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ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINT--ETC(U)
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(6) ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINTENANCE CAREER LADDER AFSCs 31631L, 31651L, 31671L, AND 31693

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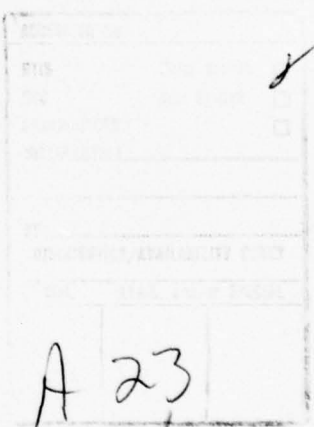

PREFACE

This report summarizes the results of a survey of Electronics Principles utilized by Missile Maintenance personnel, AFSC 31631L, 31651L, 31671L and 31693, assigned to overseas locations. This report supplements the previous Electronics Principles Occupational Survey Report for the Missile Maintenance Career Ladder, AFPT 90-316-222, dated 5 November 1976, which covered only positions assigned to selected bases within the CONUS.

The Electronics Principles Inventory (EPI) was developed by Major Thomas J. O'Connor and Mr. Hendrick W. Ruck and the survey data were analyzed by Mr. Guy B. Cole. This report has been reviewed and approved by Major Walter F. Kasper, Chief, Operations/Support Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AF, Texas, 78236.

Computer programs for analyzing the data were designed by Dr. Raymond F. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Distribution of this report is made upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

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ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINTENANCE CAREER LADDER AFSCs 31631L, 31651L, 31671L, AND 31693

INTRODUCTION

This report summarizes the results of an Electronics Principles survey of Missile Maintenance personnel assigned overseas and supplements the EPI report for the Missile Maintenance career ladder (AFPT 90-316-222, dated 5 November 1976) which was restricted to a selected sample of CONUS personnel.

ADMINISTRATION

The inventory booklet used in this survey was identical to that used in collection of data for the CONUS report. Consolidated base personnel offices in operational units overseas received the inventory booklets for administration to incumbents holding DAFSCs 316X1L and 31693. Survey administration was accomplished between 9 November 1976 and 8 February 1977. Completed survey booklets were received from 280 incumbents or 75 percent of the 375 personnel assigned to overseas locations, as reflected on the September 1976 Uniform Airman Record. The following results were based on those responses.

SUMMARY OF BACKGROUND INFORMATION

There were no significant differences between background information items reported for CONUS personnel and respondents in overseas jobs. For example, Table 1 shows that 43 percent of the overseas personnel reported that their job was dull compared to 41 percent for CONUS personnel. Additionally, as shown in Table 2, over 60 percent of the overseas respondents reported that their talents and training were used very little or not at all. This was almost identical to responses from CONUS personnel. Table 3 shows very little difference in utilization of test equipment by CONUS and overseas personnel.

Ground equipment operation is shown in Table 4. There were relatively small differences reported between these groups. However, considerably more of the CONUS group operated farm tractors while portable hoists, air compressors (MB-1), and test stands (MUH 32 E/U) were operated by from 17 to 20 percent more of the overseas personnel.

TABLE 1

JOB INTEREST
(PERCENT RESPONDING)

I FIND MY JOB:	CONUS N=202	OVERSEAS N=280
DULL	41	43
SO-SO	27	18
INTERESTING	32	39

TABLE 2

PERCEIVED UTILIZATION OF TALENTS AND TRAINING
(PERCENT RESPONDING)

	CONUS N=202	OVERSEAS N=280
MY JOB UTILIZES MY TALENTS:		
VERY LITTLE OR NOT AT ALL	63	60
FAIRLY WELL	27	25
QUITE WELL TO PERFECTLY	10	15
MY JOB UTILIZES MY TRAINING:		
VERY LITTLE OR NOT AT ALL	61	63
FAIRLY WELL	30	25
QUITE WELL TO PERFECTLY	9	12

TABLE 3

COMMON TEST EQUIPMENT USED
(20% OR MORE PERFORMING)

	CONUS N=202	OVERSEAS N=280
MULTIMETER	74	74
IGNITER TEST SET	72	68
DIGITAL VOLTMETER	56	63
FREQUENCY METER	54	51
OSCILLOSCOPE	51	63
ALIGNMENT FIXTURE	48	44
POWER SUPPLY (DC)	45	55
ELECTRONIC COUNTER	45	43
POWER SUPPLY (AC)	44	44
AUDIO SIGNAL GENERATOR	40	51
DIFFERENTIAL VOLTMETER	39	49
VACUUM TUBE VOLTMETER (AC)	36	22
DECADE RESISTOR	35	49
RF SIGNAL GENERATOR	26	30

TABLE 4

GROUND EQUIPMENT OPERATED
(20% OR MORE PERFORMING)

	CONUS N=202	OVERSEAS N=280
TRACTOR (FARM)	77	33
MISSILE TRAILER (MHV-12)	73	72
HOIST FIXED	70	69
AIR COMPRESSOR (MCIA)	63	60
FORKLIFT	62	59
TEST STAND (MVH 32 E/U)	59	77
POWER GENERATOR (MD-2)	41	50
BOMB LIFT (MJ-4)	40	42
LIGHTALL (NF-2)	38	45
BOMB LIFT (MJ-1)	37	44
POWER GENERATOR (MD-1)	22	26
AIR COMPRESSOR (MC-2)	22	24
HOIST PORTABLE	21	38
AIR COMPRESSOR (MB-1)	20	40

ELECTRONICS PRINCIPLES APPLICATION

Overseas personnel in this career ladder, like their counterparts in CONUS, employ few electronics principles in their job. Of the 1,257 items in the inventory, only 43 items were answered "yes" by 30 percent or more of the overseas respondents. This contrasts to 34 items answered "yes" by 30 percent or more of the CONUS personnel.

Table 5 shows subject areas with reasonable utilization of electronics principles reflected by respondents to the CONUS and overseas surveys. The electronics principles used by 30 percent or more of both groups were within the same subject areas. The one exception is "antennas", where 30 percent or more of the overseas group marked "yes" to two items.

Slight differences were found between the CONUS and overseas groups concerning subject areas with limited utilization (at least one response marked by 11 percent to 29 percent of the sample). Overseas personnel reflected limited utilization in 14 subject areas, as shown in Table 6. These were the same areas as shown for CONUS personnel except for "antennas" and "electron tubes". Three additional subject areas identified in this category by overseas personnel were: transistors, cable fabrication, and lazers. Significantly, less than 11 percent of the overseas respondents used any principles relating to input/output devices while the CONUS respondents had indicated limited utilization on this duty.

Detailed information concerning percent members marking "yes" to survey items is included in the appendix of this supplementary report. GPSUM1 is a summary of responses by all airmen responding to the survey and by DAFSC groups. GPSUM2 summarizes responses by time in career field groups.

CONCLUSION

Differences in electronics principles application between CONUS and overseas groups within the L shred of the Missile Systems Maintenance career ladder were minor and do not significantly alter the findings of the CONUS report.

TABLE 5

SUBJECT AREAS WITH REASONABLE UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 30% OR MORE OF THE SAMPLE)

	CONUS	OVERSEAS
MATHEMATICS	X	X
DIRECT CURRENT AND VOLTAGE	X	X
RESISTANCE	X	X
MULTIMETER USES	X	X
ALTERNATING CURRENT	X	X
SOLDERING	X	X
OSCILLOSCOPES	X	X
POWER SUPPLIES	X	X
USE OF SIGNAL GENERATORS	X	X
METER MOVEMENTS	X	X
ANTENNAS		X
INFRARED	X	X

TABLE 6

SUBJECT AREAS WITH LIMITED UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 11% TO 29% OF THE SAMPLE)

	CONUS	OVERSEAS
INDUCTORS AND INDUCTIVE REACTANCE	X	X
CAPACITORS AND CAPACITIVE REACTANCE	X	X
TRANSFORMERS	X	X
MAGNETISM	X	X
RELAYS	X	X
TRANSISTORS		X
SOLID-STATE SPECIAL PURPOSE DEVICES	X	X
ELECTRON TUBES	X	
COUNTERS	X	X
TIMING CIRCUITS	X	X
MOTORS AND GENERATORS	X	X
ANTENNAS	X	*
WAVEGUIDES AND CAVITY RESONATORS	X	X
CABLE FABRICATION		X
INPUT/OUTPUT DEVICES	X	
LAZERS		X

* Performed by over 30% of the overseas group - see Table 1

APPENDIX

APPENDIX

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

TABULATION OF PERCENT MEMBERS PERFORMING TASKS AND DUTIES BY DAFSC GROUPS
IN THE 316X1L/93 CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY = SPL001	ALL OS AIRMEN IN 316X1L/93 CAR FLD	CONTAINING 280 MEMBERS.
GROUP IDENTITY = SPL002	ALL OS AMN DAFSC 31631L	CONTAINING 16 MEMBERS.
GROUP IDENTITY = SPL003	ALL OS AMN DAFSC 31651L	CONTAINING 179 MEMBERS.
GROUP IDENTITY = SPL004	ALL OS AMN DAFSC 31671L	CONTAINING 71 MEMBERS.
GROUP IDENTITY = SPL005	ALL OS AMN DAFSC 31693	CONTAINING 10 MEMBERS.

DUTY GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DUTY	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
A	MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	88	88	89	83	80
B	MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE	85	81	89	77	70
C	CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	40	44	39	37	60
D	RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	10	0	8	11	50
E	COUPLING, SOLDERING, AND RELAYS	40	6	39	48	50
F	MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	55	38	60	52	40
G	SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	17	0	13	30	40
H	SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	51	38	51	54	60
I	MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	6	0	3	14	10
J	ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, HETERODYNING, MODULATION,	10	13	9	14	0
K	AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	5	0	4	8	10
L	LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	24	13	26	24	0
M	TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	54	38	56	52	50
N	METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVESHAPING CIRCUITS	58	56	62	54	40
O	SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	31	44	39	11	30
P	TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	26	6	30	24	10
Q	REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS	7	0	9	4	0
R	PHANTASTRONS, SCHMITT TRIGGERS, AND CABLE FABRICATION	16	13	15	20	30
S	INPUT\OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHROUS VIBRATIONS	14	19	16	8	10
T	INFRARED, LASERS, AND DISPLAY TUBES	50	69	50	49	30
U	PROGRAMMING, DB AND POWER RATIOS	10	6	7	20	20

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
A	1	A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO	44	44	50	32	20	
A	2	A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU	24	6	27	25	10	
A	3	A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	13	6	13	14	20	MATHEMATICS
A	4	A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	2	0	1	3	10	
A	5	A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	11	13	10	13	20	
A	6	A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	0	0	0	0	0	
A	7	A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	0	0	0	0	10	
A	8	A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	1	0	1	1	0	
A	9	A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	0	0	0	0	0	
A	10	A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	1	0	0	3	0	
A	11	A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	0	0	0	0	0	
A	12	A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	1	0	0	1	10	
A	13	A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	3	0	2	6	0	
A	14	A1-14 DO YOU SOLVE OR USE PROPORTIONS.	5	0	5	7	0	
A	15	A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	80	75	82	77	80	
A	16	A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	18	25	14	27	30	
A	17	A2-03 DO YOU USE THE TERM OHM.	80	75	80	80	70	
A	18	A2-04 DO YOU USE THE TERM ION.	4	0	2	7	20	DIRECT CURRENT AND VOLTAGE
A	19	A2-05 DO YOU USE THE TERM DYNE.	3	0	3	0	30	
A	20	A2-06 DO YOU USE THE TERM AMPERE.	61	38	59	69	70	
A	21	A2-07 DO YOU USE THE TERM NEUTRON.	4	0	3	6	20	
A	22	A2-08 DO YOU USE THE TERM COULOMB.	3	0	2	6	10	
A	23	A2-09 DO YOU USE THE TERM PROTON.	4	0	2	7	20	
A	24	A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	41	31	42	46	10	
A	25	A3-02 DO YOU INSPECT RESISTORS.	24	13	22	34	20	
A	26	A3-03 DO YOU CLEAN RESISTORS.	11	13	9	17	10	
A	27	A3-04 DO YOU ADJUST RESISTORS.	37	25	37	42	20	
A	28	A3-05 DO YOU CHECK OHMIC VALUE OF RESISTORS.	30	19	27	41	20	RESISTANCE
A	29	A3-06 DO YOU REMOVE OR REPLACE RESISTORS.	17	6	16	25	20	
A	30	A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.	3	0	3	4	0	
A	31	A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.	26	13	20	45	30	
A	32	A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR	25	13	19	41	30	
A	33	A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.	22	13	18	31	30	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
A	34	A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	17	13	13	27	20	
A	35	A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.	5	13	4	4	10	
A	36	A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO	6	6	4	10	0	
A	37	A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	32	13	27	48	30	
A	38	A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.	11	19	9	15	10	
A	39	A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.	9	0	8	14	10	
A	40	A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.	9	6	8	14	10	
A	41	A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.	5	0	5	7	10	
A	42	A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.	10	6	9	13	10	
A	43	A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.	8	0	7	11	10	
A	44	A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	8	0	7	11	10	
A	45	A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	7	6	6	10	10	
A	46	A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.	4	0	4	6	10	
A	47	A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.	8	6	7	13	10	
A	48	A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.	7	0	7	11	10	
A	49	A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.	9	0	8	11	10	
A	50	A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.	7	6	6	10	10	
A	51	A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.	4	0	3	6	10	
B	52	B1-01 DO YOU MEASURE RESISTANCE.	74	75	79	65	50	
B	53	B1-02 DO YOU REPAIR OHMMETERS.	3	6	3	3	0	
B	54	B1-03 DO YOU MEASURE VOLTAGE.	75	69	81	68	50	
B	55	B1-04 DO YOU REPAIR VOLTMETERS.	2	6	2	1	0	
B	56	B1-05 DO YOU REPAIR AMMETERS.	2	6	2	1	0	MULTIMETER USES
B	57	B1-06 DO YOU MEASURE CURRENT.	45	38	49	39	40	
B	58	B1-07 DO YOU USE MULTIMETERS.	77	69	83	70	50	
B	59	B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	1	0	1	0	0	
B	60	B1-09 DO YOU READ SCHEMATICS.	54	31	52	63	60	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

			BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
B	61	B2-01	DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS).	38	19	35	45	60	
B	62	B2-02	DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.	44	25	45	44	70	ALTERNATING CURRENT
B	63	B2-03	DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).	39	31	40	38	60	
B	64	B2-04	DO YOU USE OR REFER TO THE TERM WAVE LENGTH.	31	13	35	29	60	
B	65	B2-05	DO YOU USE OR REFER TO THE TERM FREQUENCY.	63	25	65	65	70	
B	66	B2-06	DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.	10	0	9	14	20	
B	67	B3-01	DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.	11	0	11	13	20	
B	68	B3-02	DO YOU INSPECT INDUCTORS.	7	6	6	8	10	
B	69	B3-03	DO YOU CLEAN INDUCTORS.	4	0	4	3	0	
B	70	B3-04	DO YOU ADJUST INDUCTORS.	5	0	4	6	10	INDUCTORS AND INDUCTIVE REACTANCE
B	71	B3-05	DO YOU REMOVE OR REPLACE INDUCTORS.	5	6	4	6	10	
B	72	B3-06	DO YOU USE OR REFER TO INDUCTANCE.	6	0	5	7	20	
B	73	B3-07	DO YOU USE OR REFER TO HENRIES.	5	6	4	6	20	
B	74	B3-08	DO YOU USE OR REFER TO INDUCTIVE REACTANCE.	5	6	4	6	10	
B	75	B3-09	DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.	0	0	1	0	0	
B	76	B3-10	DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.	1	0	1	3	0	
B	77	B3-11	DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	1	0	1	1	0	
B	78	B3-12	DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF	1	0	1	0	10	
B	79	B3-13	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS	0	0	0	0	0	
B	80	B3-14	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS	0	0	1	0	0	
B	81	B3-15	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE	0	0	0	0	0	
B	82	B3-16	DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.	0	0	1	0	0	
B	83	B3-17	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES.	1	0	1	1	0	
B	84	B3-18	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.	1	0	1	1	0	
B	85	B3-19	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.	1	0	1	1	0	
B	86	B3-20	DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.	1	0	1	3	0	
B	87	B3-21	DO YOU CALCULATE INDUCTIVE REACTANCE.	1	0	1	3	0	
B	88	B3-22	DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.	1	0	0	3	10	
B	89	B3-23	DO YOU WORK WITH POWER INDUCTORS.	3	0	3	6	0	
B	90	B3-24	DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.	3	0	2	6	10	
B	91	B3-25	DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	3	0	3	4	10	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
C	92	C1-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	22	6	22	25	30	CAPACITORS AND CAPACITIVE REACTANCE
C	93	C1-02 DO YOU INSPECT CAPACITORS.	12	13	8	18	30	
C	94	C1-03 DO YOU CLEAN CAPACITORS.	6	6	4	8	20	
C	95	C1-04 DO YOU ADJUST CAPACITORS.	4	0	4	4	10	
C	96	C1-05 DO YOU TEST CAPACITORS.	5	0	4	8	0	
C	97	C1-06 DO YOU DISCHARGE CAPACITORS.	11	6	10	15	10	
C	98	C1-07 DO YOU REMOVE OR REPLACE CAPACITORS.	8	6	6	10	30	
C	99	C1-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	0	0	1	0	0	
C	100	C1-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	0	0	1	0	0	
C	101	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.	10	6	7	15	20	
C	102	C1-11 DO YOU USE OR REFER TO CAPACITANCE.	11	6	8	17	30	
C	103	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT	0	0	0	0	0	
C	104	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	6	6	4	8	20	
C	105	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE	2	6	1	4	10	
C	106	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES	3	6	2	4	20	
C	107	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	18	6	16	21	40	
C	108	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	18	6	17	23	30	
C	109	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	14	6	12	17	30	
C	110	C1-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS	7	0	8	7	10	
C	111	C1-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	0	0	0	0	0	
C	112	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE	0	0	0	0	0	
C	113	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO	0	0	0	0	0	
C	114	C1-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	1	0	0	1	20	
C	115	C1-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	1	0	0	1	20	
C	116	C1-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	1	0	0	1	10	
C	117	C1-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS; IT ONLY APPEARS TO DO SO	7	0	1	3	20	
C	118	C1-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	1	0	0	4	10	
C	119	C1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO	1	0	0	3	0	
C	120	C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE	0	0	0	1	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
C 121	C1-30	DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	6	6	5	10	10	
C 122	C1-31	DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	4	0	3	4	10	
C 123	C1-32	DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	10	0	7	17	30	
C 124	C1-33	DO YOU WORK WITH PAPER (FIXED) CAPACITORS	9	0	7	14	30	
C 125	C1-34	DO YOU WORK WITH MICA (FIXED) CAPACITORS	10	0	7	15	30	
C 126	C1-35	DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	10	0	7	15	40	
C 127	C1-36	DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	10	0	12	8	0	
C 128	C2-01	DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	19	13	15	28	50	
C 129	C2-02	DO YOU INSPECT TRANSFORMERS	13	0	8	24	40	
C 130	C2-03	DO YOU CLEAN TRANSFORMERS	5	0	4	8	10	
C 131	C2-04	DO YOU ADJUST TRANSFORMERS	5	0	5	6	10	
C 132	C2-05	DO YOU TROUBLESHOOT TRANSFORMERS	10	0	7	18	30	TRANSFORMERS
C 133	C2-06	DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	11	0	8	18	40	
C 134	C2-07	DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	0	0	1	0	0	
C 135	C2-08	DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	0	0	1	0	0	
C 136	C2-09	DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	0	0	0	1	0	
C 137	C2-10	DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	0	0	0	1	0	
C 138	C2-11	DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	1	0	1	1	0	
C 139	C2-12	DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0	
C 140	C2-13	DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	0	0	0	0	0	
C 141	C2-14	DO YOU WORK WITH AUTOTRANSFORMERS	2	0	1	6	0	
C 142	C2-15	DO YOU WORK WITH POWER TRANSFORMERS	15	6	12	21	50	
C 143	C2-16	DO YOU WORK WITH AUDIO TRANSFORMERS	3	0	1	7	30	
C 144	C2-17	DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	4	0	2	4	30	
C 145	C2-18	DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	5	6	5	6	0	
C 146	C2-19	DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	9	0	6	17	30	
C 147	C2-20	DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	8	0	6	14	30	
C 148	C2-21	DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	7	0	4	14	40	
C 149	C2-22	DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR	2	0	2	3	0	
C 150	C2-23	DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-	3	0	3	4	0	
C 151	C2-24	DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	14	0	11	21	50	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
C	152	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	9	0	6	14	50	
C	153	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	10	0	6	17	50	
C	154	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	12	0	7	21	50	
C	155	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	7	0	5	8	40	
C	156	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	8	0	5	11	50	
C	157	C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	7	0	4	13	50	
C	158	C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING	2	0	2	3	20	
C	159	C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH	2	0	1	3	20	
C	160	C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO	2	0	1	4	0	
C	161	C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS	5	0	2	10	20	
C	162	C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	1	0	1	3	0	
C	163	C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	1	0	1	3	0	
C	164	C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	7	0	6	14	10	
C	165	C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	6	0	4	14	10	
C	166	C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	1	0	1	3	0	
C	167	C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	4	0	3	7	0	
C	168	C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	3	0	1	8	0	
C	169	C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	3	0	2	7	0	
C	170	C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	0	0	0	1	0	
C	171	C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	8	0	7	14	10	MAGNETISM
C	172	C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	5	0	4	8	10	
C	173	C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	1	0	1	1	10	
C	174	C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	1	0	1	1	10	
C	175	C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	1	0	1	1	10	
C	176	C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	1	6	1	1	10	
C	177	C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	5	0	4	6	20	
C	178	C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

			DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
C	179	C3-09	DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	0	0	0	0	0	
C	180	C3-10	DO YOU USE OR REFER TO MAGNETIC INDUCTION	5	6	2	8	20	
C	181	C3-11	DO YOU USE OR REFER TO FLUX DENSITY	1	0	1	3	10	
C	182	C3-12	DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	15	13	12	20	40	
C	183	C3-13	DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	4	13	3	3	10	
C	184	C3-14	DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	2	0	1	3	10	
D	185	D1-01	DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB	5	0	4	6	20	
D	186	D1-02	DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	10	RCL CIRCUITS
D	187	D1-03	DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	
D	188	D1-04	DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	
D	189	D1-05	DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	
D	190	D1-06	DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	
D	191	D1-07	DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	1	0	1	1	20	
D	192	D1-08	DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	10	
D	193	D1-09	DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	1	0	1	1	10	
D	194	D1-10	DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	1	0	0	1	20	
D	195	D1-11	DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	10	
D	196	D1-12	DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	
D	197	D1-13	DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	0	1	4	0	
D	198	D1-14	DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	2	0	2	3	10	
D	199	D1-15	DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	2	0	2	3	10	
D	200	D1-16	DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	2	0	2	4	10	
D	201	D1-17	DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	0	0	0	1	0	
D	202	D1-18	DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	1	0	1	3	10	
D	203	D1-19	DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	1	0	0	3	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
D 204	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	0	2	4	10
D 205	D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	0	0	0
D 206	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	0	1	0	0
D 207	D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	1	0	1	1	0
D 208	D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0
D 209	D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	1	0	1	1	0
D 210	D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	0	1	0	0
D 211	D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	1	0	1	0	10
D 212	D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	1	0	1	0	10
D 213	D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	0	1	0	0
D 214	D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	1	0	1	1	10
D 215	D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	0	0	0
D 216	D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	0	0	0
D 217	D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	1	0	1	1	10
D 218	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS	2	0	2	3	0
D 219	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	2	0	2	4	10
D 220	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS	1	0	2	1	0
D 221	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	1	0	1	4	0
D 222	D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA= 0, PF = 1, AND PA = PT FOR RESONANT CIRCUITS	0	0	0	0	0
D 223	D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	0	1	0	0
D 224	D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	1	0	1	3	0
D 225	D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	1	0	1	1	0
D 226	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	1	0	1	1	10
D 227	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	1	0	1	1	0
D 228	D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
D 229	D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	3	0	2	4	30	SERIES AND PARALLEL RESONANCE (TIME CONSTANTS)
D 230	D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	3	0	1	4	30	
D 231	D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	1	0	1	1	10	
D 232	D3-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	1	0	1	0	10	
D 233	D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5)	2	0	0	3	30	
D 234	D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	1	0	0	1	10	
D 235	D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC	0	0	0	0	10	
D 236	D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO	0	0	0	0	10	
D 237	D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND	0	0	0	0	10	
D 238	D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER	1	0	0	0	30	
D 239	D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	5	0	3	7	20	FILTERS
D 240	D3-02 DO YOU INSPECT FILTER CIRCUITS	4	0	3	6	10	
D 241	D3-03 DO YOU CLEAN FILTER CIRCUITS	2	0	2	3	10	
D 242	D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	2	0	2	3	10	
D 243	D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	2	0	2	1	20	
D 244	D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	2	0	2	3	20	
D 245	D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	4	0	2	7	20	
D 246	D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	2	0	2	3	20	
D 247	D3-09 DO YOU WORK WITH LOW PASS FILTERS	1	0	1	1	10	
D 248	D3-10 DO YOU WORK WITH HIGH PASS FILTERS	1	0	1	1	10	
D 249	D3-11 DO YOU WORK WITH BANDPASS FILTERS	1	0	1	3	10	
D 250	D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	1	0	1	1	10	
D 251	D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	3	0	2	4	20	
D 252	D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	1	0	1	3	0	
D 253	D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	1	0	1	3	0	
D 254	D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	1	0	1	3	0	
D 255	D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	3	0	2	3	30	
D 256	D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	2	0	1	4	10	
D 257	D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	2	0	1	4	10	
D 258	D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	2	0	1	3	10	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
D	259	D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	2	0	1	3	20	
D	260	D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC	0	0	0	0	0	
E	261	E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	4	0	2	6	20	
E	262	E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC	4	0	2	6	20	
E	263	E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	2	0	2	3	20	COUPLING
E	264	E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	3	0	1	7	20	
E	265	E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING	2	0	2	3	10	
E	266	E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	2	0	2	3	10	
E	267	E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	2	0	1	4	0	
E	268	E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS	2	0	1	3	20	
E	269	E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS	2	0	1	3	20	
E	270	E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	2	0	1	3	20	
E	271	E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS	2	0	1	4	20	
E	272	E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS	1	0	2	1	0	
E	273	E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS	35	6	35	44	40	
E	274	E2-02 DO YOU SELECT TYPE OF SOLDER TO USE	27	6	27	30	30	
E	275	E2-03 DO YOU ADD FLUX TO CONNECTIONS	26	6	26	30	20	SOLDERING
E	276	E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS	26	6	28	24	20	
E	277	E2-05 DO YOU STRIP INSULATION FROM WIRES	32	6	34	35	30	
E	278	E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS	21	6	19	30	30	
E	279	E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS	30	6	31	34	30	
E	280	E2-08 DO YOU CUT WIRES	31	6	32	34	30	
E	281	E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS	25	6	25	32	10	
E	282	E2-10 DO YOU TIN SOLDERING IRON TIPS	27	6	26	35	30	
E	283	E2-11 DO YOU CLEAN SOLDERING IRON TIPS	30	6	31	35	30	
E	284	E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	22	6	21	30	20	
E	285	E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS	22	6	18	35	30	
E	286	E2-14 DO YOU INSPECT SOLDERED CONNECTIONS	31	6	28	42	40	
E	287	E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING	16	6	15	23	0	
E	288	E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS	5	6	4	8	10	
E	289	E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	18	6	16	24	30	
E	290	E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL	4	6	4	1	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
E	291	E2-19 DO YOU MAKE HARDWIRE CONNECTIONS	25	0	23	35	30	
E	292	E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	13	6	12	18	10	
E	293	E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS	9	6	8	13	10	
E	294	E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS	7	6	6	11	10	
E	295	E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	17	0	16	24	20	
E	296	E3-02 DO YOU ADJUST RELAYS	5	0	7	4	0	
E	297	E3-03 DO YOU CLEAN RELAYS	5	0	6	4	10	
E	298	E3-04 DO YOU INSPECT RELAYS	8	0	7	14	10	
E	299	E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	10	0	8	17	10	RELAYS
E	300	E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	1	0	2	0	0	
E	301	E3-07 DO YOU TROUBLESHOOT RELAYS	10	0	7	18	10	
E	302	E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	5	0	6	4	0	
E	303	E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	5	0	5	6	0	
E	304	E3-10 DO YOU PERFORM TASKS ON RELAY CORES	0	0	0	0	0	
E	305	E3-11 DO YOU PERFORM TASKS ON RELAY COILS	0	0	0	0	0	
E	306	E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	0	0	0	0	0	
E	307	E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	2	0	3	3	0	
E	308	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPER (NO) SCHEMATIC SYMBOLS FOR RELAYS	11	0	10	17	20	
E	309	E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	11	0	9	18	20	
E	310	E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	10	0	8	15	20	
E	311	E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	10	0	9	15	20	
E	312	E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	9	0	7	15	10	
E	313	E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	6	0	5	10	0	
F	314	F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	2	0	2	1	10	
F	315	F1-02 DO YOU INSPECT MICROPHONES	0	0	0	1	0	
F	316	F1-03 DO YOU CLEAN MICROPHONES	0	0	1	0	0	MICROPHONES
F	317	F1-04 DO YOU OPERATE MICROPHONES	2	0	2	1	10	
F	318	F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	1	0	1	1	0	
F	319	F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	0	0	0	0	0	
F	320	F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	1	0	1	1	0	
F	321	F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	0	0	0	0	0	
F	322	F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	1	0	1	1	10	
F	323	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	0	0	1	0	0	
F	324	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	1	0	1	1	0	
F	325	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	1	0	1	1	0	
F	326	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	0	0	1	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
F	327	F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	1	0	0	3	10	
F	328	F2-02 DO YOU INSPECT SPEAKERS	1	0	0	1	10	SPEAKERS
F	329	F2-03 DO YOU CLEAN SPEAKERS	0	0	0	0	0	
F	330	F2-04 DO YOU OPERATE SPEAKERS	1	0	0	1	10	
F	331	F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	1	0	
F	332	F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0	
F	333	F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	1	0	0	1	10	
F	334	F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0	
F	335	F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	0	0	0	0	0	
F	336	F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	
F	337	F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	0	0	0	0	0	
F	338	F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0	
F	339	F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	0	0	0	0	0	
F	340	F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0	
F	341	F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	0	0	0	0	0	
F	342	F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	51	31	55	51	30	
F	343	F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	37	13	38	42	30	
F	344	F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	41	19	43	45	30	OSCILLOSCOPES
F	345	F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	33	6	35	35	30	
F	346	F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	42	25	45	41	30	
F	347	F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME	41	31	41	48	20	
F	348	F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS	4	6	4	4	0	
F	349	F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	29	19	31	30	20	
F	350	F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	20	19	20	21	20	
F	351	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	40	25	44	38	20	
F	352	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	21	13	20	27	20	
F	353	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	35	19	37	38	20	
G	354	G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	10	0	7	17	20	
G	355	G1-02 DO YOU INSPECT DIODES	9	0	6	17	30	SEMICONDUCTOR DIODES
G	356	G1-03 DO YOU REMOVE OR REPLACE DIODES	6	0	4	11	30	
G	357	G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT	6	0	4	8	20	
G	358	G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	0	0	0	0	0	
G	359	G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE,	0	0	0	0	0	
G	360	G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	0	0	1	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	Dy-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
G 361	GI-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES	3	0	1	7	20
G 362	GI-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON	6	0	3	10	30
G 363	GI-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	1	0	1	0	0
G 364	GI-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE	3	0	2	3	20
G 365	GI-12 DO YOU USE OR REFER TO DIODE COLOR CODING	2	0	2	3	10
G 366	GI-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0
G 367	GI-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0
G 368	GI-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS IN 538	5	0	2	8	30
G 369	GI-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0
G 370	GI-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0
G 371	GI-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE	3	0	2	3	20
G 372	GI-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT	0	0	0	0	0
G 373	GI-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0
G 374	GI-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0
G 375	GI-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)	0	0	0	0	0
G 376	GI-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)	0	0	0	1	0
G 377	GI-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END	8	0	4	14	30
G 378	GI-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	0	0	0	1	0
G 379	GI-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE	1	0	1	3	0
G 380	GI-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT	0	0	1	0	0
G 381	GI-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR	4	0	2	7	20
G 382	GI-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR MATERIALS	0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
G 383	G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	
G 384	G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	
G 385	G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	
G 386	G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	1	0	
G 387	G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	1	0	0	3	10	
G 388	G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	
G 389	G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	
G 390	G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	10	
G 391	G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	10	
G 392	G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	
G 393	G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	
G 394	G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	0	0	0	
G 395	G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	0	0	0	
G 396	G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	
G 397	G1-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	4	0	2	4	40	
G 398	G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	10	
G 399	G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	1	0	1	3	10	
G 400	G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	1	0	1	0	10	
G 401	G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	0	0	1	0	0	
G 402	G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	1	0	1	0	10	
G 403	G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	1	0	1	0	10	
G 404	G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.	14	0	10	24	20	
G 405	G2-02 DO YOU INSPECT TRANSISTORS	10	0	7	18	20	
G 406	G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS	7	0	4	15	20	
G 407	G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	5	0	3	10	10	TRANSISTORS
G 408	G2-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	4	0	2	8	20	
G 409	G2-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	4	0	2	7	20	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
G 410	G2-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	4	0	2	7	20	
G 411	G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	1	0	1	0	10	
G 412	G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	1	0	1	0	10	
G 413	G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)	2	0	1	4	10	
G 414	G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	0	0	0	0	10	
G 415	G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	11	0	7	23	30	
G 416	G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	11	0	7	23	30	
G 417	G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	2	0	1	4	10	
G 418	G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY	1	0	1	1	10	
G 419	G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR	4	0	2	6	10	
G 420	G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	1	0	1	3	0	
G 421	G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	0	0	1	0	0	
G 422	G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	0	0	0	0	
G 423	G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	0	0	0	0	
G 424	G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	0	0	0	0	
G 425	G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0	
G 426	G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0	
G 427	G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0	
G 428	G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	4	0	2	8	20	
G 429	G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	3	0	1	7	10	
G 430	G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	2	0	1	6	0	TRANSISTOR AMPLIFIERS
G 431	G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	3	0	1	7	10	
G 432	G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	2	0	1	4	10	
G 433	G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	3	0	2	7	10	
G 434	G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	1	0	0	1	10	
G 435	G3-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0	
G 436	G3-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
G 437	G3-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE	1	0	0	3	10
G 438	G3-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	10
G 439	G3-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	0	0	0	20
G 440	G3-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	10
G 441	G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A	0	0	0	0	0
G 442	G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	1	0	0	1	10
G 443	G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	10
G 444	G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	1	0	0	4	10
G 445	G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	1	0	0	4	10
G 446	G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	1	0	0	4	10
G 447	G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE	0	0	0	0	0
G 448	G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE	0	0	0	0	0
G 449	G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE	0	0	0	0	0
G 450	G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE	0	0	0	1	0
G 451	G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT (Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0
G 452	G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0
G 453	G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	0	1	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
G 454	G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0
G 455	G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0
G 456	G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0
G 457	G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0
G 458	G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION	0	0	0	0	0
G 459	G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	1	0	1	0	10
G 460	G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	1	0	0	1	10
G 461	G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	1	0	1	1	10
G 462	G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	1	0	1	1	10
G 463	G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	0	1	0	0
G 464	G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	1	0	1	1	10
G 465	G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	1	0	0	1	10
G 466	G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	1	0	0	1	10
G 467	G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0
G 468	G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	0	0	0
G 469	G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	1	0	0	1	10
G 470	G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR	0	0	0	0	0
G 471	G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	1	0	1	1	10
G 472	G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	1	0	1	1	0
G 473	G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	3	0	2	6	10
G 474	G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	0	0	1	0	0
G 475	G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	1	0	1	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
G 476a	G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	1	0	1	3	0	
H 477	H1-01 DO YOU USE OR REFER TO VARACTORS	2	0	1	1	10	
H 478	H1-02 DO YOU USE OR REFER TO TUNNEL DIODES	4	0	2	7	10	
H 479	H1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	9	0	7	18	0	SOLID STATE SPECIAL PURPOSE DEVICES
H 480	H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	7	0	7	13	0	
H 481	H1-05 DO YOU USE OR REFER TO ZENER DIODES	19	0	17	25	60	
H 482	H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	26	0	26	30	50	
H 483	H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	41	38	40	44	30	
H 484	H2-02 DO YOU INSPECT POWER SUPPLIES	30	38	26	35	30	
H 485	H2-03 DO YOU CLEAN POWER SUPPLIES	19	13	18	21	10	
H 486	H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	24	13	20	37	30	POWER SUPPLIES
H 487	H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	17	0	13	30	30	
H 488	H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	11	0	8	18	30	
H 489	H2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	20	0	18	31	20	
H 490	H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	10	0	7	20	20	
H 491	H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	9	0	7	15	20	
H 492	H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	7	0	5	15	10	
H 493	H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	9	0	6	17	20	
H 494	H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	3	0	2	7	0	
H 495	H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	18	13	16	24	20	
H 496	H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	13	13	12	14	10	
H 497	H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	14	13	12	21	10	
H 498	H2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	12	13	9	17	20	
H 499	H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	4	0	3	6	20	
H 500	H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	3	0	2	4	10	
H 501	H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	3	0	2	6	10	
H 502	H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	11	6	8	17	20	
H 503	H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	12	13	10	15	30	
H 504	H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	7	0	3	17	20	
H 505	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	6	0	3	13	10	
H 506	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	4	0	2	7	10	
H 507	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	2	0	2	4	10	
H 508	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	2	0	2	4	0	
H 509	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	2	0	2	4	10	
H 510	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER	12	0	11	20	0	
H 511	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	0	0	0	1	0	
H 512	H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	4	0	3	8	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
H 513	H3-02 DO YOU INSPECT OSCILLATORS	3	0	2	7	0	
H 514	H3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	4	0	3	7	0	
H 515	H3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	3	0	2	6	0	
H 516	H3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	1	0	1	1	0	OSCILLATORS
H 517	H3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	3	0	2	6	0	
H 518	H3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	1	0	1	3	0	
H 519	H3-08 DO YOU USE OR REFER TO FEEDBACK	3	0	1	8	0	
H 520	H3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	2	0	1	4	0	
H 521	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	1	0	1	3	0	
H 522	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	1	0	1	3	0	
H 523	H3-12 DO YOU USE OR REFER TO DAMPING	2	0	2	4	0	
H 524	H3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	2	0	1	6	0	
H 525	H3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	2	0	2	4	0	
H 526	H3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	1	0	1	1	0	
H 527	H3-16 DO YOU USE OR REFER TO UNDER DAMPING	1	0	1	1	0	
H 528	H3-17 DO YOU USE OR REFER TO OVER DAMPING	1	0	1	1	0	
H 529	H3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	1	0	1	4	0	
H 530	H3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	1	0	1	4	0	
H 531	H3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	2	0	1	4	0	
H 532	H3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	2	0	3	3	0	
H 533	H3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	1	0	1	1	0	
H 534	H3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	1	0	1	1	0	
H 535	H3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	1	0	1	1	0	
H 536	H3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	0	1	0	0	
H 537	H3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	0	0	0	0	
H 538	H3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	3	0	3	4	0	
I 539	I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	3	0	2	7	0	
I 540	I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	2	0	2	4	0	
I 541	I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	3	0	2	7	0	
I 542	I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	2	0	2	6	0	MULTIVIBRATORS
I 543	I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	3	0	2	7	0	
I 544	I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	2	0	1	6	0	
I 545	I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	3	0	2	7	0	
I 546	I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	1	0	0	3	0	
I 547	I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	2	0	1	6	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
I 548	11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	2	0	1	7	0	
I 549	11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	2	0	1	4	0	
I 550	11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FDD	2	0	1	4	0	
I 551	11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	1	0	0	3	0	
I 552	11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	1	0	0	4	0	
I 553	11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	1	0	0	4	0	
I 554	11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	3	0	2	7	0	
I 555	12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	2	0	1	7	0	
I 556	12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	1	0	1	3	0	LIMITERS AND CLAMPERS
I 557	12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	2	0	1	6	0	
I 558	12-04 DO YOU WORK WITH LIMITERS WITH BIAS	1	0	0	4	0	
I 559	12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	2	0	1	6	0	
I 560	12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	1	0	1	3	0	
I 561	12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	1	0	0	3	0	
I 562	12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	1	0	0	3	0	
I 563	12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	1	0	0	3	0	
I 564	12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	1	0	1	1	0	
I 565	13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	4	0	3	6	10	
I 566	13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	2	0	2	3	0	ELECTRON TUBES
I 567	13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	1	0	1	3	0	
I 568	13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	2	3	2	3	0	
I 569	13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	2	0	2	3	0	
I 570	13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	2	0	2	3	10	
I 571	13-07 DO YOU USE OR REFER TO CUTOFF	1	0	1	1	0	
I 572	13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	0	0	1	0	0	
I 573	13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	1	0	1	1	0	
I 574	13-10 DO YOU USE OR REFER TO TRANSIT TIME	0	0	0	0	0	
I 575	13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	0	0	0	1	0	
I 576	13-12 DO YOU USE OR REFER TO SATURATION	1	0	1	1	0	
I 577	13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	0	0	0	1	0	
I 578	13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	0	0	0	0	0	
I 579	13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	1	0	2	1	0	
I 580	13-16 DO YOU USE OR REFER TO PLATE CURRENT	1	0	2	1	0	
I 581	13-17 DO YOU USE OR REFER TO GRID VOLTAGE	1	0	2	1	0	
I 582	13-18 DO YOU USE OR REFER TO GRID CURRENT	1	0	2	1	0	
I 583	13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	1	0	2	1	0	
I 584	13-20 DO YOU USE OR REFER TO CATHODE CURRENT	1	0	2	1	0	
I 585	13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS	0	0	0	1	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
I 586	I3-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	0	0	0	0
I 587	I3-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	0	0	0	1	0
I 588	I3-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)	0	0	0	0	0
I 589	I3-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	0	0	0	0	0
I 590	I3-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	0	1	0
I 591	I3-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	0	0	0	0
I 592	I3-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	0	0	1	0
I 593	I3-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	0	0	0	1	0
I 594	I3-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	0	1	0
I 595	I3-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	0	0	0
I 596	I3-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	0	0	0	1	0
I 597	I3-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	0	1	0
I 598	I3-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN	1	0	1	1	0
I 599	I3-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY	1	0	1	1	0
I 600	I3-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	1	0
I 601	I3-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	0	0
I 602	I3-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	0	0
I 603	I3-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	1	0
I 604	I3-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	0	0	0	0
I 605	I3-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	2	0	1	4	0
I 606	I3-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	2	0	1	4	0
I 607	I3-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE	0	0	0	0	0
I 608	I3-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	2	0	1	4	0
J 609	J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	1	0	1	3	0
J 610	J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	1	0	1	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	D/-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
J 611	J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	1	0	1	1	0	
J 612	J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	1	0	1	1	0	
J 613	J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	0	1	0	0	
J 614	J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	1	0	1	1	0	
J 615	J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	1	0	1	0	0	
J 616	J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	1	0	1	3	0	
J 617	J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	6	6	5	8	0	SPECIAL PURPOSE ELECTRON TUBES
J 618	J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	0	0	0	0	0	
J 619	J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	0	0	0	0	0	
J 620	J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS	1	0	1	1	0	
J 621	J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATRONS ARE USED	1	0	1	1	0	
J 622	J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	3	6	2	6	0	
J 623	J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	2	6	1	4	0	
J 624	J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	2	6	1	3	0	
J 625	J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	2	6	0	6	0	
J 626	J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	1	0	1	1	0	
J 627	J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	1	0	0	4	0	
J 628	J2-13 DO YOU USE OR REFER TO PERSISTENCE	1	0	0	3	0	
J 629	J2-14 DO YOU USE OR REFER TO DECAY TIMES	0	0	0	1	0	
J 630	J2-15 DO YOU USE OR REFER TO FLUORESCENCE	1	0	1	3	0	
J 631	J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	1	6	0	4	0	
J 632	J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	4	0	3	7	0	
J 633	J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	1	6	1	1	0	
J 634	J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	1	6	0	1	0	HETERODYNING, MODULATION, AND DEMODULATION
J 635	J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	1	6	0	3	0	
J 636	J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	0	0	0	0	0	
J 637	J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	0	0	0	0	0	
K 638	K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	1	0	1	0	0	
K 639	K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
K 640	K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	AM SYSTEMS
K 641	K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
K 642	K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
K 643	K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	
K 644	K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
K 645	K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	
K 646	K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	0	0	0	0	0	
K 647	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	1	0	1	0	0	
K 648	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	0	
K 649	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	
K 650	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	0	0	0	0	0	
K 651	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	0	0	
K 652	K1-15 DO YOU PERFORM TASKS ON DETECTORS	0	0	0	0	0	
K 653	K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE	0	0	0	0	0	
K 654	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	0	0	0	0	0	
K 655	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	0	0	0	0	0	
K 656	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	0	0	0	0	0	
K 657	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	0	0	0	0	0	
K 658	K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	0	0	0	0	0	
K 659	K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	0	0	0	0	0	
K 660	K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	
K 661	K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	0	0	0	0	0	
K 662	K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	0	0	0	0	0	
K 663	K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	0	0	0	0	0	
K 664	K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	
K 665	K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	
K 666	K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	2	0	1	4	0	
K 667	K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	3	0	
K 668	K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	1	0	FM SYSTEMS
K 669	K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	1	0	
K 670	K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	1	0	0	3	0	
K 671	K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	1	0	
K 672	K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
K 673	K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	
K 674	K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	1	0	
K 675	K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	0	0	0	1	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
K 676	K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	0	0	0	1	0	
K 677	K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	1	0	
K 678	K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	0	0	0	1	0	
K 679	K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	0	0	0	1	0	
K 680	K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	1	0	
K 681	K2-16 DO YOU PERFORM TASKS ON LIMITERS	0	0	0	1	0	
K 682	K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	0	0	0	1	0	
K 683	K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	1	0	0	3	0	
K 684	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	1	0	0	3	0	
K 685	K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	1	0	1	0	10	
K 686	K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	2	0	2	3	10	NUMBERING SYSTEMS
K 687	K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	0	0	1	0	0	
K 688	K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	0	0	0	0	0	
K 689	K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	2	0	1	3	0	
K 690	K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	0	0	0	0	0	
K 691	K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	3	0	2	4	10	
K 692	K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	1	0	1	0	0	
K 693	K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	1	0	1	0	0	
K 694	K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	0	0	0	0	0	
L 695	L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	9	0	7	18	0	
L 696	L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	4	0	3	6	0	LOGIC FUNCTIONS
L 697	L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	3	0	3	4	0	
L 698	L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	3	0	3	4	0	
L 699	L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	3	0	3	3	0	
L 700	L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	7	0	6	11	0	
L 701	K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	6	0	6	10	0	
L 702	K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	6	0	6	10	0	
L 703	L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	5	0	5	8	0	
L 704	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	7	0	7	13	0	
L 705	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	7	0	7	11	0	
L 706	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	9	0	7	15	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
L 707	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	7	0	6	11	0	
L 708	L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	3	0	2	6	0	
L 709	L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	0	0	0	0	0	
L 710	L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	0	1	0	0	BOOLEAN EQUATIONS
L 711	L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	0	0	0	0	0	
L 712	L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	2	0	1	4	0	
L 713	L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	0	1	0	0	
L 714	L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	1	0	1	1	0	
L 715	L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	1	0	1	1	0	
L 716	L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	1	0	1	1	0	
L 717	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	2	0	2	4	0	
L 718	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	
L 719	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	
L 720	L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	1	0	1	3	0	
L 721	L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	2	0	2	6	0	
L 722	L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	1	0	1	4	0	
L 723	L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	2	0	1	6	0	
L 724	L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	1	0	1	4	0	
L 725	L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	2	0	2	6	0	
L 726	L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	2	0	1	6	0	
L 727	L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	1	0	1	1	0	
L 728	L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	1	0	1	1	0	
L 729	L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	1	0	1	3	0	
L 730	L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	1	0	1	3	0	
L 731	L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	1	0	1	3	0	
L 732	L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	1	0	1	1	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	UY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
L 733	L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	18	13	21	15	0	
L 734	L3-02 DO YOU USE OR REFER TO UP-COUNTERS	4	0	4	7	0	
L 735	L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS	5	0	4	7	0	
L 736	L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	2	6	2	1	0	COUNTERS
L 737	L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	1	0	1	0	0	
L 738	L3-06 DO YOU USE OR REFER TO RING COUNTERS	0	0	1	0	0	
L 739	L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	5	0	6	4	0	
L 740	L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	1	0	1	0	0	
L 741	L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	4	0	4	6	0	
L 742	L3-10 DO YOU USE OR REFER TO UP CLOCKS	4	0	5	4	0	
L 743	L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	3	0	3	4	0	
L 744	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-	2	0	3	3	0	
L 745	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	2	0	2	4	0	
L 746	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	0	0	0	0	0	
L 747	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	0	0	0	0	0	
L 748	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	1	0	
L 749	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	1	0	0	4	0	
L 750	L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	1	0	1	1	0	
L 751	L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENT-	0	0	1	0	0	
L 752	L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE	0	0	0	0	0	
L 753	L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	1	0	1	4	0	
L 754	L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	0	0	0	0	0	
L 755	L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	1	0	1	0	0	
L 756	L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	1	0	2	0	0	
M 757	M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	7	0	7	10	0	
M 758	M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	0	0	0	0	0	
M 759	M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	2	0	1	6	0	
M 760	M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	2	0	2	3	0	TIMING CIRCUITS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
M 761	M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	2	0	1	4	0	
M 762	M1-06 DO YOU USE OR REFER TO RISE TIME	7	6	6	10	10	
M 763	M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	4	6	2	8	10	
M 764	M1-08 DO YOU USE OR REFER TO SWEEP TIME	17	13	17	18	20	
M 765	M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	6	0	5	8	30	
M 766	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	5	0	4	8	10	
M 767	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	4	0	3	7	0	
M 768	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	3	0	2	6	0	
M 769	M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	42	25	45	44	20	
M 770	M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	29	0	30	38	10	
M 771	M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL	29	13	31	34	10	USE OF SIGNAL GENERATORS
M 772	M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	18	0	20	20	10	
M 773	M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	5	0	7	3	0	
M 774	M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	30	25	29	35	20	
M 775	M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	5	0	6	3	0	
M 776	M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH	11	0	12	14	0	
M 777	M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH	6	6	7	6	0	
M 778	M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	6	0	8	6	0	
M 779	M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	23	19	26	20	10	
M 780	M3-02 DO YOU INSPECT MOTORS	11	6	12	11	10	
M 781	M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	5	0	6	4	0	MOTORS AND GENERATORS
M 782	M3-04 DO YOU OPERATE MOTORS	14	19	17	8	10	
M 783	M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	2	0	1	6	0	
M 784	M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	0	0	0	0	0	
M 785	M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	7	13	8	6	10	
M 786	M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	0	0	0	0	10	
M 787	M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS	0	0	0	0	0	
M 788	M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES	0	0	1	0	0	
M 789	M3-11 DO YOU PERFORM ANY TASKS ON ROTORS	0	0	1	0	0	
M 790	M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	1	0	1	0	0	
M 791	M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	0	0	0	0	0	
M 792	M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	0	0	1	0	0	
M 793	M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
M	794	M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	
M	795	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	
M	796	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	0	1	0	0	
M	797	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	2	0	1	6	0	
M	798	M3-20 DO YOU WORK WITH INDUCTION MOTORS	4	13	3	4	0	
M	799	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	5	6	6	4	0	
M	800	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	4	6	4	3	0	
M	801	M3-23 DO YOU INSPECT GENERATORS	17	13	20	13	10	
M	802	M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	2	0	3	1	0	
M	803	M3-25 DO YOU OPERATE GENERATORS	19	13	23	13	10	
M	804	M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	2	0	2	1	0	
M	805	M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	0	0	0	0	0	
M	806	M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	9	6	9	8	10	
M	807	M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	0	0	0	0	0	
N	808	N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	56	56	60	51	40	
N	809	N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	6	0	6	8	0	
N	810	N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	7	0	8	8	0	METER MOVEMENTS
N	811	N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	5	0	5	7	0	
N	812	N1-05 DO YOU READ METER SCALES	56	56	60	51	40	
N	813	N1-06 DO YOU EXTEND THE RANGE OF AMMETERS	11	0	12	13	0	
N	814	N1-07 DO YOU ZERO OHMMETERS	56	50	60	52	40	
N	815	N1-08 DO YOU ZERO AMMETERS	25	13	28	23	30	
N	816	N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	20	13	25	15	0	
N	817	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	20	6	17	28	20	
N	818	N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	1	0	0	4	0	
N	819	N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	1	0	SATURABLE REACTORS AND MAGNETIC AMPLIFIERS
N	820	N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	
N	821	N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	
N	822	N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	
N	823	N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	
N	824	N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	UY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
N 825	N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	1	0	
N 826	N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF	0	0	0	1	0	
N 827	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE	0	0	0	0	0	
N 828	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	0	0	0	1	0	
N 829	N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS	0	0	0	0	0	
N 830	N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	0	0	0	0	0	
N 831	N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	0	0	0	0	0	
N 832	N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	0	0	0	0	0	
N 833	N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	1	0	0	3	0	
N 834	N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	4	0	4	4	0	
N 835	N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	1	0	1	3	0	WAVESHAPING CIRCUITS
N 836	N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	3	0	3	3	0	
N 837	N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	3	0	3	3	0	
N 838	N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	3	0	3	3	0	
N 839	N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	0	0	0	1	0	
N 840	N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	1	0	1	3	0	
N 841	N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	1	0	0	3	0	
N 842	N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT	0	0	0	1	0	
N 843	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	1	0	2	0	0	
N 844	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	1	0	1	0	0	
O 845	O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	0	
O 846	O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
O 847	O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	SINGLE SIDEBAND SYSTEMS
O 848	O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
O 849	O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
O 850	O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	
O 851	O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	
O 852	O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
	0 853 01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0	
	0 854 01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	
	0 855 01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0	
	0 856 01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	
	0 857 01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0	
	0 858 01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0	
	0 859 01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0	
	0 860 01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0	
	0 861 01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0	
	0 862 01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0	
	0 863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0	
	0 864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0	
	0 865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0	0	0	0	0	
	0 866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0	
	0 867 01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES	0	0	0	0	0	
	0 868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	
	0 869 01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	
	0 870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0	
	0 871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0	
	0 872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0	
	0 873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	
	0 874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	
	0 875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0	0	0	1	0	
	0 876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	1	0	PULSE MODULATION SYSTEMS
	0 877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0	
	0 878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	0	
	0 879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	1	0	
	0 880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	
	0 881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0	
	0 882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	
	0 883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	0	0	0	1	0	
	0 884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0	0	0	1	0	
	0 885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	0	0	0	
	0 886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	0	1	0	
	0 887 02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0	0	0	0	0	
	0 888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
0	889	02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0	0	0	0	0
0	890	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	0	0	0	0	0
0	891	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0	0	0	1	0
0	892	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0	0	0	0	0
0	893	02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0	0
0	894	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	0	0	0
0	895	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	0	0	0
0	896	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	0	0	0	1	0
0	897	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	0	0	0	0	0
0	898	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	0	0	0	1	0
0	899	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	0	0	0	0	0
0	900	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	0	0	0	0	0
0	901	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	0	0	0	0	0
0	902	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES	0	0	0	0	0
0	903	02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	1	0
0	904	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	0	0	0	1	0
0	905	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	0	0	0	1	0
0	906	02-32 DO YOU USE OR REFER TO PULSE SHAPE	0	0	0	1	0
0	907	02-33 DO YOU USE OR REFER TO PEAK POWER	0	0	0	1	0
0	908	02-34 DO YOU USE OR REFER TO AVERAGE POWER	0	0	0	1	0
0	909	02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0
0	910	02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	1	0
0	911	02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	0	1	0
0	912	02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	1	0
0	913	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	0	0	0	1	0
0	914	03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	30	38	37	11	30
0	915	03-02 DO YOU INSPECT ANTENNAS	31	44	38	11	30

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
0	916 03-03 DO YOU CLEAN ANTENNAS	29	38	36	8	30
0	917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	16	25	21	4	10
0	918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	5	0	6	4	0
0	919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS	9	0	10	7	20
0	920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	3	0	4	1	0
0	921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	27	38	35	7	30
0	922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	10	0	14	3	20
0	923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	1	0	1	0	0
0	924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	0	0	1	0	0
0	925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0
0	926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS	0	0	0	0	0
0	927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS	0	0	0	0	0
0	928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	0	0	0	0	0
0	929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	1	0	2	1	0
0	930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	0	0	0	0	0
0	931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	1	0	2	0	0
0	932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	1	0	2	0	0
0	933 03-20 DO YOU WORK WITH CARDIOID ARRAYS	0	0	0	0	0
0	934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS	1	0	2	0	0
0	935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	1	0
0	936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	1	0
0	937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	1	0	1	3	0
0	938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	1	0
0	939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0
0	940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0
0	941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	5	6	6	3	0
0	942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	4	0	6	3	0
0	943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	1	0	1	0	0
0	944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	0	0	1	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
O 945	03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	0	6	0	0	0	
O 946	03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	6	0	0	0	
O 947	03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	6	0	0	0	
O 948	03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS	8	13	10	4	0	
O 949	03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	5	0	7	3	10	
O 850	03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	2	0	3	0	10	
O 851	03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY	11	19	14	4	0	
O 852	03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	1	6	1	0	0	
P 953	P1-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS	4	0	5	3	0	
P 954	P1-02 DO YOU REFER TO OR USE COPPER LOSS OR I2R LOSS IN TRANSMISSION LINES	0	0	0	0	0	TRANSMISSION LINES
P 955	P1-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	
P 956	P1-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0	
P 957	P1-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	0	0	0	
P 958	P1-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	0	0	0	0	0	
P 959	P1-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	1	0	1	1	0	
P 960	P1-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	1	0	1	1	0	
P 961	P1-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	1	0	2	1	0	
P 962	P1-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	3	0	3	3	0	
P 963	P1-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	1	0	1	0	0	
P 964	P1-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	1	0	2	1	0	
P 965	P1-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	0	0	1	0	0	
P 966	P1-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	0	0	0	0	0	
P 967	P1-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	0	0	0	1	0	
P 968	P1-16 DO YOU MEASURE STANDING WAVE RATIOS (SR) OF TRANSMISSION LINES	0	0	0	0	0	
P 969	P1-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	
P 970	P1-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
P 971	P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	0	0	1	0	0	
P 972	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0	
P 973	P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	
P 974	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	0	0	0	1	0	
P 975	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	0	0	0	0	0	
P 976	P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	0	0	0	0	0	
P 977	P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	0	0	0	0	
P 978	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	0	0	0	0	0	
P 979	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	0	0	0	
P 980	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF	0	0	0	0	0	
P 981	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	1	0	1	1	0	
P 982	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	0	0	0	0	0	
P 983	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0	
P 984	P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	23	6	26	23	10	
P 985	P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	23	6	26	23	10	
P 986	P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	17	6	20	15	10	
P 987	P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	5	0	6	4	0	WAVEGUIDES AND CAVITY RESONATORS
P 988	P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	3	0	3	4	0	
P 989	P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	1	0	1	1	0	
P 990	P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	12	6	13	13	10	
P 991	P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS	5	0	6	6	0	
P 992	P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	17	6	21	13	10	
P 993	P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	7	6	7	8	0	
P 994	P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	1	6	1	1	0	
P 995	P2-12 DO YOU REMOVE OR INSTALL E BENDS	0	0	1	0	0	
P 996	P2-13 DO YOU REMOVE OR INSTALL H BENDS	0	0	1	0	0	
P 997	P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	1	0	2	0	0	
P 998	P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	0	1	0	0	
P 999	P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	0	0	0	
P1000	P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	1	6	1	0	0	
P1001	P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	0	0	1	0	0	
P1002	P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P1003 P2-20 DO YOU USE OR REFER TO "R" WALL OF WAVEGUIDES	0	0	0	0	0
P1004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES	1	0	1	1	0
P1005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0
P1006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES	0	0	1	0	0
P1007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1009 P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS	0	0	0	0	0
P1011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35	0	0	0	0	0
P1012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF	1	0	1	1	0
P1013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	0	0	0	0	0
P1014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR	0	0	0	0	0
P1015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0
P1019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	1	0	0
P1020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	1	0	0
P1021 P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	9	0	9	11	0
P1022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	5	0	4	10	0
P1023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0
P1024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
P1025	P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	
P1026	P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	1	0	0	3	0	
P1027	P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	1	0	
P1028	P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	7	0	8	7	0	
P1029	P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	1	0	1	1	0	
P1030	P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	1	0	0	3	0	
P1031	P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	1	0	1	1	0	
P1032	P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	3	0	4	3	0	
P1033	P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	1	0	1	1	0	
P1034	P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR	5	0	6	4	0	MICROWAVE AMPLIFIERS AND OSCILLATORS
P1035	P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	1	0	1	1	0	
P1036	P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	0	0	1	0	0	
P1037	P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE	0	0	1	0	0	
P1038	P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	1	0	2	1	0	
P1039	P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	0	0	0	0	0	
P1040	P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	0	0	0	0	0	
P1041	P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	0	0	1	0	0	
P1042	P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	1	0	1	0	0	
P1043	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	2	0	2	3	0	
P1044	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	0	0	1	0	0	
P1045	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	0	0	0	0	0	
P1046	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	0	0	0	0	0	
P1047	P3-14 DO YOU WORK WITH MAGNETRONS	0	0	0	0	0	
P1048	P3-15 DO YOU INSPECT KLYSTRONS OR TWT	1	0	2	1	0	
P1049	P3-16 DO YOU CLEAN KLYSTRONS OR TWT	0	0	1	0	0	
P1050	P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	1	0	2	0	0	
P1051	P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	2	0	3	0	0	
P1052	P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	1	0	2	0	0	
P1053	P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0	
P1054	P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	1	0	1	0	0	
P1055	P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	0	0	1	0	0	
P1056	P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0	
P1057	P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0	
P1058	P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P1059	P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1060	P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1061	P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1062	P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0
P1063	P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0
P1064	P3-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0
P1065	P3-32 DO YOU CLEAN MAGNETRONS	0	0	0	0	0
P1066	P3-33 DO YOU ADJUST MAGNETRONS	0	0	0	0	0
P1067	P3-34 DO YOU TUNE MAGNETRONS	0	0	0	0	0
P1068	P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0
P1069	P3-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0
P1070	P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0
P1071	P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0
P1072	P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	0	0	0	0	0
P1073	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	0	0	0	0	0
P1074	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	0	0	0	0	0
P1075	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	0	1	0	0
P1076	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	0	0	0	0	0
P1077	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS	0	0	0	0	0
P1078	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES	0	0	0	0	0
P1079	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	0	0	0	0	0
P1080	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	0	0	0	0	0
P1081	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REPELLER (REFLECTOR) PLATES	1	0	1	3	0
P1082	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	1	0	1	3	0
P1083	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	1	0	1	1	0
P1084	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	1	0	1	3	0
P1085	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	0	0	0	0	0
P1086	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	1	0	1	1	0
P1087	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P1088	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	1	0	1	3	0
P1089	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	0	0	0
P1090	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	0	0	0
P1091	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	0	0	0
P1092	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	0	0	0
P1093	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	0	0	0	0	0
P1094	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	0	0	0
P1095	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0
P1096	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	0	0	0	0	0
P1097	P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0
P1098	P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0
P1099	P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0
P1100	P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0
P1101	P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0
P1102	P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0
P1103	P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0
P1104	P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0
P1105	P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0
P1106	P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0
P1107	P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0
P1108	P3-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0
P1109	P3-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0
Q1110	Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	0	0	0	0	0
Q1111	Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	0	0	1	0	0
Q1112	Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	0	0	0	0
Q1113	Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	0	0	0	0
Q1114	Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	1	0	1	0	0
Q1115	Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	0	0	1	0	0

REGISTERS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
Q1116	Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	2	0	3	0	0	
Q1117	Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	4	0	6	3	0	
Q1118	Q2-02 DO YOU USE OR REFER TO DELAY LINES	0	0	0	0	0	
Q1119	Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	0	0	0	0	0	STORAGE DEVICES
Q1120	Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	0	0	0	0	
Q1121	Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	0	0	0	0	
Q1122	Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	1	0	1	0	0	
Q1123	Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	0	0	0	0	
Q1124	Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	0	0	0	0	
Q1125	Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	0	0	0	0	
Q1126	Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)	0	0	0	0	0	
Q1127	Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT	0	0	0	0	0	
Q1128	Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0	DIGITAL TO ANALOG CONVERTERS
Q1129	Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	
Q1130	Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	
Q1131	Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	
Q1132	Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	
Q1133	Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	
Q1134	Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER	0	0	0	1	0	
Q1135	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	
Q1136	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	
Q1137	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	
Q1138	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0	
Q1139	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
R1140	R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	0	0	1	0	0	PHANTASTRONS
R1141	R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	0	0	0	0	0	
R1142	R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	0	0	0	0	0	SCHMITT TRIGGERS
R1143	R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	0	0	0	0	0	
R1144	R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	7	6	7	8	0	CABLE FABRICATION
R1145	R3-02 DO YOU FABRICATE COAXIAL CABLES	16	13	14	20	30	
S1146	S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	13	19	15	6	10	
S1147	S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS	2	0	1	3	10	INPUT/OUTPUT DEVICES
S1148	S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	0	0	0	0	0	
S1149	S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	2	0	2	4	0	PHOTO SENSITIVE DEVICES
S1150	S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	0	0	1	0	0	
S1151	S3-02 DO YOU MEASURE EXCITATION FREQUENCIES	0	0	0	0	0	
S1152	S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	
S1153	S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES	0	0	0	0	0	
S1154	S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)
S1155	S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	1	0	0	
S1156	S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	1	0	0	
S1157	S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	1	0	0	
S1158	S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	1	0	0	
T1159	T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS	39	50	40	38	30	
T1160	T1-02 DO YOU INSPECT INFRARED SYSTEMS	32	25	34	32	20	
T1161	T1-03 DO YOU CLEAN INFRARED SYSTEMS	28	25	30	25	20	INFRARED
T1162	T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS	19	19	21	18	0	
T1163	T1-05 DO YOU OPERATE INFRARED SYSTEMS	27	25	29	25	0	
T1164	T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS	10	6	10	13	0	
T1165	T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS	14	0	13	20	20	
T1166	T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS	5	0	6	4	10	
T1167	T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS	15	6	14	21	20	
T1168	T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS	4	0	4	6	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
T1169	T1-11	DO YOU USE OR REFER TO FAR REGION	1	0	1	1	0	
T1170	T1-12	DO YOU USE OR REFER TO INTERMEDIATE REGION	1	0	1	1	0	
T1171	T1-13	DO YOU USE OR REFER TO NEAR REGION	1	0	2	1	0	
T1172	T1-14	DO YOU USE OR REFER TO MICRON	1	0	1	1	0	
T1173	T1-15	DO YOU USE OR REFER TO GRAY BODIES	1	0	1	1	0	
T1174	T1-16	DO YOU USE OR REFER TO BLACK BODIES	2	0	1	6	0	
T1175	T1-17	DO YOU USE OR REFER TO ABSORPTION	2	6	1	3	0	
T1176	T1-18	DO YOU USE OR REFER TO SCATTERING	1	6	1	1	0	
T1177	T1-19	DO YOU USE OR REFER TO ABSOLUTE ZERO	0	0	1	0	0	
T1178	T1-20	DO YOU PERFORM TASKS ON BLITZ	0	0	0	0	0	
T1179	T1-21	DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	0	1	0	
T1180	T1-22	DO YOU PERFORM TASKS ON ERECTOR LENSES	0	0	0	1	0	
T1181	T1-23	DO YOU PERFORM TASKS ON OCULAR LENSES	2	6	2	1	0	
T1182	T1-24	DO YOU PERFORM TASKS ON CORRECTION LENSES	1	0	1	1	0	
T1183	T1-25	DO YOU PERFORM TASKS ON FILTERS	1	0	1	1	10	
T1184	T1-26	DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	2	0	2	6	0	
T1185	T1-27	DO YOU PERFORM TASKS ON PLANE MIRRORS	2	0	1	6	0	
T1186	T2-01	DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	27	31	29	23	30	
T1187	T2-02	DO YOU INSPECT LASER SYSTEMS	24	25	26	21	20	
T1188	T2-03	DO YOU CLEAN LASER SYSTEMS	19	25	22	11	10	LASERS
T1189	T2-04	DO YOU OPERATE LASER SYSTEMS	18	6	21	11	20	
T1190	T2-05	DO YOU OPERATE LASER SYSTEMS	17	6	21	10	20	
T1191	T2-06	DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	5	0	7	3	10	
T1192	T2-07	DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	14	6	13	14	30	
T1193	T2-08	DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	8	6	9	6	10	
T1194	T2-09	DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	13	13	12	13	30	
T1195	T2-10	DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	5	0	5	4	10	
T1196	T2-11	DO YOU USE OR REFER TO ANGSTROMS (A)	0	0	1	0	0	
T1197	T2-12	DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	0	1	0	0	
T1198	T2-13	DO YOU USE OR REFER TO GROUND STATE	0	0	1	0	0	
T1199	T2-14	DO YOU USE OR REFER TO EXCITED STATE	0	0	1	0	0	
T1200	T2-15	DO YOU USE OR REFER TO PACKET OF RADIATION	0	0	1	0	0	
T1201	T2-16	DO YOU USE OR REFER TO PHOTONS	0	0	1	0	0	
T1202	T2-17	DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	0	1	0	0	
T1203	T2-18	DO YOU USE OR REFER TO STIMULATED EMISSION	0	0	1	0	0	
T1204	T2-19	DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	0	1	0	0	
T1205	T2-20	DO YOU USE OR REFER TO INVERSION LEVEL	0	0	1	0	0	
T1206	T2-21	DO YOU USE OR REFER TO MONOCHROMATIC	0	0	0	0	0	
T1207	T2-22	DO YOU WORK WITH ACTIVE MATERIALS	0	0	0	0	0	
T1208	T2-23	DO YOU WORK WITH PUMPING SOURCES	1	0	1	1	0	
T1209	T2-24	DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
T1210	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS	0	0	1	0	0	
T1211	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES	1	0	2	0	0	
T1212	T2-27 DO YOU WORK WITH RUBY	0	0	1	0	0	
T1213	T2-28 DO YOU WORK WITH HELIUM-NEON	0	6	0	0	0	
T1214	T2-29 DO YOU WORK WITH HELIUM-XENON	0	0	1	0	0	
T1215	T2-30 DO YOU WORK WITH XENON	0	0	0	0	0	
T1216	T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	
T1217	T2-32 DO YOU WORK WITH ARGON	1	6	1	1	10	
T1218	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	
T1219	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	
T1220	T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE	1	0	1	0	0	
T1221	T3-02 DO YOU INSPECT DVST OR MMST	1	0	1	0	0	
T1222	T3-03 DO YOU CLEAN DVST OR MMST	1	0	1	0	0	DISPLAY TUBES
T1223	T3-04 DO YOU ADJUST OR CALIBRATE DVST OR MMST	0	0	0	0	0	
T1224	T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST	1	0	2	0	0	
T1225	T3-06 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS	0	0	0	0	0	
T1226	T3-07 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	0	0	0	0	0	
T1227	T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0	0	
T1228	T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF MMST	0	0	0	0	0	
T1229	T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	
T1230	T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0	0	
T1231	T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	
T1232	T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0	0	
T1233	T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	0	0	0	
U1234	U1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING TASKS	0	0	1	0	0	
U1235	U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	0	0	0	0	0	
U1236	U1-03 DO YOU USE OR REFER TO PROGRAMS	0	0	0	0	0	PROGRAMMING
U1237	U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	0	0	0	0	0	
U1238	U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	0	0	0	0	0	
U1239	U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	0	0	0	
U1240	U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	0	0	0	0	0	
U1241	U1-08 DO YOU USE OR REFER TO TIME-SHARING	0	0	0	0	0	
U1242	U1-09 DO YOU USE OR REFER TO DATA WORDS	0	0	0	0	0	
U1243	U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	0	0	0	0	0	
U1244	U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	0	0	0	0	0	
U1245	U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	0	0	0	0	0	
U1246	U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	0	0	0	0	0	
U1247	U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	0	0	0	0	0	
U1248	U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	0	0	0	0	0	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
U1249	U1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	0	0	1	0	0	
U1250	U1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	0	0	0	0	0	
U1251	U1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	0	0	0	0	0	
U1252	U1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	0	0	1	0	0	
U1253	U1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	0	0	0	0	0	
U1254	U1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	0	0	0	0	0	
U1255	U2-01 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	4	0	2	10	10	
U1256	U2-02 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	0	0	0	1	0	DB AND POWER RATIOS
U1257	U2-03 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	0	0	0	1	0	
U1258	U2-04 DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED NO TASKS	5	6	3	10	10	

TABULATION OF PERCENT MEMBERS PERFORMING TASKS AND DUTIES BY AFMS GROUPS
IN THE 316X1L/93 CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY = SP1006	ALL OS AMN WITH 6-24 MOS IN CAR FLD	CONTAINING	56 MEMBERS.
GROUP IDENTITY = SP1007	ALL OS AMN WITH 25-48 MOS IN CAR FLD	CONTAINING	110 MEMBERS.
GROUP IDENTITY = SP1008	ALL OS AMN WITH 1-48 MOS IN CAR FLD	CONTAINING	172 MEMBERS.
GROUP IDENTITY = SP1009	ALL OS AMN WITH 49-96 MOS IN CAR FLD	CONTAINING	44 MEMBERS.
GROUP IDENTITY = SP1010	ALL OS AMN WITH 97-144 MOS IN CAR FLD	CONTAINING	28 MEMBERS.
GROUP IDENTITY = SP1011	ALL OS AMN WITH 145 OR MORE MOS IN CAR FLD	CONTAINING	35 MEMBERS.

DUTY GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DUTY	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
A	MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	91	90	90	86	82	80
B	MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE	88	92	90	82	79	74
C	CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	48	37	41	36	36	43
D	RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	5	9	8	9	14	20
E	COUPLING, SOLDERING, AND RELAYS	30	40	35	43	46	51
F	MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	52	62	58	61	46	46
G	SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	7	15	12	18	29	37
H	SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	55	49	51	59	50	49
I	MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	0	5	3	5	14	17
J	ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, HETERODYNING, MODULATION,	14	10	11	9	7	9
K	AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	4	6	5	0	7	11
L	LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	21	29	26	20	29	14
M	TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	48	59	55	52	54	49
N	METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVESHAPING CIRCUITS	55	67	64	43	54	54
O	SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	43	38	40	20	11	20
P	TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	27	34	30	16	29	14
Q	REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS	5	11	9	5	4	3
R	PHANTASTRONS, SCHMITT TRIGGERS, AND CABLE FABRICATION	11	17	15	14	21	23
S	INPUT\OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS	18	15	16	14	7	6
T	INFRARED, LASERS, AND DISPLAY TUBES	55	53	53	39	43	51
U	PROGRAMMING, DB AND POWER RATIOS	5	7	7	14	18	17

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
A	1	A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO	54	49	49	45	43	14
A	2	A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU	27	25	25	32	14	17
A	3	A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	11	13	12	16	4	20
A	4	A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	0	1	1	2	0	9
A	5	A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	13	14	13	5	4	17
A	6	A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	0	0	0	0	0	0
A	7	A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	0	0	0	0	0	3
A	8	A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	0	1	1	0	0	3
A	9	A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	0	0	0	0	0	0
A	10	A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	0	0	0	0	0	6
A	11	A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	0	0	0	0	0	0
A	12	A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	0	1	1	0	0	3
A	13	A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	4	3	3	0	4	6
A	14	A1-14 DO YOU SOLVE OR USE PROPORTIONS.	2	5	4	9	4	9
A	15	A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	80	83	81	80	79	77
A	16	A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	18	13	15	20	14	37
A	17	A2-03 DO YOU USE THE TERM OHM.	77	84	81	77	82	77
A	18	A2-04 DO YOU USE THE TERM ION.	0	2	1	5	7	14
A	19	A2-05 DO YOU USE THE TERM DYNE.	0	3	2	5	0	9
A	20	A2-06 DO YOU USE THE TERM AMPERE.	59	62	59	61	64	69
A	21	A2-07 DO YOU USE THE TERM NEUTRON.	0	3	2	7	4	11
A	22	A2-08 DO YOU USE THE TERM COULOMB.	2	3	2	2	4	9
A	23	A2-09 DO YOU USE THE TERM PROTON.	0	2	1	9	4	11
A	24	A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	41	43	41	45	39	40
A	25	A3-02 DO YOU INSPECT RESISTORS.	21	21	20	32	29	31
A	26	A3-03 DO YOU CLEAN RESISTORS.	11	7	8	16	14	20
A	27	A3-04 DO YOU ADJUST RESISTORS.	32	40	37	41	32	40
A	28	A3-05 DO YOU CHECK OHMIC VALUE OR RESISTORS.	32	25	27	32	43	34
A	29	A3-06 DO YOU REMOVE OR REPLACE RESISTORS.	16	14	14	20	21	29
A	30	A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.	5	3	3	0	4	6
A	31	A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.	21	19	19	30	32	51
A	32	A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR	20	21	20	25	32	43
A	33	A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.	23	16	18	23	25	37

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
A	34	A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	18	11	13	18	25	31
A	35	A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.	7	4	5	5	4	6
A	36	A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO	5	6	6	0	4	14
A	37	A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	29	27	27	32	39	51
A	38	A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.	14	10	11	11	7	17
A	39	A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.	7	8	8	11	7	17
A	40	A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.	9	7	8	11	7	17
A	41	A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.	5	5	5	5	0	11
A	42	A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.	11	9	9	9	7	14
A	43	A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.	5	7	6	9	7	14
A	44	A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	5	7	6	9	7	14
A	45	A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	7	5	6	9	7	11
A	46	A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.	5	4	4	2	0	11
A	47	A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.	9	6	7	9	7	14
A	48	A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.	5	6	6	9	7	14
A	49	A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.	5	9	8	9	7	14
A	50	A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.	7	5	6	9	7	11
A	51	A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.	5	3	3	2	0	11
B	52	B1-01 DO YOU MEASURE RESISTANCE.	80	83	81	66	71	51
B	53	B1-02 DO YOU REPAIR OHMMETERS.	2	4	3	7	4	0
B	54	B1-03 DO YOU MEASURE VOLTAGE.	75	85	80	70	75	60
B	55	B1-04 DO YOU REPAIR VOLTMETERS.	2	2	2	5	0	0
B	56	B1-05 DO YOU REPAIR AMMETERS.	2	2	2	5	0	0
B	57	B1-06 DO YOU MEASURE CURRENT.	46	52	48	36	57	31
B	58	B1-07 DO YOU USE MULTIMETERS.	80	85	83	73	79	60
B	59	B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	0	1	1	2	0	0
B	60	B1-09 DO YOU READ SCHEMATICS.	55	51	51	59	64	54

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
B	61	B2-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS).	25	38	33	41	50	49
B	62	B2-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.	34	48	42	43	46	51
B	63	B2-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).	36	39	37	48	43	40
B	64	B2-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH.	23	37	32	32	29	31
B	65	B2-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.	48	72	63	64	64	66
B	66	B2-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.	5	9	8	11	4	29
B	67	B3-01 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.	9	10	9	14	14	14
B	68	B3-02 DO YOU INSPECT INDUCTORS.	2	6	5	11	4	14
B	69	B3-03 DO YOU CLEAN INDUCTORS.	0	5	3	9	0	3
B	70	B3-04 DO YOU ADJUST INDUCTORS.	0	5	3	7	0	14
B	71	B3-05 DO YOU REMOVE OR REPLACE INDUCTORS.	2	5	4	7	4	9
B	72	B3-06 DO YOU USE OR REFER TO INDUCTANCE.	2	5	3	9	4	14
B	73	B3-07 DO YOU USE OR REFER TO HENRIES.	4	3	3	9	4	11
B	74	B3-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.	2	4	3	9	4	9
B	75	B3-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.	0	1	1	0	0	0
B	76	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.	0	2	1	0	4	3
B	77	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	0	1	1	0	4	0
B	78	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF	0	2	1	0	0	3
B	79	B3-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS	0	0	0	0	0	0
B	80	B3-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS	0	1	1	0	0	0
B	81	B3-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE	0	0	0	0	0	0
B	82	B3-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.	0	1	1	0	0	0
B	83	B3-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES.	2	1	1	0	0	3
B	84	B3-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.	2	1	1	0	0	3
B	85	B3-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.	2	1	1	0	0	3
B	86	B3-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.	0	0	0	2	0	6
B	87	B3-21 DO YOU CALCULATE INDUCTIVE REACTANCE.	2	1	1	0	4	3
B	88	B3-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.	0	0	0	0	4	6
B	89	B3-23 DO YOU WORK WITH POWER INDUCTORS.	2	4	3	0	7	6
B	90	B3-24 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.	4	2	2	0	7	9
B	91	B3-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	4	2	2	2	4	9

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C	92	C1-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	27	19	21	27	18	29
C	93	C1-02 DO YOU INSPECT CAPACITORS.	9	9	9	14	11	29
C	94	C1-03 DO YOU CLEAN CAPACITORS.	5	3	3	9	7	11
C	95	C1-04 DO YOU ADJUST CAPACITORS.	4	5	4	2	0	11
C	96	C1-05 DO YOU TEST CAPACITORS.	2	4	3	7	4	11
C	97	C1-06 DO YOU DISCHARGE CAPACITORS.	16	7	10	11	11	17
C	98	C1-07 DO YOU REMOVE OR REPLACE CAPACITORS.	5	6	6	7	4	23
C	99	C1-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	0	1	1	0	0	0
C	100	C1-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	0	1	1	0	0	0
C	101	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.	9	5	6	11	11	23
C	102	C1-11 DO YOU USE OR REFER TO CAPACITANCE.	14	5	8	14	11	23
C	103	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT	0	0	0	0	0	0
C	104	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	4	5	4	7	4	17
C	105	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE	4	0	1	0	4	9
C	106	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES	2	2	2	2	0	14
C	107	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	20	13	15	23	14	31
C	108	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	21	14	16	20	18	29
C	109	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	14	13	13	11	11	26
C	110	C1-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS	9	7	8	7	11	6
C	111	C1-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	0	0	0	0	0	0
C	112	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE	0	0	0	0	0	0
C	113	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO	0	0	0	0	0	0
C	114	C1-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	0	0	0	0	0	9
C	115	C1-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	0	0	0	0	0	9
C	116	C1-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	0	0	0	0	0	6
C	117	C1-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	0	1	1	2	0	9
C	118	C1-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	0	0	0	2	0	9
C	119	C1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO	0	0	0	2	4	0
C	120	C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE	0	0	0	0	4	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C	121	C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	7	4	5	9	7	11
C	122	C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	4	3	3	2	4	9
C	123	C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	7	7	7	9	11	26
C	124	C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	9	6	7	7	11	23
C	125	C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	7	7	7	9	11	26
C	126	C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	7	6	6	9	11	29
C	127	C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	11	11	10	14	7	3
C	128	C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	18	15	16	16	29	34
C	129	C2-02 DO YOU INSPECT TRANSFORMERS	7	8	8	14	21	29
C	130	C2-03 DO YOU CLEAN TRANSFORMERS	2	5	4	7	4	11
C	131	C2-04 DO YOU ADJUST TRANSFORMERS	5	5	5	5	4	9
C	132	C2-05 DO YOU TROUBLESHOOT TRANSFORMERS	4	6	5	16	14	23
C	133	C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	7	8	8	14	7	31
C	134	C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	0	1	1	0	0	0
C	135	C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	0	1	1	0	0	0
C	136	C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	0	0	0	0	0	3
C	137	C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	0	0	0	0	4	0
C	138	C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	0	1	1	0	0	3
C	139	C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0	0
C	140	C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	0	0	0	0	0	0
C	141	C2-14 DO YOU WORK WITH AUTOTRANSFORMERS	4	0	1	2	4	6
C	142	C2-15 DO YOU WORK WITH POWER TRANSFORMERS	11	13	12	14	14	34
C	143	C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS	2	1	1	2	4	14
C	144	C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	4	3	3	2	0	11
C	145	C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	5	5	5	5	7	3
C	146	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	2	5	4	14	11	26
C	147	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	2	5	4	14	7	23
C	148	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	0	4	2	14	11	23
C	149	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR	2	1	1	2	4	3
C	150	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-	2	3	2	2	4	6
C	151	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	11	9	9	16	18	31

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C	152	C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	5	5	9	11	29
C	153	C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	5	5	11	18	26
C	154	C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	7	6	6	11	18	34
C	155	C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	5	4	7	7	20
C	156	C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	4	4	9	7	26
C	157	C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	3	3	9	11	26
C	158	C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING	0	3	2	0	7	6
C	159	C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH	0	1	1	2	4	9
C	160	C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO	0	1	1	2	7	3
C	161	C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS	0	3	2	5	11	14
C	162	C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	2	4	3
C	163	C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	2	4	3
C	164	C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	9	5	6	5	11	14
C	165	C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	4	5	4	5	14	14
C	166	C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	2	1	1	0	4	3
C	167	C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	2	4	3	0	11	6
C	168	C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	0	2	1	2	7	9
C	169	C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	0	4	2	2	7	6
C	170	C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	0	0	0	0	4	0
C	171	C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	5	6	6	7	18	14
C	172	C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	4	5	4	2	7	14
C	173	C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	0	1	1	0	0	6
C	174	C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	0	1	1	0	0	6
C	175	C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	0	1	1	2	0	3
C	176	C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	2	1	1	0	0	6
C	177	C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	2	3	2	11	7	9
C	178	C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C	179	C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	0	0	0	0	0	0
C	180	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION	4	2	2	5	11	11
C	181	C3-11 DO YOU USE OR REFER TO FLUX DENSITY	0	1	1	0	4	6
C	182	C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	13	14	13	9	18	29
C	183	C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	5	4	5	0	4	6
C	184	C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	0	2	1	0	4	6
D	185	D1-01 DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB	4	5	4	2	7	9
D	186	D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	3
D	187	D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D	188	D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D	189	D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D	190	D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D	191	D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	0	9
D	192	D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	3
D	193	D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	0	1	1	0	0	6
D	194	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	9
D	195	D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	0	1	1	0	0	3
D	196	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D	197	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	0	2	1	0	7	3
D	198	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	2	2	2	0	4	6
D	199	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	2	2	2	0	4	6
D	200	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	0	3	2	0	7	6
D	201	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	4	0
D	202	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	0	1	1	0	4	6
D	203	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	4	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DI-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
D 204	DI-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	2	2	0	7	6
D 205	DI-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	0	0	0	0
D 206	DI-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	1	1	0	0	0
D 207	DI-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	0	2	1	0	0	3
D 208	DI-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0	0
D 209	DI-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	0	2	1	0	0	3
D 210	DI-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	1	1	0	0	0
D 211	DI-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	0	2	1	0	0	3
D 212	DI-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	0	1	1	0	0	3
D 213	DI-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	1	1	0	0	0
D 214	DI-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	0	1	1	0	0	6
D 215	DI-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	0	0	0	0
D 216	DI-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	0	0	0	0
D 217	DI-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	0	2	1	0	0	6
D 218	DI-34 DO YOU CHECK CAPACITORS USING OHMMETERS	0	3	2	2	4	3
D 219	DI-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	0	2	1	5	0	9
D 220	DI-36 DO YOU CHECK INDUCTORS USING OHMMETERS	0	3	2	0	0	3
D 221	DI-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	0	1	1	2	0	6
D 222	DI-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA= 0, PF = 1, AND PA = PT FOR RESONANT CIRCUITS	0	0	0	0	0	0
D 223	DI-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	1	1	0	0	0
D 224	DI-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	0	2	1	0	4	3
D 225	DI-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	0	2	1	0	4	0
D 226	DI-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	0	1	1	0	4	3
D 227	DI-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	0	1	1	0	4	0
D 228	DI-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

			SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
D	229	D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	2	2	2	2	7	9
D	230	D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	2	1	1	0	7	11
D	231	D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	2	1	1	0	0	6
D	232	D2-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	0	1	1	0	0	3
D	233	D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5)	0	0	0	0	4	11
D	234	D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	0	0	0	0	4	3
D	235	D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC	0	0	0	0	0	3
D	236	D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO	0	0	0	0	0	3
D	237	D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND	0	0	0	0	0	3
D	238	D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER	0	0	0	0	0	9
D	239	D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	4	3	3	5	11	9
D	240	D3-02 DO YOU INSPECT FILTER CIRCUITS	2	3	2	5	7	6
D	241	D3-03 DO YOU CLEAN FILTER CIRCUITS	2	2	2	5	4	3
D	242	D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	0	2	1	2	4	6
D	243	D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	0	2	1	2	0	9
D	244	D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	0	3	2	2	4	6
D	245	D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	0	3	2	7	7	9
D	246	D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	0	3	2	2	4	6
D	247	D3-09 DO YOU WORK WITH LOW PASS FILTERS	0	1	1	0	0	6
D	248	D3-10 DO YOU WORK WITH HIGH PASS FILTERS	0	1	1	0	0	6
D	249	D3-11 DO YOU WORK WITH BANDPASS FILTERS	0	1	1	0	4	6
D	250	D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	0	1	1	0	0	6
D	251	D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	4	2	2	2	7	6
D	252	D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	0	1	1	0	4	3
D	253	D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	0	1	1	2	0	3
D	254	D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	0	1	1	2	0	3
D	255	D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	2	2	2	2	7	9
D	256	D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	0	2	1	2	4	6
D	257	D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	0	2	1	2	4	6
D	258	D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	0	2	1	0	4	6

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
D	259	D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	2	1	1	0	7	6
D	260	D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC	0	0	0	0	0	0
E	261	E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	0	3	2	2	11	9
E	262	E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC	0	3	2	5	7	9
E	263	E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	2	1	5	0	9
E	264	E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	2	1	2	11	9
E	265	E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING	0	3	2	2	4	6
E	266	E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	0	2	1	2	4	6
E	267	E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	0	2	1	0	7	3
E	268	E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS	0	1	1	0	4	9
E	269	E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS	0	1	1	0	4	9
E	270	E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	0	1	1	0	4	9
E	271	E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS	0	1	1	0	7	9
E	272	E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS	0	2	1	2	4	0
E	273	E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS	29	35	31	41	39	46
E	274	E2-02 DO YOU SELECT TYPE OF SOLDER TO USE	27	26	26	30	25	31
E	275	E2-03 DO YOU ADD FLUX TO CONNECTIONS	25	25	24	32	25	26
E	276	E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS	21	29	26	27	25	26
E	277	E2-05 DO YOU STRIP INSULATION FROM WIRES	27	34	30	39	32	34
E	278	E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS	18	20	19	23	25	31
E	279	E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS	27	31	28	36	32	31
E	280	E2-08 DO YOU CUT WIRES	27	33	30	36	32	31
E	281	E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS	21	26	24	25	29	29
E	282	E2-10 DO YOU TIN SOLDERING IRON TIPS	21	28	25	30	32	34
E	283	E2-11 DO YOU CLEAN SOLDERING IRON TIPS	27	32	29	32	32	34
E	284	E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	18	23	20	25	25	26
E	285	E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS	20	19	19	23	32	34
E	286	E2-14 DO YOU INSPECT SOLDERED CONNECTIONS	21	30	26	34	39	43
E	287	E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING	14	15	14	18	18	20
E	288	E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS	11	0	3	9	4	11
E	289	E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	20	14	15	20	11	34
E	290	E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL	9	3	5	2	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		QY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
E	291	E2-19 DO YOU MAKE HARDWIRE CONNECTIONS	18	25	22	27	32	34
E	292	E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	18	8	11	16	11	20
E	293	E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS	9	7	8	11	14	11
E	294	E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS	7	5	6	9	11	11
E	295	E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	7	16	13	23	25	23
E	296	E3-02 DO YOU ADJUST RELAYS	4	7	6	7	0	6
E	297	E3-03 DO YOU CLEAN RELAYS	0	7	5	7	4	6
E	298	E3-04 DO YOU INSPECT RELAYS	2	8	6	11	7	17
E	299	E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	4	9	7	14	14	17
E	300	E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	2	1	1	2	0	0
E	301	E3-07 DO YOU TROUBLESHOOT RELAYS	4	7	6	16	14	17
E	302	E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	0	6	4	9	0	6
E	303	E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	2	6	5	5	4	6
E	304	E3-10 DO YOU PERFORM TASKS ON RELAY CORES	0	0	0	0	0	0
E	305	E3-11 DO YOU PERFORM TASKS ON RELAY COILS	0	0	0	0	0	0
E	306	E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	0	0	0	0	0	0
E	307	E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	2	3	2	5	0	3
E	308	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS	5	9	8	16	14	23
E	309	E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	4	8	6	16	18	23
E	310	E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	2	7	5	16	18	20
E	311	E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	2	8	6	16	18	20
E	312	E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	2	7	5	11	18	14
E	313	E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	2	3	2	16	11	6
F	314	F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	0	2	1	2	0	6
F	315	F1-02 DO YOU INSPECT MICROPHONES	0	0	0	0	0	3
F	316	F1-03 DO YOU CLEAN MICROPHONES	0	0	0	2	0	0
F	317	F1-04 DO YOU OPERATE MICROPHONES	0	2	1	2	0	6
F	318	F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	2	0	3
F	319	F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	0	0	0	0	0	0
F	320	F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	0	0	0	2	0	3
F	321	F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	0	0	0	0	0	0
F	322	F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	0	0	0	2	0	6
F	323	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	0	0	0	2	0	0
F	324	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	0	0	0	2	0	3
F	325	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	0	0	0	2	0	3
F	326	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	0	1	1	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
F	327	F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	0	0	0	2	0	6
F	328	F2-02 DO YOU INSPECT SPEAKERS	0	0	0	0	0	6
F	329	F2-03 DO YOU CLEAN SPEAKERS	0	0	0	0	0	0
F	330	F2-04 DO YOU OPERATE SPEAKERS	0	0	0	0	0	6
F	331	F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	0	0	3
F	332	F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0	0
F	333	F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	0	0	0	0	0	6
F	334	F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0	0
F	335	F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	0	0	0	0	0	0
F	336	F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	0
F	337	F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	0	0	0	0	0	0
F	338	F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0	0
F	339	F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	0	0	0	0	0	0
F	340	F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0	0
F	341	F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	0	0	0	0	0	0
F	342	F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	50	55	52	57	46	43
F	343	F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	30	42	37	39	36	40
F	344	F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	34	45	41	50	39	37
F	345	F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	29	37	33	34	25	37
F	346	F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	43	46	44	48	36	34
F	347	F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME	39	42	41	43	43	40
F	348	F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS	7	5	5	5	0	3
F	349	F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	29	35	31	25	25	29
F	350	F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	21	22	21	20	18	20
F	351	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	43	45	42	48	32	29
F	352	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	25	18	20	25	18	29
F	353	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	34	39	36	43	25	31
G	354	G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	5	8	7	9	11	23
G	355	G1-02 DO YOU INSPECT DIODES	4	7	6	9	14	23
G	356	G1-03 DO YOU REMOVE OR REPLACE DIODES	0	5	3	7	11	17
G	357	G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT	2	5	4	7	4	14
G	358	G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	0	0	0	0	0	0
G	359	G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE,	0	0	0	0	0	0
G	360	G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	2	0	1	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DE=TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G	361	G1-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES	2	1	1	2	4	14
G	362	G1-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON	4	5	4	5	4	20
G	363	G1-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	0	2	1	0	0	0
G	364	G1-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE	0	4	2	0	4	9
G	365	G1-12 DO YOU USE OR REFER TO DIODE COLOR CODING	2	2	2	0	4	6
G	366	G1-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0	0
G	367	G1-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0	0
G	368	G1-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS IN 538	4	2	2	2	7	17
G	369	G1-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0	0
G	370	G1-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0	0
G	371	G1-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE	0	4	2	0	4	9
G	372	G1-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT	0	0	0	0	0	0
G	373	G1-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0	0
G	374	G1-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0	0
G	375	G1-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)	0	0	0	0	0	0
G	376	G1-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)	0	0	0	0	0	3
G	377	G1-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END	4	5	5	9	11	20
G	378	G1-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	0	0	0	0	0	3
G	379	G1-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE	0	1	1	0	4	3
G	380	G1-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT	0	1	1	0	0	0
G	381	G1-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR	2	3	2	2	4	14
G	382	G1-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G 383	G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
G 384	G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
G 385	G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
G 386	G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	0	0	3
G 387	G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	0	0	0	0	4	6
G 388	G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
G 389	G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
G 390	G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	3
G 391	G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	3
G 392	G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
G 393	G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
G 394	G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	0	0	0	0
G 395	G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	0	0	0	0
G 396	G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	0
G 397	G1-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	0	3	2	2	4	17
G 398	G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	0	3
G 399	G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	2	0	1	2	0	6
G 400	G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	0	1	1	0	0	3
G 401	G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	0	1	1	0	0	0
G 402	G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	0	1	1	0	0	3
G 403	G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	0	1	1	0	0	3
G 404	G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.	7	10	9	18	18	29
G 405	G2-02 DO YOU INSPECT TRANSISTORS	4	7	6	16	14	20
G 406	G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS	2	3	2	14	11	20
G 407	G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	2	3	2	9	4	14
G 408	G2-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	2	1	5	7	14
G 409	G2-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	2	1	5	4	14

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G	410	G2-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	0	2	1	7	4	14
G	411	G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	0	1	1	0	0	3
G	412	G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	0	1	1	0	0	3
G	413	G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)	0	1	1	5	0	6
G	414	G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	0	0	0	0	0	3
G	415	G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	4	7	6	16	14	31
G	416	G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	5	7	6	14	18	29
G	417	G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	2	0	1	2	0	9
G	418	G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY	0	1	1	0	0	6
G	419	G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR	0	4	2	5	11	3
G	420	G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	0	1	1	0	4	3
G	421	G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	0	0	0	2	0	0
G	422	G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	0	0	0	0	0
G	423	G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G	424	G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G	425	G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0	0
G	426	G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G	427	G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G	428	G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	0	3	2	7	7	11
G	429	G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	0	1	1	7	7	6
G	430	G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	0	2	1	5	7	3
G	431	G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	0	1	1	7	7	6
G	432	G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	0	0	0	7	4	3
G	433	G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	0	2	1	7	7	6
G	434	G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	0	0	0	2	0	3
G	435	G3-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0	0
G	436	G3-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G 437	G3-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	4	6
G 438	G3-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	3
G 439	G3-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	0	0	0	0	0	6
G 440	G3-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	3
G 441	G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A	0	0	0	0	0	0
G 442	G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	0	0	0	0	0	6
G 443	G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	0	3
G 444	G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	5	4	3
G 445	G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	5	4	3
G 446	G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	0	5	4	3
G 447	G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE	0	0	0	0	0	0
G 448	G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE	0	0	0	0	0	0
G 449	G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE	0	0	0	0	0	0
G 450	G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE	0	0	0	0	0	3
G 451	G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT [Q] OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0	0
G 452	G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0	0
G 453	G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	1	1	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-ISK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G	454	G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0	0
G	455	G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	1	1	0	0	0
G	456	G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	1	1	0	0	0
G	457	G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	1	1	0	0	0
G	458	G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION	0	0	0	0	0	0
G	459	G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	0	1	1	0	0	3
G	460	G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	0	0	0	0	0	6
G	461	G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	0	1	1	0	4	3
G	462	G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	0	1	1	0	4	3
G	463	G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	1	1	0	0	0
G	464	G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	0	1	1	0	0	6
G	465	G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	0	0	0	0	0	6
G	466	G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0	6
G	467	G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0	0
G	468	G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	0	0	0	0
G	469	G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	0	0	0	0	0	6
G	470	G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR	0	0	0	0	0	0
G	471	G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	0	1	1	0	0	6
G	472	G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	1	1	0	0	3
G	473	G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	0	2	1	7	4	6
G	474	G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	0	1	1	0	0	0
G	475	G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	2	1	2	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G	476	G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	1	1	2	0	3
H	477	H1-01 DO YOU USE OR REFER TO VARACTORS	2	2	2	0	4	3
H	478	H1-02 DO YOU USE OR REFER TO TUNNEL DIODES	2	2	2	2	7	11
H	479	H1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	5	5	5	16	14	17
H	480	H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	5	5	5	9	14	14
H	481	H1-05 DO YOU USE OR REFER TO ZENER DIODES	7	15	12	34	25	34
H	482	H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	11	30	23	36	29	31
H	483	H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	50	36	41	45	39	37
H	484	H2-02 DO YOU INSPECT POWER SUPPLIES	32	29	27	36	32	34
H	485	H2-03 DO YOU CLEAN POWER SUPPLIES	23	16	18	25	11	23
H	486	H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	29	16	20	30	36	31
H	487	H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	18	9	12	23	29	29
H	488	H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	9	5	6	14	11	29
H	489	H2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	23	17	19	25	25	20
H	490	H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	9	4	5	16	14	23
H	491	H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	4	5	5	11	18	20
H	492	H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	4	5	4	5	14	23
H	493	H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	5	4	4	11	18	23
H	494	H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	2	2	2	2	11	6
H	495	H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	18	12	13	30	14	29
H	496	H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	11	12	11	18	14	11
H	497	H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	16	8	10	27	14	17
H	498	H2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	14	6	9	18	7	23
H	499	H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	2	2	2	7	4	11
H	500	H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	0	2	1	5	4	9
H	501	H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	0	4	2	0	0	14
H	502	H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	7	6	6	20	14	17
H	503	H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	13	7	9	18	7	26
H	504	H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	2	3	2	9	21	17
H	505	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	2	2	2	11	14	11
H	506	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	2	2	2	5	7	9
H	507	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	2	1	1	5	0	9
H	508	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	4	1	2	0	4	6
H	509	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	2	2	2	0	4	9
H	510	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER	14	7	9	16	25	11
H	511	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	0	0	0	0	0	3
H	512	H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	2	3	2	7	7	6

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	QY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
H 513	H3-02 DO YOU INSPECT OSCILLATORS	2	2	2	5	7	6
H 514	H3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	2	3	2	7	7	3
H 515	H3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	2	2	2	7	7	0
H 516	H3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	0	1	1	2	0	0
H 517	H3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	2	2	2	7	7	0
H 518	H3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	0	1	1	2	0	3
H 519	H3-08 DO YOU USE OR REFER TO FEEDBACK	0	2	1	0	11	9
H 520	H3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	0	2	1	0	11	0
H 521	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	0	2	1	0	4	3
H 522	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	2	1	0	4	3
H 523	H3-12 DO YOU USE OR REFER TO DAMPING	0	2	1	2	7	3
H 524	H3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	0	1	1	0	7	6
H 525	H3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	2	2	2	0	7	3
H 526	H3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	0	1	1	0	0	3
H 527	H3-16 DO YOU USE OR REFER TO UNDER DAMPING	0	2	1	0	0	3
H 528	H3-17 DO YOU USE OR REFER TO OVER DAMPING	0	2	1	0	0	3
H 529	H3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	0	1	1	0	7	3
H 530	H3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	0	1	1	0	7	3
H 531	H3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	0	2	1	0	7	3
H 532	H3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	5	1	2	5	4	0
H 533	H3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 534	H3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 535	H3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 536	H3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	1	1	0	0	0
H 537	H3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	0	0	0	0	0
H 538	H3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	5	1	2	5	7	0
I 539	I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	0	3	2	0	14	3
I 540	I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	7	3
I 541	I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	11	6
I 542	I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	7	6
I 543	I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	14	3
I 544	I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	0	2	1	0	11	3
I 545	I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	14	3
I 546	I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	0	0	0	0	4	3
I 547	I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	0	1	1	0	11	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
I	548	11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	0	1	1	0	11	6
I	549	11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	0	2	1	0	7	3
I	550	11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FDO	0	2	1	2	7	0
I	551	11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	0	0	0	0	4	3
I	552	11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	0	0	0	0	7	3
I	553	11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	0	0	0	0	7	3
I	554	11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	0	3	2	2	11	3
I	555	12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	0	1	1	0	14	3
I	556	12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	0	1	1	0	4	3
I	557	12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	0	1	1	0	11	3
I	558	12-04 DO YOU WORK WITH LIMITERS WITH BIAS	0	0	0	0	7	3
I	559	12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	0	1	1	0	7	6
I	560	12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	0	1	1	0	4	3
I	561	12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	0	0	0	0	7	0
I	562	12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	0	0	0	0	4	3
I	563	12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	0	0	0	0	4	3
I	564	12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	0	1	1	0	4	0
I	565	13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	0	5	3	2	0	14
I	566	13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	0	3	2	0	0	6
I	567	13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	0	2	1	0	0	6
I	568	13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	0	3	2	0	0	6
I	569	13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	0	3	2	0	0	6
I	570	13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	0	3	2	0	0	9
I	571	13-07 DO YOU USE OR REFER TO CUTOFF	0	1	1	0	0	3
I	572	13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	0	1	1	0	0	0
I	573	13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	0	1	1	0	0	3
I	574	13-10 DO YOU USE OR REFER TO TRANSIT TIME	0	0	0	0	0	0
I	575	13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	0	0	0	0	0	3
I	576	13-12 DO YOU USE OR REFER TO SATURATION	0	1	1	0	0	3
I	577	13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	0	0	0	0	0	3
I	578	13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	0	0	0	0	0	0
I	579	13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	0	2	1	2	0	3
I	580	13-16 DO YOU USE OR REFER TO PLATE CURRENT	0	2	1	2	0	3
I	581	13-17 DO YOU USE OR REFER TO GRID VOLTAGE	0	2	1	2	0	3
I	582	13-18 DO YOU USE OR REFER TO GRID CURRENT	0	2	1	2	0	3
I	583	13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	0	2	1	2	0	3
I	584	13-20 DO YOU USE OR REFER TO CATHODE CURRENT	0	2	1	2	0	3
I	585	13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS	0	0	0	0	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
I	586	I3-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	0	0	0	0	0
I	587	I3-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	0	0	0	0	0	3
I	588	I3-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (Gm WHICH IS MEASURED IN MHOS)	0	0	0	0	0	0
I	589	I3-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	0	0	0	0	0	0
I	590	I3-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	0	0	0	3
I	591	I3-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	0	0	0	0	0
I	592	I3-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	0	0	0	0	3
I	593	I3-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	0	0	0	0	0	3
I	594	I3-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	0	0	0	3
I	595	I3-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	0	0	0	0
I	596	I3-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	0	0	0	0	0	3
I	597	I3-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	0	0	0	3
I	598	I3-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	3
I	599	I3-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY	0	1	1	0	0	3
I	600	I3-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	3
I	601	I3-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	0
I	602	I3-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	0
I	603	I3-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	0	0	3
I	604	I3-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	0	0	0	0	0
I	605	I3-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	0	2	1	0	0	9
I	606	I3-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	0	2	1	0	0	9
I	607	I3-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE	0	0	0	0	0	0
I	608	I3-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	0	2	1	0	0	9
J	609	J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	0	2	1	0	4	3
J	610	J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	0	1	1	0	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
J 611	J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	1	1	0	0	3
J 612	J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	0	2	1	0	0	3
J 613	J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	1	1	0	0	0
J 614	J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	1	1	0	0	3
J 615	J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	0	2	1	0	0	0
J 616	J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	0	1	1	0	0	6
J 617	J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	7	5	5	7	4	9
J 618	J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	0	0	0	0	0	0
J 619	J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	0	0	0	0	0	0
J 620	J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS	0	1	1	0	0	3
J 621	J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATRONS ARE USED	0	1	1	0	0	3
J 622	J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	4	1	2	5	7	3
J 623	J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	4	1	2	2	4	3
J 624	J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	4	1	2	2	0	3
J 625	J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	2	0	1	2	4	6
J 626	J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	0	1	1	0	4	0
J 627	J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	0	0	0	0	4	6
J 628	J2-13 DO YOU USE OR REFER TO PERSISTENCE	0	0	0	0	4	3
J 629	J2-14 DO YOU USE OR REFER TO DECAY TIMES	0	0	0	0	0	3
J 630	J2-15 DO YOU USE OR REFER TO FLUORESCENCE	0	1	1	0	0	6
J 631	J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	2	0	1	0	4	6
J 632	J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	7	3	4	2	4	3
J 633	J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	2	1	1	0	0	3
J 634	J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	2	0	1	0	0	3
J 635	J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	3
J 636	J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	0	0	0	0	0	0
J 637	J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	0	0	0	0	0	0
K 638	K1-01 DO YOU WORK ON AN TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	0	2	1	0	0	0
K 639	K1-02 DO YOU INSPECT AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 640	K1-03 DO YOU CLEAN AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 641	K1-04 DO YOU ALIGN OR ADJUST AN TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
K 642	K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 643	K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0
K 644	K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 645	K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0
K 646	K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	0	0	0	0	0	0
K 647	K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	0	2	1	0	0	0
K 648	K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	0	0
K 649	K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	0
K 650	K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	0	0	0	0	0	0
K 651	K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	0	0	0
K 652	K1-15 DO YOU PERFORM TASKS ON DETECTORS	0	0	0	0	0	0
K 653	K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE	0	0	0	0	0	0
K 654	K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	0	0	0	0	0	0
K 655	K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	0	0	0	0	0	0
K 656	K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	0	0	0	0	0	0
K 657	K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	0	0	0	0	0	0
K 658	K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	0	0	0	0	0	0
K 659	K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	0	0	0	0	0	0
K 660	K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	0
K 661	K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	0	0	0	0	0	0
K 662	K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	0	0	0	0	0	0
K 663	K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	0	0	0	0	0	0
K 664	K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
K 665	K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
K 666	K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	4	1	2	0	4	3
K 667	K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	3
K 668	K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	0
K 669	K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	4	0	1	0	0	0
K 670	K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	0	3
K 671	K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	3
K 672	K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 673	K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0
K 674	K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	0	3
K 675	K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	0	0	0	0	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

			SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
		DY-TSK						
K	676	K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	0	0	0	0	0	3
K	677	K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	3
K	678	K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	0	0	0	0	0	3
K	679	K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	0	0	0	0	0	3
K	680	K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	0	0	3
K	681	K2-16 DO YOU PERFORM TASKS ON LIMITERS	0	0	0	0	0	3
K	682	K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	0	0	0	0	0	3
K	683	K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	0	0	0	0	4	3
K	684	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	0	0	0	0	4	3
K	685	K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	0	1	1	0	0	3
K	686	K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	0	4	2	0	4	6
K	687	K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	0	1	1	0	0	0
K	688	K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	0	0	0	0	0	0
K	689	K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	0	3	2	0	4	3
K	690	K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	0	0	0	0	0	0
K	691	K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	0	5	3	0	4	9
K	692	K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	0	2	1	0	0	0
K	693	K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	0	2	1	0	0	0
K	694	K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	0	0	0	0	0	0
L	695	L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	4	8	6	11	21	11
L	696	L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	4	4	3	2	7	3
L	697	L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	4	4	3	2	4	3
L	698	L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	4	4	3	2	4	3
L	699	L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	4	4	3	0	4	3
L	700	L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	4	7	6	5	18	6
L	701	K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	4	7	6	5	14	6
L	702	K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	4	6	5	5	14	6
L	703	L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	4	5	5	2	14	6
L	704	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	4	8	6	7	18	6
L	705	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	4	8	6	7	14	6
L	706	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	4	8	6	9	18	11

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
L 707	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	4	7	6	7	14	6
L 708	L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	0	3	2	2	7	6
L 709	L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	0	0	0	0	0	0
L 710	L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	1	1	0	0	0
L 711	L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	0	0	0	0	0	0
L 712	L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	0	2	1	0	7	3
L 713	L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	1	1	0	0	0
L 714	L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	0	1	1	0	4	0
L 715	L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	0	2	1	0	0	3
L 716	L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	2	1	0	0	3
L 717	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	0	3	2	0	4	6
L 718	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0
L 719	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0
L 720	L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	0	1	1	0	4	3
L 721	L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	0	3	2	0	11	3
L 722	L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	0	1	1	0	7	3
L 723	L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	0	2	1	0	7	6
L 724	L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	0	1	1	0	7	3
L 725	L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	0	2	1	2	11	3
L 726	L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	0	2	1	0	7	6
L 727	L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	0	1	1	0	0	3
L 728	L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	0	1	1	0	0	3
L 729	L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	0	1	1	0	7	0
L 730	L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	0	1	1	2	0	6
L 731	L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	0	1	1	2	0	6
L 732	L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	0	1	1	2	4	0

		DUTIES	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
L	733	L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	18	23	20	16	14	14
L	734	L3-02 DO YOU USE OR REFER TO UP-COUNTERS	4	5	5	2	4	6
L	735	L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS	4	6	5	2	7	3
L	736	L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	2	4	3	2	0	0
L	737	L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	0	2	1	0	0	0
L	738	L3-06 DO YOU USE OR REFER TO RING COUNTERS	0	1	1	0	0	0
L	739	L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	2	6	5	7	7	0
L	740	L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	0	2	1	0	0	0
L	741	L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	0	6	4	5	7	3
L	742	L3-10 DO YOU USE OR REFER TO UP CLOCKS	0	7	5	5	4	3
L	743	L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	5	3	2	0	6
L	744	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-	0	5	3	2	0	3
L	745	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	2	2	2	2	7	0
L	746	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	0	0	0	0	0	0
L	747	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	0	0	0	0	0	0
L	748	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	2	0	0
L	749	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	0	0	0	0	4	6
L	750	L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	2	1	0	4	0
L	751	L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENT-	0	1	1	0	0	0
L	752	L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE	0	0	0	0	0	0
L	753	L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	2	0	1	0	7	3
L	754	L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	0	0	0	0	0	0
L	755	L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	0	1	1	2	0	0
L	756	L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	0	2	1	2	0	0
M	757	M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	9	6	7	5	14	3
M	758	M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	0	0	0	0	0	0
M	759	M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	0	2	1	2	7	3
M	760	M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	0	4	2	2	4	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	QY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
M	761 M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	0	2	1	2	4	3
M	762 M1-06 DO YOU USE OR REFER TO RISE TIME	5	9	8	2	7	11
M	763 M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	2	4	3	2	11	9
M	764 M1-08 DO YOU USE OR REFER TO SWEEP TIME	14	23	19	14	14	17
M	765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	2	8	6	2	7	14
M	766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	4	5	5	2	7	9
M	767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	2	5	3	2	7	6
M	768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	0	4	2	2	7	3
M	769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	36	46	42	50	43	34
M	770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	27	29	27	30	39	31
M	771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL	20	32	28	39	29	26
M	772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	20	20	19	14	18	20
M	773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	5	6	6	7	0	3
M	774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	29	29	29	34	32	29
M	775 M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	7	6	6	0	7	0
M	776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH	9	13	11	9	7	17
M	777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH	7	6	6	9	4	3
M	778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	4	7	6	11	11	0
M	779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	27	27	27	14	21	17
M	780 M3-02 DO YOU INSPECT MOTORS	14	11	12	7	11	14
M	781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	4	6	5	2	4	6
M	782 M3-04 DO YOU OPERATE MOTORS	20	16	17	7	14	9
M	783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	0	2	1	0	7	6
M	784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	0	0	0	0	0	0
M	785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	13	5	8	7	4	9
M	786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	0	0	0	0	0	3
M	787 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS	0	0	0	0	0	0
M	788 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES	0	1	1	0	0	0
M	789 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS	0	1	1	0	0	0
M	790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	0	1	1	2	0	0
M	791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	0	0	0	0	0	0
M	792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	0	1	1	0	0	0
M	793 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
M 794	M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0
M 795	M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0
M 796	M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	1	1	0	0	0
M 797	M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	0	2	1	0	11	3
M 798	M3-20 DO YOU WORK WITH INDUCTION MOTORS	5	2	3	2	7	3
M 799	M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	2	6	5	5	7	3
M 800	M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	4	5	5	0	4	3
M 801	M3-23 DO YOU INSPECT GENERATORS	21	20	20	11	14	11
M 802	M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	4	4	3	0	0	3
M 803	M3-25 DO YOU OPERATE GENERATORS	21	25	24	11	18	9
M 804	M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	2	2	2	2	0	3
M 805	M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	0	0	0	0	0	0
M 806	M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	14	7	9	7	4	11
M 807	M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	0	0	0	0	0	0
N 808	N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	52	67	63	41	50	51
N 809	N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	7	4	5	9	7	6
N 810	N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	9	7	8	9	7	6
N 811	N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	7	3	4	9	4	6
N 812	N1-05 DO YOU READ METER SCALES	54	66	63	39	50	51
N 813	N1-06 DO YOU EXTEND THE RANGE OF AMMETERS	5	12	9	14	7	17
N 814	N1-07 DO YOU ZERO OHMMETERS	55	65	62	41	50	54
N 815	N1-08 DO YOU ZERO AMMETERS	25	28	27	20	18	31
N 816	N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	21	28	25	14	7	17
N 817	N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	23	16	18	14	21	34
N 818	N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	0	0	0	0	7	3
N 819	N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	3
N 820	N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N 821	N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N 822	N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N 823	N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N 824	N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
N	825	N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	0	4	0
N	826	N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF	0	0	0	0	4	0
N	827	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE	0	0	0	0	0	0
N	828	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	0	0	0	0	4	0
N	829	N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS	0	0	0	0	0	0
N	830	N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	0	0	0	0	0	0
N	831	N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	0	0	0	0	0	0
N	832	N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	0	0	0	0	0	0
N	833	N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	0	0	0	0	4	3
N	834	N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	2	4	3	5	7	3
N	835	N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	2	0	1	0	4	3
N	836	N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	2	3	2	5	4	3
N	837	N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	2	4	3	2	4	3
N	838	N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	2	4	3	2	4	3
N	839	N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	0	0	0	0	4	0
N	840	N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	0	0	0	5	7	0
N	841	N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	0	0	0	0	4	3
N	842	N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT	0	0	0	0	4	0
N	843	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	2	2	2	0	0	0
N	844	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	2	1	1	0	0	0
O	845	01-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	0	0
O	846	01-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O	847	01-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O	848	01-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O	849	01-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O	850	01-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0
O	851	01-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O	852	01-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 00A	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
0	853 01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0	0
0	854 01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	0
0	855 01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0	0
0	856 01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	0
0	857 01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0	0
0	858 01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0	0
0	859 01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0	0
0	860 01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0	0
0	861 01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0	0
0	862 01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0	0
0	863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0	0
0	864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0	0
0	865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0	0	0	0	0	0
0	866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0	0
0	867 01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES	0	0	0	0	0	0
0	868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	0
0	869 01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	0
0	870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0	0
0	871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0	0
0	872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0	0
0	873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
0	874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
0	875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	0	3
0	876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	0	0	3
0	877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0	878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0	879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	0	0	3
0	880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	0
0	881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0	882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	0
0	883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	0	0	0	0	0	3
0	884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0	0	0	0	0	3
0	885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	0	0	0	0
0	886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	0	0	0	3
0	887 02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0	0	0	0	0	0
0	888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
0	889	02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0	0	0	0	0	0
0	890	02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	0	0	0	0	0	0
0	891	02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0	0	0	0	0	3
0	892	02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0	0	0	0	0	0
0	893	02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0	0	0
0	894	02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	0	0	0	0
0	895	02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	0	0	0	0
0	896	02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	0	0	0	0	0	3
0	897	02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	0	0	0	0	0	0
0	898	02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	0	0	0	0	0	3
0	899	02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	0	0	0	0	0	0
0	900	02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	0	0	0	0	0	0
0	901	02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	0	0	0	0	0	0
0	902	02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES	0	0	0	0	0	0
0	903	02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	3
0	904	02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	0	0	0	0	0	3
0	905	02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	0	0	0	0	0	3
0	906	02-32 DO YOU USE OR REFER TO PULSE SHAPE	0	0	0	0	0	3
0	907	02-33 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	3
0	908	02-34 DO YOU USE OR REFER TO AVERAGE POWER	0	0	0	0	0	3
0	909	02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	0
0	910	02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	3
0	911	02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	0	0	0	3
0	912	02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	3
0	913	02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	3
0	914	03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	43	37	39	16	11	20
0	915	03-02 DO YOU INSPECT ANTENNAS	41	37	39	20	11	20

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
0	916	03-03 DO YOU CLEAN ANTENNAS	41	35	37	20	11	14
0	917	03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	25	23	23	9	4	6
0	918	03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	2	10	7	0	4	3
0	919	03-06 DO YOU TROUBLESHOOT TO ANTENNAS	13	9	10	5	7	11
0	920	03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	4	3	3	5	4	0
0	921	03-08 DO YOU REMOVE OR INSTALL ANTENNAS	38	34	35	20	11	14
0	922	03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	11	15	13	5	4	9
0	923	03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	0	2	1	0	0	0
0	924	03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	0	1	1	0	0	0
0	925	03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0	0
0	926	03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS	0	0	0	0	0	0
0	927	03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS	0	0	0	0	0	0
0	928	03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	0	0	0	0	0	0
0	929	03-16 DO YOU WORK WITH HERTZ ANTENNAS	5	0	2	2	0	0
0	930	03-17 DO YOU WORK WITH MARCONI ANTENNAS	0	0	0	0	0	0
0	931	03-18 DO YOU WORK WITH BROADSIDE ARRAYS	0	2	1	2	0	0
0	932	03-19 DO YOU WORK WITH END-FIRE ARRAYS	0	2	1	2	0	0
0	933	03-20 DO YOU WORK WITH CARDIOID ARRAYS	0	0	0	0	0	0
0	934	03-21 DO YOU WORK WITH COLLINEAR ARRAYS	4	1	2	0	0	0
0	935	03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	0	0	3
0	936	03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	0	0	3
0	937	03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	2	0	6
0	938	03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	0	0	3
0	939	03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0	0
0	940	03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0	0
0	941	03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	5	7	6	0	0	6
0	942	03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	5	5	5	2	0	6
0	943	03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	0	1	1	2	0	0
0	944	03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	2	0	1	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

			SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
		DY-TSK						
O	945	03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	0	0	1	0	0	0
O	946	03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	0	1	0	0	0
O	947	03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	0	1	0	0	0
O	948	03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS	14	10	11	5	0	6
O	949	03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	5	8	7	0	4	6
O	950	03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	5	3	3	0	0	3
O	951	03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY	18	12	14	9	0	9
O	952	03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	0	1	1	2	0	0
P	953	P1-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS	5	5	5	2	7	0
P	954	P1-02 DO YOU REFER TO OR USE COPPER LOSS OR I2R LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P	955	P1-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	0
P	956	P1-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P	957	P1-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P	958	P1-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	0	0	0	0	0	0
P	959	P1-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	2	0	1	0	4	0
P	960	P1-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	2	0	1	0	4	0
P	961	P1-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	2	2	2	0	4	0
P	962	P1-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	2	5	3	0	7	0
P	963	P1-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	2	1	1	0	0	0
P	964	P1-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	2	2	2	0	4	0
P	965	P1-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	2	0	1	0	0	0
P	966	P1-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	0	0	0	0	0	0
P	967	P1-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	0	0	0	0	4	0
P	968	P1-16 DO YOU MEASURE STANDING WAVE RATIOS (SR) OF TRANSMISSION LINES	0	0	0	0	0	0
P	969	P1-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
P	970	P1-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P 971	P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	0	1	1	0	0	0
P 972	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0	0
P 973	P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	0
P 974	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	0	0	0	0	4	0
P 975	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	0	0	0	0	0	0
P 976	P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	0	0	0	0	0	0
P 977	P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	0	0	0	0	0
P 978	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	0	0	0	0	0	0
P 979	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	0	0	0	0
P 980	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF	0	0	0	0	0	0
P 981	P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	0	1	1	0	4	0
P 982	P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	0	0	0	0	0	0
P 983	P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0	0
P 984	P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	23	30	27	16	25	14
P 985	P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	23	30	27	16	25	14
P 986	P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	18	23	20	14	18	9
P 987	P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	4	8	6	2	4	3
P 988	P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	2	4	3	2	4	3
P 989	P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	2	1	1	0	0	3
P 990	P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	14	13	13	9	14	11
P 991	P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS	4	8	6	2	7	3
P 992	P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	16	25	21	14	14	9
P 993	P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	9	8	8	2	7	6
P 994	P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	2	2	2	0	4	0
P 995	P2-12 DO YOU REMOVE OR INSTALL E BENDS	0	1	1	0	0	0
P 996	P2-13 DO YOU REMOVE OR INSTALL H BENDS	0	1	1	0	0	0
P 997	P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	2	3	2	0	0	0
P 998	P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	1	1	0	0	0
P 999	P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	0	0	0	0
P1000	P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	2	1	1	0	0	0
P1001	P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	0	1	1	0	0	0
P1002	P2-19 DO YOU USE OR REFER TO "AM WALL OF WAVEGUIDES	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1003 P2-20 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	1	0	0	0	0	0
P1004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES	2	0	1	0	4	0
P1005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0	0
P1006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES	0	1	1	0	0	0
P1007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1009 P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS	0	0	0	0	0	0
P1011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35	0	0	0	0	0	0
P1012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF	0	2	1	0	4	0
P1013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	0	0	0	0	0	0
P1014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR	0	0	0	0	0	0
P1015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	1	1	0	0	0
P1020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	1	1	0	0	0
P1021 P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	13	9	10	9	11	3
P1022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	5	4	4	2	11	9
P1023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0
P1024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0
P1026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	2	0	3
P1027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	2	0	0
P1028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	4	10	8	2	7	9
P1029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	0	0	0	2	4	0
P1030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	0	0	0	0	4	3
P1031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	0	2	1	0	4	0
P1032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	2	5	4	0	0	6
P1033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	0	2	1	0	0	3
P1034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR	4	7	6	0	7	3
P1035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	0	1	1	0	0	3
P1036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	0	1	1	0	0	0
P1037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE	0	1	1	0	0	0
P1038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	0	3	2	0	0	3
P1039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	0	0	0	0	0	0
P1040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	0	0	0	0	0	0
P1041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	0	1	1	0	0	0
P1042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	0	2	1	0	0	0
P1043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	4	2	2	0	4	3
P1044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	2	0	1	0	0	0
P1045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1047 P3-14 DO YOU WORK WITH MAGNETRONS	0	0	0	0	0	0
P1048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT	4	1	2	0	0	3
P1049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT	2	0	1	0	0	0
P1050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	2	3	2	0	0	0
P1051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	2	4	3	0	0	0
P1052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	4	2	2	0	0	0
P1053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0	0
P1054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	2	1	1	0	0	0
P1055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	2	0	1	0	0	0
P1056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING

	BY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1059	P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1060	P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1061	P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1062	P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0	0
P1063	P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0	0
P1064	P3-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0	0
P1065	P3-32 DO YOU CLEAN MAGNETRONS	0	0	0	0	0	0
P1066	P3-33 DO YOU ADJUST MAGNETRONS	0	0	0	0	0	0
P1067	P3-34 DO YOU TUNE MAGNETRONS	0	0	0	0	0	0
P1068	P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0	0
P1069	P3-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	0
P1070	P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	0
P1071	P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	0
P1072	P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	0	0	0	0	0	0
P1073	P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	0	0	0	0	0	0
P1074	P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	0	0	0	0	0	0
P1075	P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	1	1	0	0	0
P1076	P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	0	0	0	0	0	0
P1077	P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS	0	0	0	0	0	0
P1078	P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES	0	0	0	0	0	0
P1079	P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	0	0	0	0	0	0
P1080	P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	0	0	0	0	0	0
P1081	P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REPELLER (REFLECTOR) PLATES	0	1	1	0	4	3
P1082	P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	0	1	1	0	4	3
P1083	P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	2	0	1	0	0	3
P1084	P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	2	1	1	0	4	3
P1085	P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	0	0	0	0	0	0
P1086	P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	0	1	1	0	4	0
P1087	P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	0	0	0	0	4	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1088	P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	2	0	1	0	4	3
P1089	P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	0	0	0	0
P1090	P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	0	0	0	0
P1091	P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	0	0	0	0
P1092	P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	0	0	0	0
P1093	P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	0	0	0	0	0	0
P1094	P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	0	0	0	0
P1095	P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0	0
P1096	P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	0	0	0	0	0	0
P1097	P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	0
P1098	P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	0
P1099	P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0	0
P1100	P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	0
P1101	P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	0
P1102	P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0	0
P1103	P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0	0
P1104	P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0	0
P1105	P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0	0
P1106	P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0	0
P1107	P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0	0
P1108	P3-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0	0
P1109	P3-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0	0
Q1110	Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	0	0	0	0	0	0
Q1111	Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	0	1	1	0	0	0
Q1112	Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	0	0	0	0	0
Q1113	Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	0	0	0	0	0
Q1114	Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	2	1	0	0	0
Q1115	Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	0	1	1	0	0	0

PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
Q1116	Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	0	5	3	0	0	0
Q1117	Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	5	5	5	5	4	0
Q1118	Q2-02 DO YOU USE OR REFER TO DELAY LINES	0	0	0	0	0	0
Q1119	Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	0	0	0	0	0	0
Q1120	Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	0	0	0	0	0
Q1121	Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	0	0	0	0	0
Q1122	Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	2	1	1	0	0	0
Q1123	Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	0	0	0	0	0
Q1124	Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	0	0	0	0	0
Q1125	Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	0	0	0	0	0
Q1126	Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)	0	0	0	0	0	0
Q1127	Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT	0	0	0	0	0	0
Q1128	Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0	0
Q1129	Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0
Q1130	Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1131	Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1132	Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1131	Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1134	Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER	0	0	0	0	0	3
Q1135	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
[illegible]	DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1137	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1138	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1139	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0	0

AD-A047 546 AIR FORCE OCCUPATIONAL MEASUREMENT CENTER LACKLAND A--ETC F/G 5/9
ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINT--ETC(U)
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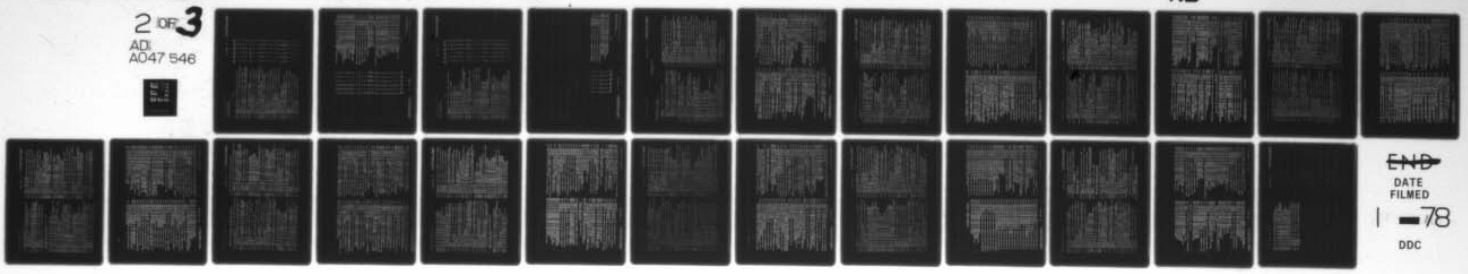

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CONT.

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
R1140	R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	0	1	1	0	0	0
R1141	R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	0	0	0	0	0	0
R1142	R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
R1143	R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	0	0	0	0	0	0
R1144	R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	4	7	6	7	7	9
R1145	R3-02 DO YOU FABRICATE COAXIAL CABLES	11	15	14	14	21	23
S1146	S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	18	15	16	11	4	6
S1147	S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS	4	1	2	2	0	3
S1148	S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	0	0	0	0	0	0
S1149	S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	2	1	1	5	4	3
S1150	S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	0	0	0	2	0	0
S1151	S3-02 DO YOU MEASURE EXCITATION FREQUENCIES	0	0	0	0	0	0
S1152	S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	0
S1153	S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES	0	0	0	0	0	0
S1154	S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	0	0
S1155	S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	2	0	0
S1156	S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	2	0	0
S1157	S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	2	0	0
S1158	S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	0	0	0	2	0	0
T1159	T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS	43	44	43	25	39	40
T1160	T1-02 DO YOU INSPECT INFRARED SYSTEMS	36	40	37	14	32	34
T1161	T1-03 DO YOU CLEAN INFRARED SYSTEMS	34	32	31	14	25	31
T1162	T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS	23	22	22	9	25	11
T1163	T1-05 DO YOU OPERATE INFRARED SYSTEMS	25	35	31	11	36	17
T1164	T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS	9	12	10	7	18	6
T1165	T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS	9	17	14	9	21	17
T1166	T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS	5	5	5	5	7	3
T1167	T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS	18	14	15	9	25	20
T1168	T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS	5	4	4	5	7	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

BY-TSK		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
T1169	T1-11 DO YOU USE OR REFER TO FAR REGION	2	1	1	0	4	0
T1170	T1-12 DO YOU USE OR REFER TO INTERMEDIATE REGION	2	1	1	0	4	0
T1171	T1-13 DO YOU USE OR REFER TO NEAR REGION	4	1	2	0	4	0
T1172	T1-14 DO YOU USE OR REFER TO MICRON	2	1	1	0	4	0
T1173	T1-15 DO YOU USE OR REFER TO GRAY BODIES	2	0	1	0	4	0
T1174	T1-16 DO YOU USE OR REFER TO BLACK BODIES	2	1	1	0	7	6
T1175	T1-17 DO YOU USE OR REFER TO ABSORPTION	2	1	2	0	7	0
T1176	T1-18 DO YOU USE OR REFER TO SCATTERING	2	1	2	0	4	0
T1177	T1-19 DO YOU USE OR REFER TO ABSOLUTE ZERO	0	1	1	0	0	0
T1178	T1-20 DO YOU PERFORM TASKS ON GLITZ	0	0	0	0	0	0
T1179	T1-21 DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	0	0	4	0
T1180	T1-22 DO YOU PERFORM TASKS ON ERECTOR LENSES	0	0	0	0	4	0
T1181	T1-23 DO YOU PERFORM TASKS ON OCULAR LENSES	0	3	2	0	4	0
T1182	T1-24 DO YOU PERFORM TASKS ON CORRECTION LENSES	0	1	1	0	4	0
T1183	T1-25 DO YOU PERFORM TASKS ON FILTERS	2	1	1	0	4	3
T1184	T1-26 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	2	2	2	2	7	3
T1185	T1-27 DO YOU PERFORM TASKS ON PLANE MIRRORS	0	1	1	2	7	3
T1186	T2-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	32	33	31	25	11	26
T1187	T2-02 DO YOU INSPECT LASER SYSTEMS	25	31	28	18	11	26
T1188	T2-03 DO YOU CLEAN LASER SYSTEMS	25	25	24	14	4	14
T1189	T2-04 DO YOU OPERATE LASER SYSTEMS	20	25	23	9	7	14
T1190	T2-05 DO YOU OPERATE LASER SYSTEMS	18	25	22	9	7	14
T1191	T2-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	7	7	7	2	0	6
T1192	T2-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	7	16	13	18	4	20
T1193	T2-08 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	9	10	9	11	0	6
T1194	T2-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	16	11	12	14	7	20
T1195	T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	5	5	5	5	0	9
T1196	T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)	0	1	1	0	0	0
T1197	T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	1	1	0	0	0
T1198	T2-13 DO YOU USE OR REFER TO GROUND STATE	0	1	1	0	0	0
T1199	T2-14 DO YOU USE OR REFER TO EXCITED STATE	0	1	1	0	0	0
T1200	T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION	0	1	1	0	0	0
T1201	T2-16 DO YOU USE OR REFER TO PHOTONS	0	1	1	0	0	0
T1202	T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	1	1	0	0	0
T1203	T2-18 DO YOU USE OR REFER TO STIMULATED EMISSION	0	1	1	0	0	0
T1204	T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	1	1	0	0	0
T1205	T2-20 DO YOU USE OR REFER TO INVERSION LEVEL	0	1	1	0	0	0
T1206	T2-21 DO YOU USE OR REFER TO MONOCHROMATIC	0	0	0	0	0	0
T1207	T2-22 DO YOU WORK WITH ACTIVE MATERIALS	0	0	0	0	0	0
T1208	T2-23 DO YOU WORK WITH PUMPING SOURCES	2	0	1	0	0	3
T1209	T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
T1210	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS	0	1	1	0	0	0
T1211	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES	0	2	1	2	0	0
T1212	T2-27 DO YOU WORK WITH RUBY	2	0	1	0	0	0
T1213	T2-28 DO YOU WORK WITH HELIUM-NEON	2	0	1	0	0	0
T1214	T2-29 DO YOU WORK WITH HELIUM-XENON	2	0	1	0	0	0
T1215	T2-30 DO YOU WORK WITH XENON	0	0	0	0	0	0
T1216	T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	0
T1217	T2-32 DO YOU WORK WITH ARGON	4	1	2	0	0	3
T1218	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	0
T1219	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	0
T1220	T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE	2	1	1	0	0	0
T1221	T3-02 DO YOU INSPECT DVST OR MMST	2	1	1	0	0	0
T1222	T3-03 DO YOU CLEAN DVST OR MMST	2	1	1	0	0	0
T1223	T3-04 DO YOU ADJUST OR CALIBRATE DVST OR MMST	0	0	0	0	0	0
T1224	T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST	2	2	2	0	0	0
T1225	T3-06 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS	0	0	0	0	0	0
T1226	T3-07 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	0	0	0	0	0	0
T1227	T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0	0	0
T1228	T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF MMST	0	0	0	0	0	0
T1229	T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	0
T1230	T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0	0	0
T1231	T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	0
T1232	T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0	0	0
T1233	T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	0	0	0	0
U1234	U1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING TASKS	0	1	1	0	0	0
U1235	U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	0	0	0	0	0	0
U1236	U1-03 DO YOU USE OR REFER TO PROGRAMS	0	0	0	0	0	0
U1237	U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	0	0	0	0	0	0
U1238	U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	0	0	0	0	0	0
U1239	U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	0	0	0	0
U1240	U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	0	0	0	0	0	0
U1241	U1-08 DO YOU USE OR REFER TO TIME-SHARING	0	0	0	0	0	0
U1242	U1-09 DO YOU USE OR REFER TO DATA WORDS	0	0	0	0	0	0
U1243	U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	0	0	0	0	0	0
U1244	U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	0	0	0	0	0	0
U1245	U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	0	0	0	0	0	0
U1246	U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	0	0	0	0	0	0
U1247	U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	0	0	0	0	0	0
U1248	U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

QY-TSK		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
U1249	U1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	0	1	1	0	0	0
U1250	U1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	0	0	0	0	0	0
U1251	U1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	0	0	0	0	0	0
U1252	U1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	2	0	1	0	0	0
U1253	U1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	0	0	0	0	0	0
U1254	U1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	0	0	0	0	0	0
U1255	U2-01 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	0	4	2	7	7	9
U1256	U2-02 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	0	0	0	0	4	0
U1257	U2-03 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	0	0	0	0	4	0
U1258	U2-04 DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED NO TASKS	4	3	3	7	11	9

UNITED STATES AIR FORCE
JOB INVENTORY

MISSILE SYSTEMS MAINTENANCE
AFSCS 31631L, 31651L, 31671L, 31693

A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE

A 1 A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10.
A 2 A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB.
A 3 A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.
A 4 A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.
A 5 A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.
A 6 A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.
A 7 A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.
A 8 A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.
A 9 A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.
A 10 A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.
A 11 A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.
A 12 A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.
A 13 A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.
A 14 A1-14 DO YOU SOLVE OR USE PROPORTIONS.
A 15 A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).
A 16 A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).
A 17 A2-03 DO YOU USE THE TERM OHM.
A 18 A2-04 DO YOU USE THE TERM ION.
A 19 A2-05 DO YOU USE THE TERM DYNE.
A 20 A2-06 DO YOU USE THE TERM AMPERE.
A 21 A2-07 DO YOU USE THE TERM NEUTRON.
A 22 A2-08 DO YOU USE THE TERM COULOMB.
A 23 A2-09 DO YOU USE THE TERM PROTON.
A 24 A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.
A 25 A3-02 DO YOU INSPECT RESISTORS.
A 26 A3-03 DO YOU CLEAN RESISTORS.
A 27 A3-04 DO YOU ADJUST RESISTORS.
A 28 A3-05 DO YOU CHECK OHMIC VALUE OR RESISTORS.
A 29 A3-06 DO YOU REMOVE OR REPLACE RESISTORS.
A 30 A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.
A 31 A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.
A 32 A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR POTENTIOMETER.
A 33 A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.
A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.
A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.
A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO ACHIEVE A SPECIFIC VOLTAGE.
A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES
A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.
A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.
A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.
A 41 A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.
A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 46 A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.
A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.
A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.
A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.
A 51 A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.

B MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE

B 52 B1-01 DO YOU MEASURE RESISTANCE.

B 53 B1-02 DO YOU REPAIR OHMMETERS.
B 54 B1-03 DO YOU MEASURE VOLTAGE.
B 55 B1-04 DO YOU REPAIR VOLTMETERS.
B 56 B1-05 DO YOU REPAIR AMMETERS.
B 57 B1-06 DO YOU MEASURE CURRENT.
B 58 B1-07 DO YOU USE MULTIMETERS.
B 59 B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.
B 60 B1-09 DO YOU READ SCHEMATICS.
B 61 B2-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS).
B 62 B2-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.
B 63 B2-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).
B 64 B2-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH.
B 65 B2-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.
B 66 B2-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.
B 67 B3-01 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.
B 68 B3-02 DO YOU INSPECT INDUCTORS.
B 69 B3-03 DO YOU CLEAN INDUCTORS.
B 70 B3-04 DO YOU ADJUST INDUCTORS.
B 71 B3-05 DO YOU REMOVE OR REPLACE INDUCTORS.
B 72 B3-06 DO YOU USE OR REFER TO INDUCTANCE.
B 73 B3-07 DO YOU USE OR REFER TO HENRIES.
B 74 B3-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.
B 75 B3-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.
B 76 B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.
B 77 B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS
B 78 B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL.
B 79 B2-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE.
B 80 B2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH.
B 81 B2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMEABILITY OF THE CORE MATERIAL.
B 82 B2-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.
B 83 B3-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES.
B 84 B3-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.
B 85 B3-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.
B 86 B3-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.
B 87 B3-21 DO YOU CALCULATE INDUCTIVE REACTANCE.
B 88 B3-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.
B 89 B3-23 DO YOU WORK WITH POWER INDUCTORS.
B 90 B3-24 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.
B 91 B3-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.

C CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM

C 92 C1-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.
C 93 C1-02 DO YOU INSPECT CAPACITORS.
C 94 C1-03 DO YOU CLEAN CAPACITORS.
C 95 C1-04 DO YOU ADJUST CAPACITORS.
C 96 C1-05 DO YOU TEST CAPACITORS.
C 97 C1-06 DO YOU DISCHARGE CAPACITORS.
C 98 C1-07 DO YOU REMOVE OR REPLACE CAPACITORS.
C 99 C1-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.
C100 C1-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.
C101 C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.
C102 C1-11 DO YOU USE OR REFER TO CAPACITANCE.
C103 C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT
C104 C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS
C105 C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE
C106 C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES
C107 C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS
C108 C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS
C109 C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC
C110 C1-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS
C111 C1-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS
C112 C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT
C113 C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS
C114 C1-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES
C115 C1-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL
C116 C1-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS
C117 C1-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO
C118 C1-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS
C119 C1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT

CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY
C120 C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE
C121 C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS
C122 C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS
C123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS
C124 C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS
C125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS
C126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS
C127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS
C128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB
C129 C2-02 DO YOU INSPECT TRANSFORMERS
C130 C2-03 DO YOU CLEAN TRANSFORMERS
C131 C2-04 DO YOU ADJUST TRANSFORMERS
C132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS
C133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS
C134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING
C135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)
C136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M
C137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS
C138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS
C139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS
C140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS
C141 C2-14 DO YOU WORK WITH AUTOTRANSFORMERS
C142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS
C143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS
C144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS
C145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS
C146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE
C147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE
C148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES
C149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO
C150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO
C151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS
C152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS
C153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS
C154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS
C155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS
C159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH
C160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO
C161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS
C162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS
C163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS
C164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS
C165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS
C166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS
C167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS
C168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS
C169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS
C170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS
C171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS
C172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS
C173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS
C174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS
C175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS
C176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM
C177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX
C178 C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM
C179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM
C180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION
C181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY
C182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT
C183 C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES

C184 C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL

D RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS

D185 D1-01 DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB
D186 D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS
D187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS
D188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS
D189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS
D190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS
D191 D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS
D192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS
D193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS
D194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS
D195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS
D196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS
D197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS
D198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS
D199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS
D200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS
D201 D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS
D202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS
D203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS
D204 D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS
D205 D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS
D206 D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS
D207 D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS
D208 D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS
D209 D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS
D210 D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS
D211 D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS
D212 D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS
D213 D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL - CIRCUITS
D214 D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS
D215 D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS
D216 D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD
D217 D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW
D218 D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS
D219 D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION
D220 D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS
D221 D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION
D222 D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA= 0, PF = 1, AND PA = PT FOR RESONANT CIRCUITS
D223 D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS
D224 D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS
D225 D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS
D226 D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE
D227 D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q
D228 D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS
D229 D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS
D230 D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS
D231 D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE
D232 D3-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS
D233 D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)
D234 D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS
D235 D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE

CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS
D236 D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETER[illegible] THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT [illegible] TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS
D237 D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMIN[illegible] COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES
D238 D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS
D239 D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB
D240 D3-02 DO YOU INSPECT FILTER CIRCUITS
D241 D3-03 DO YOU CLEAN FILTER CIRCUITS
D242 D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS
D243 D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL
D244 D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS
D245 D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT
D246 D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS
D247 D3-09 DO YOU WORK WITH LOW PASS FILTERS
D248 D3-10 DO YOU WORK WITH HIGH PASS FILTERS
D249 D3-11 DO YOU WORK WITH BANDPASS FILTERS
D250 D3-12 DO YOU WORK WITH BAND-REJECT FILTERS
D251 D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH
D252 D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION
D253 D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION
D254 D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION
D255 D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION
D256 D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS
D257 D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS
D258 D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS
D259 D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT
D260 D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS

E COUPLING, SOLDERING, AND RELAYS

E261 E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB
E262 E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING
E263 E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING
E264 E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING
E265 E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING
E266 E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING
E267 E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING
E268 E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS
E269 E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS
E270 E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS
E271 E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS
E272 E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS
E273 E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS
E274 E2-02 DO YOU SELECT TYPE OF SOLDER TO USE
E275 E2-03 DO YOU ADD FLUX TO CONNECTIONS
E276 E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS
E277 E2-05 DO YOU STRIP INSULATION FROM WIRES
E278 E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS
E279 E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS
E280 E2-08 DO YOU CUT WIRES
E281 E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS
E282 E2-10 DO YOU TIN SOLDERING IRON TIPS
E283 E2-11 DO YOU CLEAN SOLDERING IRON TIPS
E284 E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS
E285 E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS
E286 E2-14 DO YOU INSPECT SOLDERED CONNECTIONS
E287 E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING
E288 E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS
E289 E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS
E290 E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL
E291 E2-19 DO YOU MAKE HARDWIRE CONNECTIONS
E292 E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS
E293 E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS
E294 E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS
E295 E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB
E296 E3-02 DO YOU ADJUST RELAYS
E297 E3-03 DO YOU CLEAN RELAYS
E298 E3-04 DO YOU INSPECT RELAYS
E299 E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS
E300 E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS
E301 E3-07 DO YOU TROUBLESHOOT RELAYS
E302 E3-08 DO YOU STRAIGHTEN RELAY CONTACTS
E303 E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS
E304 E3-10 DO YOU PERFORM TASKS ON RELAY CORES
E305 E3-11 DO YOU PERFORM TASKS ON RELAY COILS

E306 E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES
E307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS
E308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPER (NO) SCHEMATIC SYMBOLS FOR RELAYS
E309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS
E310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS
E311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS
E312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS
E313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE

F MICROPHONES, SPEAKERS, AND OSCILLOSCOPES

F314 F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES
F315 F1-02 DO YOU INSPECT MICROPHONES
F316 F1-03 DO YOU CLEAN MICROPHONES
F317 F1-04 DO YOU OPERATE MICROPHONES
F318 F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OR MICROPHONES
F319 F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS
F320 F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES
F321 F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS
F322 F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES
F323 F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES
F324 F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES
F325 F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES
F326 F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES
F327 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS
F328 F2-02 DO YOU INSPECT SPEAKERS
F329 F2-03 DO YOU CLEAN SPEAKERS
F330 F2-04 DO YOU OPERATE SPEAKERS
F331 F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OF SPEAKERS
F332 F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS
F333 F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS
F334 F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS
F335 F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES
F336 F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS
F337 F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS
F338 F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS
F339 F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS
F340 F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS
F341 F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES
F342 F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB
F343 F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS
F344 F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS
F345 F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS
F346 F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY
F347 F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME
F348 F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS
F349 F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES
F350 F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS
F351 F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE
F352 F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS
F353 F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE

6 SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS

G354 G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB
G355 G1-02 DO YOU INSPECT DIODES
G356 G1-03 DO YOU REMOVE OR REPLACE DIODES
G357 G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT
G358 G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES
G359 G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE
G360 G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES
G361 G1-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES
G362 G1-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE
G363 G1-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW
G364 G1-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE
G365 G1-12 DO YOU USE OR REFER TO DIODE COLOR CODING
G366 G1-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS
G367 G1-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS
G368 G1-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS IN 538
G369 G1-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT
G370 G1-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN

ELECTRON MOVING IN ORBIT
G371 G1-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE
G372 G1-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT
G373 G1-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON
G374 G1-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON
G375 G1-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)
G376 G1-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)
G377 G1-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END
G378 G1-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON
G379 G1-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)
G380 G1-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)
G381 G1-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS
G382 G1-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR MATERIALS
G383 G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS
G384 G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS
G385 G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS
G386 G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS
G387 G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS
G388 G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS
G389 G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS
G390 G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL
G391 G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL
G392 G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS
G393 G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS
G394 G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS
G395 G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS
G396 G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL
G397 G1-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES
G398 G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS
G399 G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION
G400 G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS
G401 G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS
G402 G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS
G403 G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS
G404 G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.
G405 G2-02 DO YOU INSPECT TRANSISTORS
G406 G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS
G407 G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT
G408 G2-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS
G409 G2-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS
G410 G2-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS
G411 G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION
G412 G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION
G413 G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)
G414 G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR
G415 G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS
G416 G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC
G417 G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION
G418 G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT IE (USUALLY IB BEING 2 TO 8 PERCENT OF IE)
G419 G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS
G420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES
G421 G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES
G422 G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS

G423 G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS
G424 G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS
G425 G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS
G426 G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS
G427 G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS
G428 G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB
G429 G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS
G430 G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS
G431 G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL
G432 G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS
G433 G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER
G434 G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS
G435 G3-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE CURRENT
G436 G3-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT
G437 G3-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CURRENT
G438 G3-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT
G439 G3-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL
G440 G3-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL
G441 G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)
G442 G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR
G443 G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR
G444 G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION
G445 G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION
G446 G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION
G447 G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE-EMITTER VOLTAGE INTO THE CHANGE THE BASE COLLECTOR VOLTAGE TO DETERMINE THE VOLTAGE GAIN
G448 G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT TO DETERMINE THE CURRENT GAIN
G449 G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CURRENT GAIN TIMES THE VOLTAGE GAIN TO DETERMINE THE POWER GAIN
G450 G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE INCREASES (THIS AFFECTS THE STATIC OPERATING POINT [Q] OF THE TRANSISTOR)
G451 G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT [Q] OF A TRANSISTOR AT DIFFERENT TEMPERATURES
G452 G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION
G453 G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION
G454 G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION
G455 G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION
G456 G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION
G457 G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION
G458 G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION
G459 G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION
G460 G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION
G461 G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION
G462 G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION
G463 G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION
G464 G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS
G465 G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION
G466 G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS
G467 G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS
G468 G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION
G469 G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE

CAUSES OF FREQUENCY DISTORTION
G470 G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS IN THE COMMON COLLECTOR CONFIGURATION
G471 G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS
G472 G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS
G473 G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS
G474 G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS
G475 G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS
G476 G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS

H SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS

H477 H1-01 DO YOU USE OR REFER TO VARACTORS
H478 H1-02 DO YOU USE OR REFER TO TUNNEL DIODES
H479 H1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)
H480 H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS
H481 H1-05 DO YOU USE OR REFER TO ZENER DIODES
H482 H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS
H483 H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES
H484 H2-02 DO YOU INSPECT POWER SUPPLIES
H485 H2-03 DO YOU CLEAN POWER SUPPLIES
H486 H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES
H487 H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL
H488 H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS
H489 H2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES
H490 H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS
H491 H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS
H492 H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS
H493 H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS
H494 H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS
H495 H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE
H496 H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY
H497 H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE
H498 H2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE
H499 H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE
H500 H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY
H501 H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE
H502 H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS
H503 H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE
H504 H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS
H505 H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS
H506 H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS
H507 H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS
H508 H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS
H509 H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS
H510 H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER
H511 H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER
H512 H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB
H513 H3-02 DO YOU INSPECT OSCILLATORS
H514 H3-03 DO YOU ALIGN OR ADJUST OSCILLATORS
H515 H3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS
H516 H3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS
H517 H3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL
H518 H3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS
H519 H3-08 DO YOU USE OR REFER TO FEEDBACK
H520 H3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)
H521 H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY
H522 H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY
H523 H3-12 DO YOU USE OR REFER TO DAMPING
H524 H3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK
H525 H3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT
H526 H3-15 DO YOU USE OR REFER TO CRITICAL DAMPING
H527 H3-16 DO YOU USE OR REFER TO UNDER DAMPING
H528 H3-17 DO YOU USE OR REFER TO OVER DAMPING
H529 H3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD
H530 H3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD
H531 H3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD
H532 H3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD
H533 H3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS
H534 H3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS
H535 H3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS
H536 H3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS
H537 H3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS
H538 H3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS

I MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES

I539 I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB
I540 I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS
I541 I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS

1542 11-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS
1543 11-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS
1544 11-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS
1545 11-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS
1546 11-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS
1547 11-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS
1548 11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS
1549 11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS
1550 11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FDD
1551 11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS
1552 11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS
1553 11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS
1554 11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS
1555 12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB
1556 12-02 DO YOU WORK WITH SERIES DIODE LIMITERS
1557 12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS
1558 12-04 DO YOU WORK WITH LIMITERS WITH BIAS
1559 12-05 DO YOU WORK WITH ZENER DIODE LIMITERS
1560 12-06 DO YOU WORK WITH TRANSISTOR LIMITERS
1561 12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS
1562 12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS
1563 12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS
1564 12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT
1565 13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES
1566 13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD
1567 13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES
1568 13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES
1569 13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES
1570 13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES
1571 13-07 DO YOU USE OR REFER TO CUTOFF
1572 13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING
1573 13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING
1574 13-10 DO YOU USE OR REFER TO TRANSIT TIME
1575 13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING
1576 13-12 DO YOU USE OR REFER TO SATURATION
1577 13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE
1578 13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES
1579 13-15 DO YOU USE OR REFER TO PLATE VOLTAGE
1580 13-16 DO YOU USE OR REFER TO PLATE CURRENT
1581 13-17 DO YOU USE OR REFER TO GRID VOLTAGE
1582 13-18 DO YOU USE OR REFER TO GRID CURRENT
1583 13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE
1584 13-20 DO YOU USE OR REFER TO CATHODE CURRENT
1585 13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)
1586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS
1587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS
1588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)
1589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES
1590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE
1591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE
1592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE
1593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES
1594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS
1595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS
1596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF
1597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION
1598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN
1599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY
1600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE
1605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION
1606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS
1607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE ELECTRON TUBES YOU WORK ON
1608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS

J ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, HETERODYNING, MODULATION,

J609 J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB
J610 J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS
J611 J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS
J612 J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS
J613 J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS
J614 J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS
J615 J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER
J616 J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)
J617 J2-02 DO YOU WORK WITH CATHODE-RAY TUBES
J618 J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES
J619 J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED
J620 J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS
J621 J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATRONS ARE USED
J622 J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)
J623 J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)
J624 J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)
J625 J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS
J626 J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS
J627 J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS
J628 J2-13 DO YOU USE OR REFER TO PERSISTENCE
J629 J2-14 DO YOU USE OR REFER TO DECAY TIMES
J630 J2-15 DO YOU USE OR REFER TO FLUORESCENCE
J631 J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE
J632 J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB
J633 J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS
J634 J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS
J635 J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS
J636 J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS
J637 J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS

K AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS

K638 K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB
K639 K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS
K640 K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS
K641 K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS
K642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS
K643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS
K644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS
K645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS
K646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS
K647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS
K648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS
K649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS
K650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS
K651 K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS
K652 K1-15 DO YOU PERFORM TASKS ON DETECTORS
K653 K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE
K654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS
K655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS
K656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS
K657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS
K658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION
K659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION
K660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION
K661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE
K662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS
K663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS
K664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS
K665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS
K666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB
K667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS
K668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS
K669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS
K670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS
K671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS
K672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS
K673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS

K674 K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS
K675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS
K676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)
K677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS
K678 K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS
K679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS
K680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS
K681 K2-16 DO YOU PERFORM TASKS ON LIMITERS
K682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS
K683 K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS
K684 K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS
K685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS
K686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS
K687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS
K688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS
K689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS
K690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS
K691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM
K692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD
K693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD
K699 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM

L LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS

L695 L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS
L696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES
L697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES
L698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS
L699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES
L700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES
L701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES
L702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS
L703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS
L704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES
L705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES
L706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES
L707 L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES
L708 L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS
L709 L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS
L710 L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS
L711 L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS
L712 L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES
L713 L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS
L714 L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA
L715 L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES
L716 L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS
L717 L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE
L718 L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS
L719 L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS
L720 L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS
L721 L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS
L722 L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS
L723 L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS
L724 L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS
L725 L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS
L726 L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES
L727 L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS
L728 L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS
L729 L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS
L730 L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS
L731 L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS
L732 L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS
L733 L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB
L734 L3-02 DO YOU USE OR REFER TO UP-COUNTERS
L735 L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS

L736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS
L737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS
L738 L3-06 DO YOU USE OR REFER TO RING COUNTERS
L739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS
L740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS
L741 L3-09 DO YOU USE OR REFER TO DOWN CLOCKS
L742 L3-10 DO YOU USE OR REFER TO UP CLOCKS
L743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS
L744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS
L745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS
L746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS
L747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER
L748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS
L749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS
L750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS
L751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS
L752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTERS
L753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS
L754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS
L755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES
L756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT

M TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS

M757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS
M758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS
M759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK
M760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK
M761 M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS
M762 M1-06 DO YOU USE OR REFER TO RISE TIME
M763 M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME
M764 M1-08 DO YOU USE OR REFER TO SWEEP TIME
M765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS
M766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS
M767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS
M768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS
M769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB
M770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS
M771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS
M772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS
M773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS
M774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS
M775 M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE
M776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH
M777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH
M778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS
M779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR GENERATORS
M780 M3-02 DO YOU INSPECT MOTORS
M781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS
M782 M3-04 DO YOU OPERATE MOTORS
M783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS
M784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS
M785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS
M786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS
M787 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS
M788 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES
M789 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS
M790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES
M791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS
M792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS
M793 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES
M794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR
M795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR
M796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS
M797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS
M798 M3-20 DO YOU WORK WITH INDUCTION MOTORS
M799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS

M800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS
M801 M3-23 DO YOU INSPECT GENERATORS
M802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS
M803 M3-25 DO YOU OPERATE GENERATORS
M804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS
M805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS
M806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS
M807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS

N METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVESHAPING CIRCUITS

N808 N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB
N809 N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS
N810 N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS
N811 N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS
N812 N1-05 DO YOU READ METER SCALES
N813 N1-06 DO YOU EXTEND THE RANGE OF AMMETERS
N814 N1-07 DO YOU ZERO OHMMETERS
N815 N1-08 DO YOU ZERO AMMETERS
N816 N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS
N817 N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)
N818 N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB
N819 N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS
N820 N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS
N821 N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS
N822 N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS
N823 N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS
N824 N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS
N825 N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS
N826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS
N827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS
N828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS
N829 N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS
N830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS
N831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS
N832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS
N833 N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS
N834 N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB
N835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS
N836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)
N837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)
N838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)
N839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS
N840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS
N841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT
N842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION
N843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS
N844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS

O SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS

O845 O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB
O846 O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS
O847 O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS
O848 O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS
O849 O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS
O850 O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS
O851 O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS
O852 O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS
O853 O1-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS
O854 O1-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS
O855 O1-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS
O856 O1-12 DO YOU PERFORM TASKS ON SSB LC FILTERS
O857 O1-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS
O858 O1-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS
O859 O1-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS
O860 O1-16 DO YOU PERFORM TASKS ON SSB MIXERS
O861 O1-17 DO YOU PERFORM TASKS ON SSB DRIVERS
O862 O1-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS

0863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS
0864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS
0865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS
0866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS
0867 01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES
0868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING
0869 01-25 DO YOU USE OR REFER TO PEAK POWER
0870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY
0871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS
0872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS
0873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS
0874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS
0875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB
0876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS
0877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS
0878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS
0879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS
0880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS
0881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS
0882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS
0883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS
0884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS
0885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS
0886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS
0887 02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS
0888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM
0889 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES
0890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES
0891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS
0892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS
0893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS
0894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS
0895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES
0896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS
0897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS
0898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS
0899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS
0900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS
0901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS
0902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES
0903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)
0904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)
0905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)
0906 02-32 DO YOU USE OR REFER TO PULSE SHAPE
0907 02-33 DO YOU USE OR REFER TO PEAK POWER
0908 02-34 DO YOU USE OR REFER TO AVERAGE POWER
0909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)
0910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)
0911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS
0912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS
0913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS
0914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB
0915 03-02 DO YOU INSPECT ANTENNAS
0916 03-03 DO YOU CLEAN ANTENNAS
0917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS
0918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS
0919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS
0920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS
0921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS
0922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS
0923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES
0924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES
0925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS
0926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS INDUCTIVE LOADS TO THE GENERATOR
0927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR

0928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR
0929 03-16 DO YOU WORK WITH HERTZ ANTENNAS
0930 03-17 DO YOU WORK WITH MARCONI ANTENNAS
0931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS
0932 03-19 DO YOU WORK WITH END-FIRE ARRAYS
0933 03-20 DO YOU WORK WITH CARDIOID ARRAYS
0934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS
0935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS
0936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS
0937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS
0938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS
0939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION
0940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD
0941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED
0942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED
0943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON
0944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS
0945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS
0946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS
0947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS
0948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS
0949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS
0850 03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS
0851 03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY
0852 03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS

P TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS

P953 P1-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS BETWEEN RECEIVERS AND ANTENNAS, TELEPHONE LEADS, AS WELL AS HIGH VOLTAGE POWER LINES, ETC. DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES
P954 P1-02 DO YOU REFER TO OR USE COPPER LOSS OR I2R LOSS IN TRANSMISSION LINES
P955 P1-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES
P956 P1-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES
P957 P1-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES
P958 P1-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES
P959 P1-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES
P960 P1-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES
P961 P1-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES
P962 P1-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES
P963 P1-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES
P964 P1-12 DO YOU TROUBLESHOOT TRANSMISSION LINES
P965 P1-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)
P966 P1-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS
P967 P1-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS
P968 P1-16 DO YOU MEASURE STANDING WAVE RATIOS (SR) OF TRANSMISSION LINES
P969 P1-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES
P970 P1-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS
P971 P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS
P972 P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING
P973 P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA
P974 P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES
P975 P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES
P976 P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES
P977 P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES
P978 P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES
P979 P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES
P980 P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH

INCREASES
P981 P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES
P982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES
P983 P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING
P984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB
P985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS
P986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS
P987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS
P988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS
P989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS
P990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS
P991 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS
P992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES
P993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS
P994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS
P995 P2-12 DO YOU REMOVE OR INSTALL E BENDS
P996 P2-13 DO YOU REMOVE OR INSTALL H BENDS
P997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS
P998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS
P999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS
P000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS
P001 P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS
P002 P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES
P003 P2-20 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES
P004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES
P005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES
P006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES
P007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS
P008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS
P009 P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS
P010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS OF THE OPERATING FREQUENCY
P011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 USED AS AN AVERAGE
P012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF
P013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION
P014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES
P015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES
P016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES
P017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES
P018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P021 P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES O CAVITY RESONATORS YOU WORK WITH
P028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING
P030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING
P031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING
P032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING
P033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS
P034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS
P035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE
P036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME
P037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE
P038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY
P039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION
P040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING
P041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS
P042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS
P043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS
P044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)

P045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS
P046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS
P047 P3-14 DO YOU WORK WITH MAGNETRONS
P048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT
P049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT
P050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY
P051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY
P052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT
P053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT
P054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT
P055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS
P056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS
P057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS
P058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS
P059 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS
P060 P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS
P061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS
P062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER
P063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS
P064 P3-31 DO YOU INSPECT MAGNETRONS
P065 P3-32 DO YOU CLEAN MAGNETRONS
P066 P3-33 DO YOU ADJUST MAGNETRONS
P067 P3-34 DO YOU TUNE MAGNETRONS
P068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS
P069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS
P070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON
P071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS
P072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES
P073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES
P074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS
P075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS
P076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES
P077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS
P078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES
P079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS
P080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES
P081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REPELLER (REFLECTOR) PLATES
P082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS
P083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS
P084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES
P085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS
P086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS
P087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES
P088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS
P089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS
P090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES
P091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS
P092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES
P093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES
P094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS
P095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS
P096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS
P097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS
P098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES
P099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES
P100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES
P101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS
P102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES
P103 P3-70 DO YOU PERFORM TASKS ON ANODES
P104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING FINS
P105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS
P106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS
P107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES
P108 P3-75 DO YOU PERFORM TASKS ON CATHODES
P109 P3-76 DO YOU PERFORM TASKS ON MAGNETS

Q REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS

Q110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS
Q111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS
Q112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS
Q113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS
Q114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS
Q115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS
Q116 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED
Q117 Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB
Q118 Q2-02 DO YOU USE OR REFER TO DELAY LINES
Q119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES
Q120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS
Q121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES
Q122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS
Q123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS
Q124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS
Q125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES
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Q127 Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES
Q128 Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS
Q129 Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS
Q130 Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS
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Q137 Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS
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T161 T1-03 DO YOU CLEAN INFRARED SYSTEMS

T182 T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS
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This report summarizes the results of an Electronics Principles survey of Missile Maintenance personnel assigned overseas and supplements the EPI report for the Missile Maintenance career ladder (AFPT 90-316-222, dated 5 November 1976) which was restricted to a selected sample of CONUS personnel. This report gives a detailed listing of the technical tasks and knowledge needed to perform the jobs within the specialty or career ladder.

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This specialty has the following functions:

Performs maintenance on missile and Remotely Piloted Vehicle (RPV) guidance and control systems, subsystems, and components; operates, calibrates, and maintains related test, monitoring, and checkout equipment; performs malfunction analysis, and repairs, maintains, modifies, inspects, and services missile and RPV systems, subsystems, and ground operating equipment to component level; performs field maintenance on electronic test, launch control, checkout, and related ground support equipment used by missile activities; and assembles and disassembles missiles and RPVs.