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APPENDIX 6.

PHARMACY TECHNICIAN

APPLICATION OF A SYSTEM APPROACH
U.S. NAVY MEDICAL DEPARTMENT
EDUCATION AND TRAINING PROGRAMS
FINAL REPORT

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OFFICE OF NAVAL RESEARCH
U.S. DEPARTMENT OF THE NAVY

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Bureau of Medicine and Surgery (Code 71G)

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currently designated Navy enlisted occupations, 20 Naval Enlisted Classification Codes (NEC's) were computerized. A set of 16 groupings that cover all designated occupations was developed so as to enhance the effectiveness of professionals and sub-professionals alike.

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FOREWORD

The project, "Application of a System Approach to the Navy Medical Department Education and Training Programs," was initiated in May of 1969 as a realistic, comprehensive response to certain objectives set forth in ADO 43-03X, and to memoranda from both the Secretary of Defense and the Assistant Secretary of Defense, Manpower and Reserve Affairs. The Secretary's concern was stated in his memorandum of 29 June 1965, "Innovation in Defense Training and Education." More specific concerns were stated in the Assistant Secretary's memorandum of 14 June 1968, "Application of a System Approach in the Development and Management of Training Courses." In this he called for "vigorous and imaginative effort," and an approach "characterized by an organized training program with precise goals and defined operational interrelation among instructional system components." He also noted, "Job analyses with task descriptions expressed in behavioristic terms are basic and essential to the development of precise training goals and learning objectives."

The Project

System survey and analysis was conducted relative to all factors affecting education and training programs. Subsequently, a job-analysis sub-system was defined and developed incorporating a series of task inventories "...expressed in behavioristic terms..." These inventories enabled the gathering of job activity data from enlisted job incumbents, and data relating to task sharing and delegation from officers of the Medical, Nurse and Dental Corps. A data management sub-system was devised to process incumbent data, then carry out needed analyses. The development of initial competency curricula based upon job analysis was implemented to a level of methodology determination. These methods and curriculum materials constituted a third (instructional) sub-system.

Thus, as originally proposed, a system capability has been developed in fulfillment of expressed need. The system, however, remains untested and unevaluated. ADO 43-03X called for feasibility tests and cost-effectiveness determination. The project was designed to so comply. Test and evaluation through the process of implementation has not proved feasible in the Navy Medical Department within the duration of the project. As designed and developed the system does have "...precise goals and defined operational interrelation among instructional system components." The latter has been achieved in terms of a recommended career structure affording productive, rewarding manpower utilization which bridges manpower training and health care delivery functions.

Data Management Sub-System

Job analysis, involving the application of comprehensive task inventories to thousands of job incumbents, generates many millions of discrete bits of response data. They can be processed and manipulated only by high speed computer capability using rigorously designed specialty programs. In addition to numerical data base handling, there is the problem of rapidly and accurately manipulating a task statement data base exceeding ten thousand carefully phrased behavioral statements. Through the use of special programs, task inventories are prepared, printouts for special purposes are created following a job analysis application, access and retrieval of both data and tasks are efficiently and accurately carried out, and special data analyses conducted. The collective programs, techniques and procedures comprising this sub-system are referred to as the Navy Occupational Data Analysis Language (NODAL).

Job Analysis Sub-System

Some twenty task inventory booklets (and associated response booklets) were the instruments used to obtain job incumbent response data for more than fifty occupations. An inventory booklet contains instructions, formatted questions concerning respondent information ("bio-data"), response dimension definitions, and a list of tasks which may vary in number from a few hundred to more than a thousand per occupational field.

By applying NODAL and its associated indexing techniques, it is possible to assemble modified or completely different inventories than those used in this research. Present inventories were applied about three years ago. While they have been rendered in operational format, they should not be re-applied until their task content is updated.

Response booklets were designed in OPSCAN mode for ease of recording and processing responses.

Overall job analysis objectives and a plan of administration were established prior to inventory preparation, including the setting of provisional sample target sizes. Since overall data attrition was forecast to approximate twenty percent, final sample and sub-sample sizes were adjusted accordingly. Stratified random sampling techniques were used. Variables selected (such as rating, NEC, environment) determined stratifications, together with sub-population sizes. About fifteen percent of large sub-populations were sought while a majority or all members of small sub-populations were sought.

Administration procedures were established with great care for every step of the data collecting process, and were coordinated with sampling and data analysis plans. Once set, the procedures were formalized as a protocol and followed rigorously.

Instructional Sub-System

Partial "competency curricula" have been composed as an integral sub-system bridging what is required as performance on the job with what is, accordingly, necessary instruction in the training process. Further, curriculum materials were developed to meet essential requirements for implementing the system so that the system could be tested and evaluated for cost effectiveness. However, due to the fact that test and evaluation was not feasible in the Navy Medical Department within the duration of the project, it was not possible to complete the development of the system through the test and evaluation phase. The inability to complete this phase also interrupted the planned process for fully developing the curricula; therefore, instead of completed curricula ready for use in the system, the curricula were partially developed to establish the necessary sub-system methodology. The competency curricula are based on tasks currently performed by job incumbents in 1971. (The currency of a given curriculum depends upon periodic analysis of incumbents' jobs, and its quality control resides in the evaluation of the performance competency of the program's graduates.)

A competency curriculum provides a planned course of instruction or training program made up of sequenced competency units which are, in turn, comprised of sequenced modules. These modules, emphasizing performance objectives, are the foundation of the curriculum.

A complete module would be comprised of seven parts: a cluster of related tasks; a performance objective; a list of knowledges and skills implied by the objective; a list of instructional strategies for presenting the knowledges and skills to the learner; an inventory of training aids for supporting the instructional strategies; a list of examination modes; and a statement of the required training time. In this project, curriculum materials have been developed to various levels of adequacy, and usually comprise only the first three parts; the latter four need to be prepared by the user.

The performance objective, which is the most crucial part of the module, is the basis for determining curriculum content. It is composed of five essential elements: the stimulus which initiates the behavior; the behavior; the conditions under which the behavior takes place; the criteria for evaluating the behavior; and the consequence or results of the behavior. A sixth element, namely next action, is not essential; however, it is intended to provide linkage for the next behavior.

Knowledges and skills listed in the module are those needed by the learner for meeting the requirements of the performance objective.

Instructional strategies, training aids, examination modes and training time have been specified only for the Basic Hospital Corps Curriculum. The strategies, aids and modes were selected on the basis of those considered to be most supportive in presenting the knowledges and skills so as to provide optimum learning effectiveness and training efficiency. The strategies extend from the classroom lecture as traditionally presented by a teacher to the more sophisticated mediated program for self-instruction. The training aids, like strategies, extend from the traditional references and handout material in the form of a student syllabus to mediated programs for self-instruction supported by anatomical models. Examination modes extend from the traditional paper and pencil tests to proficiency evaluation of program graduates on the job, commonly known as feedback. Feedback is essential for determining learning effectiveness and for quality control of a training program. The kind of instructional strategies, training aids and examination modes utilized for training are limited only by such factors as staff capability and training budget.

The training time specified in the Basic Hospital Corps Curriculum is estimated, based upon essential knowledge and skills and program sequence.

The competency curriculum module, when complete, provides all of the requirements for training a learner to perform the tasks set forth in the module. A module may be used independently or related modules may be re-sequenced into modified competency units to provide training for a specific job segment.

Since the curricula are based upon tasks performed by job incumbents in 1971, current analysis of jobs needs to be accomplished using task inventories that have been updated to reflect changes in performed tasks. Subsequent to job analysis, a revision of the curricula should be accomplished to reflect task changes. When the foregoing are accomplished, then faculty and other staff members may be indoctrinated to the competency curricula and to their relationship to the education and training system.

In addition to the primary use for the systematic training of job incumbents, these curricula may be used to plan for new training programs, develop new curricula, and revise existing curricula; develop or modify performance standards; develop or modify proficiency examinations; define billets; credentialize training programs; counsel on careers; select students; and identify and select faculty.

The System

Three sub-systems, as described, comprise the proposed system for Education and Training Programs in The Navy Medical Department. This exploratory and advanced developmental research has established an overall methodology for improved education and training incorporating every possible means of providing bases for demonstrating feasibility and cost effectiveness. There remains only job analysis sub-system updating, instructional sub-system completion, and full system test and evaluation.

Acknowledgements

The authors wish to acknowledge the invaluable participation of the several thousands of Naval personnel who served as respondents in inventory application. The many military and civilian personnel who contributed to developmental efforts are cited by name in the Final Report.

The authors also wish to acknowledge former colleagues for singularly important contributions, namely, Elias H. Porter, Ph.D., Carole K. Kauffman, R.N., M.P.H., Mary Kay Munday, B.S.N., R.N., Gail Zarren, M.S.W., and Renee Schick, B.A.

Identity and acknowledgement of the project Advisory Group during the project's final year is recorded in the Final Report.

Lastly, the project could not have been commenced nor carried out without the vision, guidance and outstanding direction of Ouida C. Upchurch, Capt., NC, USN, Project Manager.

NAVY MEDICAL DEPARTMENT

TASK INVENTORY BOOKLET

PHARMACY

CONSTRAINTS AND ETHICAL USE

This task inventory was developed three years ago in a first-version key punch format for education and training research purposes.

The present "operational" format, using a mark-sense response booklet (Opscan), is recommended for future applications. The task and equipment statements comprising the bulk of the inventory are precisely the same (less duplicate entries) as in the original research tools but rearranged for Opscan mode. Biographical data questions have also been reformatted for Opscan (NEC codes should be updated).

The processing, administering and formatting of this inventory have thus been readied for operational application.

It is strongly recommended that this inventory be updated in its task and equipment statement sections before actual operational use. These reasons pertain:

- Changes in medical or related procedures or techniques
- Some tasks may violate current policy or be obsolete
- Equipment changes may have occurred
- The objective of task comprehensiveness may change
- Objectives may shift to embrace manpower utilization as well as education and training

In the latter regard, the present operational format includes a "time to perform" dimension (as well as frequency of performance and two additional optional blank response dimension fields). As a response dimension, "time to perform" has been validated within the context of inventories for professional personnel where the objectives embraced utilization (i.e., time associated with shared and delegable tasks). The original Enlisted inventory content was directed to education and training factors only. If "time to perform" is to be used operationally, each task and equipment statement should be examined by expert job incumbents to remove possible overlaps which could confound "time to perform" data. This review process would also serve other purposes cited above.

A general precaution is in order.

When task analysis inventories are poorly prepared, loosely administered, administered according to less than rigorous sampling, or are handled casually in processing or interpretation, they will inevitably produce poor or questionable data, at best. At worst, such practices will result in loss of money and time, and produce dangerous data. Inventories should be prepared, applied, processed and interpreted only by knowledgeable professional and technical personnel. As in the cases of ethically controlled behavior tests, inventories should not be casually copied or distributed, and should remain under the control of authorized, trained personnel. Factors effecting reliability and validity should be fully appreciated.

GENERAL INSTRUCTIONS

There are two parts to be completed for this survey:

- Part I Career Background Information
 (answers to be recorded in this
 TASK BOOKLET)

- Part II A List of Tasks (answers to be
 recorded on the accompanying
 RESPONSE BOOKLET)

- B List of Instruments and
 Equipment (answers to be
 recorded on the accompanying
 RESPONSE BOOKLET)

Each part is preceded by a set of instructions. Be sure to read them carefully before you start answering each part. All instructions are found on the tinted pages.

PLEASE USE ONLY NUMBER 2 LEAD PENCILS. ERASE ALL CHANGES CAREFULLY AND COMPLETELY. DO NOT PUT ANY MARKS OTHER THAN YOUR ANSWERS ON EACH RESPONSE PAGE.

DO NOT FOLD, WRINKLE, CREASE OR DETACH PAGES FROM EITHER TASK BOOKLET OR RESPONSE BOOKLET.

WHEN RECORDING YOUR ANSWERS YOU MAY WANT TO USE A RULER TO READ ACROSS ANSWER AND QUESTION COLUMNS.

WHEN YOU HAVE COMPLETED YOUR RESPONSES, PUT THE TASK INVENTORY BOOKLET AND THE RESPONSE BOOKLET IN THE ENCLOSED SELF-ADDRESSED ENVELOPE. SEAL AND RETURN TO THE OFFICER WHO GAVE YOU THIS PACKAGE. COMPLETED BOOKLETS SHOULD BE RETURNED WITHIN ONE WEEK OF RECEIPT.

Part I

CAREER BACKGROUND INFORMATION

Check that the Form and Serial Number in this box match those on the cover of this Booklet

Please fill out completely

DO NOT FILL IN	

N	
Form	Serial No.

(1)

(7)

Name of your Duty Station _____

City & State (if applicable) _____

Your Name _____

Social Security Number _____

(14)

PLEASE ANSWER QUESTIONS BELOW BY ENTERING THE PROPER NUMBER IN THE BLANKS PROVIDED. TWO BLANKS REQUIRE A TWO-DIGIT ANSWER. DISREGARD NUMBERS IN PARENTHESIS.

ENTER ANSWERS HERE

Q1. Select the number to indicate the Corps to which you belong:

Q1. ___ (23)

- 1. Dental Technician
- 2. Hospital Corps

Q2. Indicate your military status:

Q2. ___ (24)

- 1. USN
- 2. USNR

Q3. Indicate your pay grade:

Q3. ___ (25)

- 1. E1 6. E6
- 2. E2 7. E7
- 3. E3 8. E8
- 4. E4 9. E9
- 5. E5

Q4. Indicate your total years of active duty in the Navy to date: (estimate to the nearest year)

Q4. ___ (26)

- 1. Less than 2 years
- 2. 2 to 4 years
- 3. 5 to 8 years
- 4. More than 8 years

ENTER
ANSWERS
HERE

- Q5. Select the number to indicate your present immediate supervisor:
1. Physician
 2. Dentist
 3. Nurse
 4. MSC Officer
 5. HM or DT
 6. Other (Specify) _____
- Q6. Select the number to indicate the average number of hours you work per week: (estimate to the nearest hour)
1. 35 to 40 hours
 2. 41 to 50 hours
 3. More than 50 hours
- Q7. Please give an estimate of the percent of time you spend on the following (write five percent as 05):
1. Inpatient care
 2. Outpatient care
 3. Teaching
 4. Administration
 5. Other (specify) _____
- Q8. Assuming that most or all of the following factors are of importance to you, select the three which, if improved, would contribute most to your job satisfaction:
- 01 Salary and/or promotion opportunities
 - 02 Retirement benefits
 - 03 Housing
 - 04 Educational advancement opportunities
 - 05 Stability of tour of duty
 - 06 Physical facilities and equipment
 - 07 Administrative and clerical support
 - 08 Work load
 - 09 Personal career planning
 - 10 Opportunity to attend professional meetings

Q5. ___ (27)

Q6. ___ (28)

Q7.

1. ___ % (29)

2. ___ % (31)

3. ___ % (33)

4. ___ % (35)

5. ___ % (37)

Q8. ___ (39)

___ (41)

___ (43)

ENTER
ANSWERS
HERE

- Q9. Using the list on page vii specify your current NEC by writing the last two digits of the CODE. Q9. __ __ (45)
- Q10. Select the number to indicate your years of experience corresponding to the NEC stated in Q9: (estimate to the nearest year) Q10. __ __ (47)
1. Less than 1 year 4. 6 to 10 years
2. 1 to 2 years 5. 11 to 15 years
3. 3 to 5 years 6. More than 15 years
- Q11. If you have other NEC(s) in addition to the one specified in Q9, check page vii and indicate the last two digits of the CODE(s). If you have none, enter "99" in answer space for Q11 and Q12. Q11a. __ __ (48)
b. __ __ (50)
- Q12. Select the number to indicate the years of experience you had in the NEC(s) stated in Q11 (estimate to the nearest year). Q12a. __ __ (52)
b. __ __ (53)
1. Less than 1 year 4. 6 to 10 years
2. 1 to 2 years 5. 11 to 15 years
3. 3 to 5 years 6. More than 15 years
- Q13. From the list below, write the two-digit CODE to indicate the specialty of the department in which you are currently functioning. Q13. __ __ (54)

CODE

- | | |
|--------------------------|--------------------|
| 01 Administration | 18 Urology |
| 02 Education | 19 Intensive Care |
| 03 Anesthesiology | 20 Operating Room |
| 04 Coronary Care | 21 Emergency Room |
| 05 Dermatology | 00 Other (specify) |
| 06 Medicine - OPD | |
| 07 Medicine - Wards | |
| 08 Obstetrics/Gynecology | |
| 09 Ophthalmology | |
| 10 Orthopedics | |
| 11 Otolaryngology | |
| 12 Medical Laboratory | |
| 13 Pediatrics | |
| 14 Psychiatry | |
| 15 Public Health | |
| 16 Radiology | |
| 17 General Surgery-Wards | |

ENTER
ANSWER
HERE

Q14. Select the number to indicate the type of duty station at which you currently work, and have been working for at least 30 days:

Q14.____ (56)

1. Hospital
2. Dispensary
3. Aboard ship/sub, no M.O. (or D.O.) aboard
4. Aboard ship/sub, M.O. (or D.O.) aboard
5. Aviation squadron/wing, Navy or Marine
6. Marine ground forces
7. Administrative Commands
8. Research Commands or PMUs
9. Dental Clinic
0. Other _____

Q15. Indicate the number of people you normally supervise:

Q15.____ (57)

- | | |
|---------|------------|
| 0. None | 3. 6-10 |
| 1. 1-2 | 4. 11-20 |
| 2. 3-5 | 5. over 20 |

MEDICAL/DENTAL NEC (NAVAL ENLISTED CODE) AND TITLE

0000 General Service, Hospital or Dental Corpsman
3371 Health Physics & Process Control Technician
3391 Nuclear Power Plant Operator
8402 Nuclear Submarine Medicine Technician
8403 Submarine Medicine Technician
8404 Medical Field Service Technician
8405 Advanced Hospital Corps Technician (Class B)
8406 Aviation Medicine Technician
8407 Nuclear Medicine Technician
8408 Cardiopulmonary Technician
8409 Aviation Physiology Technician
8412 Clinical Laboratory Assistant Technician
8413 Tissue Culture Technician
8414 Clinical Chemistry Technician
8415 Medical Technology Technician
8416 Radioactive Isotope Technician
8417 Clinical Laboratory Technician
8432 Preventive Medicine Technician
8433 Tissue Culture and Tissue Bank Technician
8442 Medical Administrative Technician
8452 X-ray Technician
8453 Electrocardiograph/Basal Metabolism Technician
8454 Electroencephalograph Technician
8462 Optician (General) Technician
8463 Optician Technician
8466 Physical and Occupational Technician
8472 Medical Photography Technician
8482 Pharmacy Technician
8483 Operating Room Technician
8484 Eye, Ear, Nose, & Throat Technician
8485 Neuropsychiatry Technician
8486 Urological Technician
8487 Occupational Therapy Technician
8488 Orthopedic Appliance Mechanic
8489 Orthopedic Cast Room Technician
8492 Special Operations Technician
8493 Medical Deep Sea Diving Technician
8494 Physical Therapy Technician
8495 Dermatology Technician
8496 Embalming Technician
8497 Medical Illustration Technician
8498 Medical Equipment Repair Technician
8703 DT General, Advanced
8707 DT Field Service
8713 DT Clinical Laboratory
8714 DT Research Assistant
8722 DT Administrative
8732 DT Repair
8752 DT Prosthetic, Basic
8753 DT Prosthetic, Advanced
8765 DT Maxillofacial Prosthetic

RESPONSE BOOKLET INSTRUCTIONS

- To complete Part II, you need this TASK BOOKLET and the accompanying RESPONSE BOOKLET. Record all your answers to Part II in the RESPONSE BOOKLET.
- All pages of the RESPONSE BOOKLET are machine readable. In order for responses to be properly read, please be sure to:
 1. Use a No. 2 pencil only
 2. Carefully and completely shade the number corresponding to your answer under each column.
- Complete Page 00 of the RESPONSE BOOKLET first. Follow instructions given on the page. Fill in Line 1, and Boxes 2, 3, 4, and 5. Ignore all other boxes. BE SURE TO ENTER YOUR SOCIAL SECURITY NUMBER (WRITE DOWNWARD) IN THE BLANK SPACES IN BOX 3: then darkly shade the corresponding number on each line. An example of a completed Page 00 is shown on the next page (the handwritten notes in this example are for clarification only. Please do not make similar notes on your RESPONSE BOOKLET.)
- After completing Page 00, carefully read and follow instructions given on pages x through xiv.
- PLEASE HANDLE YOUR RESPONSE BOOKLET CAREFULLY. KEEP IT CLEAN AND AWAY FROM CHEMICALS. DO NOT DETACH, FOLD, WRINKLE OR CROSS OUT ANY PAGE.

DO NOT MARK IN THESE BOXES	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
RESPONSE BOOKLET				
Serial No. 0233				

My name is

1 NAME Mary Smith

Ignore these boxes

INSTRUCTIONS

1. Use No. 2 pencil ONLY.
2. Indicate responses with solid black mark in space provided.
3. Erase **COMPLETELY** all changes.
4. Do not detach forms from packet.
5. Answer questions 2 through 5 below.
6. See Task Statement Booklet for further instructions for completing boxes to the right.

Today is June 4, 1972
June = 06
1972 = 72

2	TODAY'S DATE	MONTH	0 1 2 3 4 5 6 7 8 9
		DAY	0 1 2 3 4 5 6 7 8 9
	YEAR	0 1 2 3 4 5 6 7 8 9	

My Soc. Sec. No. is 304-26-9751

3	SOCIAL SECURITY NUMBER	3	0 1 2 3 4 5 6 7 8 9
		0	0 1 2 3 4 5 6 7 8 9
		4	0 1 2 3 4 5 6 7 8 9
		2	0 1 2 3 4 5 6 7 8 9
		6	0 1 2 3 4 5 6 7 8 9
		9	0 1 2 3 4 5 6 7 8 9
		7	0 1 2 3 4 5 6 7 8 9
		5	0 1 2 3 4 5 6 7 8 9
		1	0 1 2 3 4 5 6 7 8 9

TASK ANALYSIS BACKGROUND DATA SHEET

6	SEE TASK STATEMENT BOOKLET FOR INSTRUCTIONS TO BE COMPLETED	0 1 2 3 4 5 6 7 8 9	13 0 1
		0 1 2 3 4 5 6 7 8 9	14 0 1
		0 1 2 3 4 5 6 7 8 9	15 0 1
		0 1 2 3 4 5 6 7 8 9	16 0 1
		0 1 2 3 4 5 6 7 8 9	17 0 1
		0 1 2 3 4 5 6 7 8 9	18 0 1
		0 1 2 3 4 5 6 7 8 9	19 0 1
		0 1 2 3 4 5 6 7 8 9	20 0 1
		0 1 2 3 4 5 6 7 8 9	21 0 1
		0 1 2 3 4 5 6 7 8 9	22 0 1
		0 1 2 3 4 5 6 7 8 9	23 0 1
		0 1 2 3 4 5 6 7 8 9	24 0 1
7	0 1 2 3 4 5 6 7 8 9	25 0 1	
		26 0 1	
		27 0 1	
		28 0 1	
8	0 1 2 3 4 5 6 7 8 9	29 0 1	
		30 0 1	
		31 0 1	
		32 0 1	
9	0 1 2 3 4 5 6 7 8 9	33 0 1	
		34 0 1	
		35 0 1	
		36 0 1	
10	0 1 2 3 4 5 6 7 8 9	37 0 1	
		38 0 1	
		39 0 1	
		40 0 1	
11	0 1 2 3 4 5 6 7 8 9	41 0 1	
		42 0 1	
		43 0 1	
		44 0 1	
12	0 1 2 3 4 5 6 7 8 9	45 0 1	
		46 0 1	
		47 0 1	
		48 0 1	

SEE COVER OF YOUR TASK BOOKLET Form Nao, Ser.No.0233

4	TASK BOOKLET	FORM	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
		SERIAL NO.	0 1 2 3 4 5 6 7 8 9
			0 1 2 3 4 5 6 7 8 9
			0 1 2 3 4 5 6 7 8 9

My birthday is May 10, 1940
May = 05 1940 = 40

5	BIRTHDAY	MONTH	0 1 2 3 4 5 6 7 8 9
		DAY	0 1 2 3 4 5 6 7 8 9
		YEAR	0 1 2 3 4 5 6 7 8 9

Ignore these boxes

PART II

PART II A LIST OF TASKS

PART II B LIST OF INSTRUMENTS AND EQUIPMENT

HOW TO RESPOND TO TASK STATEMENTS AND INSTRUMENTS

Your responses to each statement should be marked on the corresponding page, column and item number in your RESPONSE BOOKLET.

Note that each page in your RESPONSE BOOKLET has two response blocks. The left-hand block (items 1-25) is for entering responses to statements printed on LEFT pages of this TASK BOOKLET; the right-hand block (items 26-50) is for the responses to statements printed on RIGHT pages. Make sure that your answers are recorded in the appropriate block on every page. DO NOT MAKE ANY MARKS OTHER THAN YOUR ANSWERS!

Each time you start a new page in your RESPONSE BOOKLET, check the page on your TASK BOOKLET. See that the numbers match; then mark the page number in "Box X" in the response page (see instructions at the top of response page.) This is necessary for computer processing.

Tear the Response Guide (p. xiii) at the perforation, and use the correct side to respond to each task or instrument found on the following white pages. Note the following detailed explanation of responses.

Column A - (the responses to Column A differ for Part II A and Part II B, be sure to use the appropriate set of responses.)

Part II A

How often did you do this task within the last month? (If you were on leave, consider your immediate past working month.)

- 0 - Did not do
- 1 - Did less than 5 times
- 2 - Did 5 to 20 times
- 3 - Did 21 to 50 times
- 4 - Did 51 to 100 times
- 5 - Did more than 100 times

Part II B

How often did you use this instrument or piece of equipment within the last month? (If you were on leave, consider your immediate past working month.)

- 0 - Did not use
- 1 - Used less than 5 times
- 2 - Used 5-20 times
- 3 - Used 21-50 times
- 4 - Used 51-100 times
- 5 - Used more than 100 times

If answer in Column A is 0, go to the next statement. If answer is 1, 2, 3, 4 or 5, answer also Columns B, C & D.

Column B

Indicate the approximate time you spent on a single performance the last time you performed this task.

0 = less than one minute

1 = 1 to 4 minutes

2 = 5 to 10 minutes

3 = 11 to 20 minutes

4 = 21 to 30 minutes

5 = 31 to 60 minutes

6 = 1 to 2 hours

7 = more than 2 hours

Column C

Do you feel you need additional training to perform this task?

0 = No

1 = Yes

RESPONSE GUIDE

(DO NOT LOSE THIS TAB)

HOW TO RESPOND TO PART IIA - LIST OF TASKS

ANSWER COL. A FIRST. IF A = 0, GO TO NEXT STATEMENT: IF A = 1-5, ANSWER COLUMNS B, C & D ALSO.

A

FREQUENCY

- 0=DID NOT DO LAST MONTH
- 1=DID LESS THAN 5 TIMES
- 2=DID 5 TO 20 TIMES
- 3=DID 21 TO 50 TIMES
- 4=DID 51 TO 100 TIMES
- 5=DID MORE THAN 100 TIMES

B

TIME CONSUMED
(single performance
the last time
performed)

- 0=LESS THAN 1 MINUTE
- 1=1 TO 4 MINUTES
- 2=5 TO 10 MINUTES
- 3=11 TO 20 MINUTES
- 4=21 TO 30 MINUTES
- 5=31 TO 60 MINUTES
- 6=1 TO 2 HOURS
- 7=MORE THAN 2 HOURS

C

DO YOU FEEL YOU
NEED ADDITIONAL
TRAINING TO PER-
FORM THIS TASK?

- 0=NO
- 1=YES

D

OPTION
(Additional instructions
will be given if this
column is used)

RESPONSE GUIDE

(DO NOT LOSE THIS TAB)

HOW TO RESPOND TO PART IIB - LIST OF INSTRUMENTS AND EQUIPMENT

ANSWER COL. A FIRST. IF A = 0, GO TO NEXT STATEMENT; IF A = 1-5, ANSWER COLUMNS B, C & D ALSO.

A B C D

FREQUENCY	TIME CONSUMED (last time used)	DO YOU FEEL YOU NEED ADDITIONAL TRAINING TO PER- FORM THIS TASK?	OPTION (Additional instructions will be given if this column is used)
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- | | | |
|----------------------------|----------------------|-------|
| 0=DID NOT USE LAST MONTH | 0=LESS THAN 1 MINUTE | 0=NO |
| 1=USED LESS THAN 5 TIMES | 1=1 TO 4 MINUTES | 1=YES |
| 2=USED 5 TO 20 TIMES | 2=5 TO 10 MINUTES | |
| 3=USED 21 TO 50 TIMES | 3=11 TO 20 MINUTES | |
| 4=USED 51 TO 100 TIMES | 4=21 TO 30 MINUTES | |
| 5=USED MORE THAN 100 TIMES | 5=31 TO 60 MINUTES | |
| | 6=1 TO 2 HOURS | |
| | 7=MORE THAN 2 HOURS | |

Part II A
LIST OF TASKS

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 01 OF RESPONSE BOOKLET
1	COMPUTE PHARMACEUTICAL WEIGHTS AND MEASURES, E.G. APOTHECARY, TROY, METRIC
2	CONVERT MEDICATION DOSAGE FROM CC TO MINIMS, GRAINS TO GRAM
3	CONVERT COMMON WEIGHTS AND MEASURES FROM ONE SYSTEM TO ANOTHER, E.G. CC TO TSP, LBS TO KG
4	CONVERT SOLUTION CONCENTRATIONS FROM GM/MG % TO MEQ/L AND VICE VERSA
5	CONVERT PRESCRIBED DOSE INTO UNITS OF ADMINISTRATION, E.G. NUMBER OF CC, TABLETS
6	CALCULATE STRENGTH OF SOLUTIONS, E.G. MG %, MEQ/L
7	CALCULATE AND PREPARE PERCENT SOLUTIONS
8	CALCULATE AND PREPARE NORMAL/MOLAR SOLUTIONS
9	CALCULATE AND PREPARE MOLAL SOLUTIONS
10	CALCULATE MILLIEQUIVALENTS/MILLIMOLES
11	CALCULATE MOLAR/NORMAL CONCENTRATIONS OF REAGENTS FOR BUFFER PREPARATION
12	PREPARE BUFFER SOLUTIONS
13	COMPUTE AMOUNTS OF INGREDIENTS FOR COMPOUNDING/PREPARING PHARMACEUTICALS
14	WEIGH/MEASURE CHEMICALS
15	CHECK WEIGHING/MEASUREMENTS DONE BY OTHER TECHNICIANS
16	MAKE ENTRIES INTO BULK COMPOUNDING LOG
17	COMPOUND ANTIDOTES
18	COMPOUND CAPSULES
19	COMPOUND COLLOIDIONS
20	COMPOUND CONCENTRATES OF MEDICINAL PREPARATIONS
21	COMPOUND ELIXIRS
22	COMPOUND EMULSIONS
23	COMPOUND EXTRACTS
24	COMPOUND FLUIDEXTRACTS
25	COMPOUND GLYCERITES

ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 01
OF RESPONSE BOOKLET

- | | |
|----|------------------------------------|
| 26 | COMPOUND LINIMENTS |
| 27 | COMPOUND LOTIONS |
| 28 | COMPOUND MUCILAGES |
| 29 | COMPOUND OINTMENTS |
| 30 | COMPOUND INSECTICIDES/RODENTICIDES |
| 31 | COMPOUND PASTES |
| 32 | COMPOUND POWDER |
| 33 | COMPOUND SPIRITS |
| 34 | COMPOUND SUPPOSITORIES |
| 35 | COMPOUND TINCTURES |
| 36 | COMPOUND WATERS |
| 37 | COMPOUND MAGMAS |
| 38 | PREPARE CAPSULES |
| 39 | PREPARE EMULSIONS |
| 40 | PREPARE LINIMENTS/LOTIONS |
| 41 | PREPARE MIXTURES |
| 42 | PREPARE OINTMENTS/PASTES |
| 43 | PREPARE SPIRITS |
| 44 | PREPARE SUPPOSITORIES |
| 45 | PREPARE TINCTURES |
| 46 | PREPARE VACCINES FOR USE |
| 47 | PREPARE ISOTONIC SOLUTIONS |
| 48 | PREPARE OPHTHALMIC SOLUTIONS |
| 49 | PREPARE ELIXIRS |
| 50 | MANUFACTURE 70% ALCOHOL |

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 02 OF RESPONSE BOOKLET
1	PREPARE AND BOTTLE I.V. SOLUTIONS, E.G. RINGER'S LACTATE
2	ADD MEDICATION TO AND LABEL I.V. SOLUTIONS
3	MIX BLADDER IRRIGATION SOLUTION
4	MAKE DILUTIONS OF MEDICINALS
5	DILUTE OR MIX POWDERED MEDICATIONS
6	PREPARE/MIX DESENSITIZATION SERA FROM COMMERCIAL PREPARATIONS
7	PREPARE LOCAL ANESTHETIC SOLUTIONS FOR USE
8	PREPARE INFANT FORMULAS
9	INTERPRET FORMULA/DIRECTIONS FOR COMPOUNDING PHARMACEUTICALS
10	READ/USE PHARMACEUTICAL MANUALS, FORMULARY, PDR
11	DETERMINE EXPIRATION DATE OF LOCALLY COMPOUNDED PHARMACEUTICALS
12	REVIEW/UPDATE PHARMACEUTICAL COMPOUNDING FORMULA REFERENCE FILE
13	DETERMINE COMPATIBILITIES OF INGREDIENTS FOR COMPOUNDING PHARMACEUTICAL
14	CALCULATE PEDIATRIC DOSAGE OF COMPOUNDED MEDICINALS
15	DETERMINE COMPATIBILITIES OF I.V. SOLUTIONS AND ADDITIVES
16	DEVELOP NEW FORMULAS FOR COMPOUNDING PHARMACEUTICAL
17	TEST SHELF LIFE OF NEW FORMULA
18	CALCULATE DOSAGE OF DIAGNOSTIC PHARMACEUTICAL, E.G. BSP DYE
19	PREPARE CO2 SLUSH
20	PREPARE PATCH TEST SOLUTION USING PATIENT'S SUSPECTED ALLERGENS
21	CHECK PRESCRIPTIONS FOR INCOMPATIBILITY/IDIOSYNCRACIES OF CONCURRENTLY PRESCRIBED MEDICATIONS
22	CHECK PRESCRIPTIONS FOR COMPLETENESS, E.G. DRUG, DOSE, FORM, SIG., PRESCRIBER ID
23	CHECK PRESCRIPTIONS FOR ACCURACY OF CALCULATIONS
24	CHECK PRESCRIPTIONS FOR OVERDOSAGE
25	NOTIFY DOCTOR OF ERRORS IN PRESCRIPTION

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 02 OF RESPONSE BOOKLET
26	CONFER WITH PRESCRIBING DOCTOR ON QUESTIONS CONCERNING PRESCRIPTIONS
27	TRANSLATE/TRANSFER/TYPE PRESCRIPTION INFORMATION ON LABEL
28	FILL PATIENT PRESCRIPTIONS
29	CHECK PRESCRIPTIONS FILLED BY TECHNICIANS
30	ISSUE FILLED PRESCRIPTIONS
31	ISSUE NON-PRESCRIPTION MEDICATIONS E.G. ASPIRIN
32	FILE PRESCRIPTIONS
33	SET UP PRESCRIPTION FILES
34	PREPARE SUMMARY OF PRESCRIPTIONS FILLED FOR INPATIENTS AND OUTPATIENTS
35	WRITE PRESCRIPTION RENEWALS FOR DOCTOR'S SIGNATURE
36	CHECK ORDERED MEDICATION AGAINST LIST OF RECALLED (UNSAFE) DRUGS
37	FILL WARD/CLINIC PHARMACY REQUISITIONS
38	PREPARE UNIT DOSE FOR WARDS
39	PACKAGE DRUG ORDERS FOR WARD/CLINIC/DEPARTMENT ISSUE
40	DELIVER REQUISITIONED PHARMACEUTICALS TO WARD/CLINIC
41	ISSUE DRUG KITS/FILLERS
42	STOCK ANESTHETIC CART
43	PREPARE MEDICATIONS AND RECORDS FOR PATIENT IN FLIGHT
44	COORDINATE DOCTORS REQUESTS FOR DRUG TRAVEL KITS
45	DETERMINE MEDICATIONS AND SUPPLIES FOR DRUG KITS
46	ASSEMBLE/PACK DRUG KITS ACCORDING TO CHECK LIST
47	ANSWER PERSONNEL INQUIRIES REGARDING MIXING/ADMINISTERING DRUGS
48	PROVIDE INFORMATION ON SYMPTOMS/TREATMENT OF DRUG TOXICITY
49	ANSWER INQUIRIES REGARDING DRUG REACTION
50	INFORM PATIENT/FAMILY OF SYMPTOMS OF INTOLERANCE/OVERDOSE TO MEDICATION, E.G. BLEEDING GUMS, COMA

TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 03
| OF RESPONSE BOOKLET

- 1 | EXPLAIN/ANSWER PATIENT/FAMILY QUESTIONS ABOUT MEDICATIONS, E.G. PURPOSE, DOSE, SCHEDULE
- 2 | ANSWER PATIENT INQUIRIES REGARDING NONPRESCRIPTION DRUGS
- 3 | TEACH PATIENT SELF-ADMINISTRATION OF MEDICATIONS (OTHER THAN INJECTIONS)
- 4 | TEACH PATIENT/FAMILY ADMINISTRATION OF INJECTIONS
- 5 | TEACH PATIENT MEDICATION STORAGE REQUIREMENTS, E.G. REFRIGERATION, EXPIRATION DATE
- 6 | COMPLETE REPORT FORMS ON ADVERSE DRUG REACTION
- 7 | MAKE LOCAL OPEN PURCHASES OF PHARMACEUTICALS
- 8 | NEGOTIATE WITH CIVILIAN SUPPLIERS REGARDING NEW DRUGS
- 9 | ORDER DRUGS LISTED IN FEDERAL SUPPLY CATALOGUE
- 10 | VERIFY/SIGN OFF ON DRUGS THAT ARE DELIVERED TO THE PHARMACY
- 11 | CHECK DRUGS FOR SUPPLY NEEDS
- 12 | CALCULATE FUTURE DRUG SUPPLY REQUIREMENTS FOR THE PHARMACY
- 13 | DETERMINE SIMILARITIES BETWEEN PHARMACEUTICAL TRADE NAMES AND GENERIC NAMES
- 14 | NEGOTIATE WITH PHARMACEUTICAL COMPANY REPRESENTATIVES FOR FREE INTRODUCTORY SAMPLES
- 15 | DO AN INVENTORY OF DRUGS OTHER THAN NARCOTICS AND CONTROLLED DRUGS
- 16 | PREPACKAGE PHARMACEUTICALS WITH MACHINES
- 17 | PREPACKAGE PHARMACEUTICALS MANUALLY
- 18 | PACKAGE/BOTTLE PHARMACEUTICAL BULK STOCK FOR DISPENSING
- 19 | PACKAGE/PREPARE PHARMACEUTICALS FOR SHIPMENT
- 20 | ATTACH AUXILIARY LABELS TO CONTAINER, E.G. SHAKE WELL
- 21 | ATTACH PREPACKAGING LABELS TO DRUG CONTAINERS
- 22 | SET UP/ASSIGN LOT AND CONTROL NUMBERS FOR DRUGS
- 23 | CLASSIFY AND STORE DRUGS
- 24 | REPLACE STOCK IN PHARMACY FROM RESERVES
- 25 | ROTATE PHARMACEUTICAL STOCKS TO INSURE FRESHNESS AND POTENCY

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 03
OF RESPONSE BOOKLET

- 26 | SAFEGUARD POISONS
- 27 | CHECK DRUGS FOR VISIBLE CONTAMINATION/DETERIORATION, E.G.
| CLOUDINESS, COLOR CHANGE
- 28 | DO A CULTURE TEST ON DRUGS SUSPECTED OF BACTERIAL CONTAMINATION
- 29 | INSPECT DRUG STORAGE IN WARD/CLINIC/DEPARTMENT
- 30 | DISPOSE OF/RETURN MEDICATIONS/DRUGS WHOSE SHELF-LIFE HAS EXPIRED
- 31 | DISPOSE/REPACK UNCLAIMED MEDICATIONS/DRUGS
- 32 | RETURN/EXCHANGE EXPIRED/RECALLED PHARMACEUTICALS TO MANUFACTURER
- 33 | DETERMINE WHETHER TO DESTROY OR TO RETURN PHARMACEUTICALS TO
| MANUFACTURER
- 34 | MONITOR EXPIRATION DATED PHARMACEUTICALS
- 35 | RECORD DRUG WASTAGE
- 36 | CHECK REQUISITIONS AGAINST DRUG ISSUES
- 37 | RECEIVE AND LOG INCOMING PHARMACEUTICALS IN BULK
- 38 | PREPARE/CHECK PACKING LIST OF PHARMACEUTICALS TO MANUFACTURER
- 39 | PREPARE REFERENCE DRUG LISTS, E.G. QUANTITY LIMITED, PREPAK
| QUANTITY
- 40 | WASH GLASSWARE/INSTRUMENTS
- 41 | PREPARE DRY ICE USING CARBONDIOXIDE (CO2)
- 42 | FILL NARCOTICS PRESCRIPTION
- 43 | FILL CONTROLLED DRUGS/ALCOHOL PRESCRIPTION
- 44 | FILL INVESTIGATIONAL DRUG PRESCRIPTION
- 45 | TRANSPOSE NARCOTIC/CONTROLLED DRUG PRESCRIPTION ONTO IBM CARDS
- 46 | PREPARE LYTIC COCKTAIL
- 47 | PREPARE NAVMED 6710/1 FOR ISSUE
- 48 | ISSUE NARCOTICS FOR COMPOUNDING
- 49 | DELIVER NARCOTICS/CONTROLLED DRUGS/ALCOHOL TO WARD/CLINIC/OTHER
| DEPARTMENTS
- 50 | ACCEPT/TAKE PROPER ACTION ON RETURNED NARCOTICS/CONTROLLED DRUGS

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 04
OF RESPONSE BOOKLET

- 1 | PREPARE LIST OF RETURNED NAVMED 6710/1
- 2 | DISTRIBUTE NARCOTIC PRINT OUT
- 3 | COMPILE LIST OF OUTSTANDING WARD NARCOTICS
- 4 | SEARCH FOR UNACCOUNTABLE WARD/CLINIC NARCOTICS/CONTROLLED DRUGS
- 5 | CHECK/COUNT NARCOTICS/CONTROLLED DRUGS
- 6 | DO PRE INVENTORY COUNT OF NARCOTICS (SAFE & VAULT)
- 7 | DO FORMAL INVENTORY OF NARCOTICS AND CONTROLLED DRUGS
- 8 | ORDER NONSTANDARD NARCOTICS
- 9 | DETERMINE STORAGE AREA FOR NARCOTICS/CONTROLLED DRUGS
- 10 | PREPARE STORAGE FOR SUPPLY OF NARCOTICS/CONTROLLED DRUGS
- 11 | CONTROL DISTRIBUTION OF NARCOTICS, I.E. CARRY UNIT NARCOTICS KEY
- 12 | RECORD ISSUED NARCOTICS/CONTROLLED DRUGS ON PERPETUAL INVENTORY
- 13 | MAKE ENTRIES INTO CONTROLLED DRUG/ALCOHOL LOG
- 14 | MAKE ENTRIES ON NAVMED 1397 (24 HOUR INVENTORY)
- 15 | UPDATE NARCOTIC LEDGER
- 16 | PREPARE SUMMARIES OF NARCOTIC/CONTROLLED DRUG/ALCOHOL ISSUES
- 17 | RECEIVE RADIOPHARMACEUTICAL
- 18 | DISTRIBUTE RADIOPHARMACEUTICAL TO CLINIC SECTIONS
- 19 | SHIP RADIOPHARMACEUTICAL
- 20 | STORE RADIOPHARMACEUTICAL
- 21 | CALCULATE RADIOPHARMACEUTICAL DOSE
- 22 | DEPYROGENATE/STERILIZE CHEMICAL COMPOUNDS
- 23 | PREPARE QUALITY CONTROL CULTURES
- 24 | RUN CONTROL TESTS TO VALIDATE MEDIA
- 25 | IDENTIFY BACTERIA BY BASIC CULTURE TECHNIQUES

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 04 OF RESPONSE BOOKLET
26	IDENTIFY BACTERIA BY STAINING METHODS
27	DO BACTERIAL COUNTS BY FILTRATION, E.G. MILLIPORE
28	DO BACTERIAL COUNTS BY DILUTION
29	DO BACTERIAL COUNTS BY CALIBRATED LOOP
30	WASH/PREPARE GLASSWARE FOR LAB USE, INCLUDING SPECIAL PREPARATION, E.G. ACID WASH, SILICONE COAT
31	CHECK/ADJUST PH OF BUFFERS/REAGENTS
32	PREPARE CHEMICAL STANDARDS
33	STANDARDIZE REAGENTS
34	PREPARE CULTURE MEDIA FROM BASIC INGREDIENTS, E.G. BEEF EXTRACT
35	PREPARE CULTURE MEDIA USING COMMERCIALY DEHYDRATED PRODUCT, E.G. MC CONKEY AGAR
36	STREAK CULTURE MEDIA
37	PREPARE SPECIAL STAINS
38	LOOK UP NORMAL VALUES FOR LABORATORY TESTS FROM REFERENCE TABLE/BOOK
39	USE LOG TABLES
40	CONVERT CENTIGRADE TEMPERATURE TO FAHRENHEIT OR VICE VERSA
41	READ EQUIPMENT MANUALS FOR OPERATION AND MAINTENANCE OF EQUIPMENT
42	USE NAVY/DOD MANUALS TO STUDY ANALYTICAL PROCEDURES
43	CALCULATE LAB/DIAGNOSTIC TEST RESULTS
44	DETERMINE ADEQUACY OF STERILIZATION PROCEDURES
45	CHECK INSTRUMENTS AND SUPPLIES FOR STERILIZATION INDICATORS
46	MAKE UP STERILE TRAYS
47	TRANSPORT STERILE EQUIPMENT/SUPPLIES, RETURN DIRTY OR EXPIRED ITEMS TO CENTRAL SUPPLY ROOM
48	PREPARE AND STERILIZE LINEN
49	PREPARE RUBBER GOODS FOR STERILIZATION
50	STERILIZE NEEDLES

TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 05
| OF RESPONSE BOOKLET

- 1 | PREPARE SOLUTION BOTTLES FOR STERILIZATION AND STORAGE
- 2 | PACKAGE (WRAP/DATE/LABEL) STERILE SUPPLIES
- 3 | DETERMINE METHOD OF STERILIZATION FOR INSTRUMENTS/EQUIPMENT
- 4 | DETERMINE/SELECT AGENTS/PROCESSES FOR EQUIPMENT/INSTRUMENT STERILIZATION
- 5 | TEST AUTOCLAVE EFFECTIVENESS WITH CULTURE STRIPS
- 6 | PREPARE SILK, COTTON, WIRE SUTURES FOR STERILIZATION
- 7 | DISINFECT INSTRUMENTS/MATERIALS/EQUIPMENT
- 8 | DEPYROGENATE GLASSWARE
- 9 | PREPARE NORMAL SALINE SOLUTION
- 10 | PREPARE DISTILLED WATER
- 11 | READ EQUIPMENT MANUALS FOR OPERATION AND MAINTENANCE OF EQUIPMENT
- 12 | RUN TEST STANDARD TO CHECK ACCURACY OF EQUIPMENT
- 13 | CALIBRATE EQUIPMENT
- 14 | DO MINOR REPAIR ON EQUIPMENT
- 15 | SUPERVISE ROUTINE EQUIPMENT MAINTENANCE FOR SECTION/UNIT
- 16 | PREPARE SCHEDULE FOR CONTRACT PREVENTIVE MAINTENANCE
- 17 | PREPARE PAPERWORK FOR EQUIPMENT REPAIR/MAINTENANCE
- 18 | ARRANGE FOR REPLACEMENT/REPAIR OF EQUIPMENT AS REQUIRED
- 19 | COORDINATE WITH MANUFACTURERS/CONTRACTORS FOR EQUIPMENT REPAIR/ MAINTENANCE
- 20 | MAINTAIN INVENTORY/STOCK OF EQUIPMENT/FURNITURE
- 21 | SURVEY EQUIPMENT TO DETERMINE CONTINUED SERVICEABILITY/USABILITY
- 22 | EVALUATE THE MAINTENANCE AND USE OF SUPPLIES, EQUIPMENT AND WORK SPACE
- 23 | DETERMINE SUPPLIES AND EQUIPMENT BUDGET
- 24 | CONFER/VISIT MANUFACTURERS/CONTRACTORS TO OBTAIN FIRST HAND KNOWLEDGE OF EQUIPMENT/SUPPLIES
- 25 | NEGOTIATE WITH VENDORS, E.G. COST, DELIVERY SCHEDULE

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 05
OF RESPONSE BOOKLET

- 26 | MAINTAIN FILE ON EQUIPMENT LOCATION/AVAILABILITY
- 27 | PROJECT COSTS FOR EQUIPMENT NEEDS
- 28 | ORDER SUPPLIES/EQUIPMENT THROUGH FEDERAL SUPPLY SYSTEM
- 29 | COORDINATE ON EQUIPMENT LOANS, BORROWING OF MEDICAL/DENTAL
| SUPPLIES/TRAINING AIDS
- 30 | TYPE
- 31 | DO ROUTINE FILING
- 32 | WRITE/ENTER INTO LOG MINUTES/NOTES OF MEETINGS
- 33 | PREPARE AUTOMATED DATA PROCESSING CODE SHEETS
- 34 | PERFORM MATHEMATICAL CALCULATIONS
- 35 | COMPLETE POISON REPORT
- 36 | COMPLETE REPORT FORMS ON DRUG ABUSE
- 37 | MAINTAIN CARDEX FILE/SYSTEM
- 38 | MAINTAIN LOG OF QUALITY CONTROL PROCEDURES
- 39 | TRANSCRIBE PHYSICIAN'S ORDERS
- 40 | AMEND CROSS REFERENCE LIST OF INSTRUCTIONS/MATERIALS
- 41 | ANSWER QUERIES FROM CIVILIAN ASSOCIATIONS/INDIVIDUALS
- 42 | CHECK/CORRECT CALCULATIONS PERFORMED BY OTHER TECHNICIANS
- 43 | PREPARE VISIT INSPECTION REPORT
- 44 | DOCUMENT NEW OR CHANGED PROCEDURES
- 45 | MAINTAIN SIGNATURE FILE
- 46 | MAINTAIN ATTENDANCE RECORDS
- 47 | MAINTAIN PERSONNEL RECORDS
- 48 | FILL OUT TIME SHEETS
- 49 | PREPARE WORK ORDERS/WORK REQUESTS
- 50 | PREPARE NAVY DISBURSING FORMS

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 06 OF RESPONSE BOOKLET
1	PREPARE MARINE CORPS DISBURSING FORMS
2	PREPARE REQUEST FOR TAD/AUTHORIZATION ORDER
3	PREPARE NECESSARY PAPERWORK TO UPDATE ORGANIZATION CHARTS
4	LOG LOSS OF SUPPLIES AND NOTIFY INVENTORY CONTROL OF LOSS
5	ENSURE THAT SAFE INDUSTRIAL PRACTICES ARE ADHERED TO, E.G. USE OF PROTECTIVE EYE GLASSES
6	APPROVE REQUISITIONS
7	DRAFT OFFICIAL CORRESPONDENCE
8	PREPARE REPORTS FOR TRANSMITTAL TO OTHER COMMANDS
9	EVALUATE THE ADEQUACY/EFFECTIVENESS OF ROUTINE REPORTS
10	PREPARE STANDING OPERATING PROCEDURES, GUIDES AND INSTRUCTIONS FOR USE BY PERSONNEL
11	MAKE FINAL DECISION ON REJECTION/ACCEPTANCE OF DRAFTS/FINAL TYPED MATERIAL
12	COMPOSE/DRAFT AN AGENDA FOR STAFF MEETINGS
13	INTERPRET BUPERS MANUALS/INSTRUCTIONS/NOTICES
14	COORDINATE WITH SCHOOL GUIDANCE DEPARTMENTS
15	ESTABLISH LIAISON WITH CIVILIAN SPECIALISTS/CONSULTANTS
16	ASSESS ACCURACY OF ANALYSIS PERFORMED BY OTHER LABORATORIES
17	ASSESS COMPLETENESS OF LABORATORY REPORTS
18	INSPECT THE PHYSICAL LAYOUT OF PHARMACY FACILITIES
19	PLAN THE DEPARTMENT/UNIT PHYSICAL LAYOUT
20	INSPECT CONDITION OF ACID LOCKER/VAULT
21	ASSIGN WORK TO PATIENTS
22	SERVE AS MEMBER OF ALCOHOL AND NARCOTIC INVENTORY BOARD
23	INVESTIGATE/REPORT ON INJURIES/INCIDENTS TO PATIENTS/STAFF/VISITORS
24	PREPARE DRUG ABUSE REPORTS
25	REVIEW/UPDATE FORMULARY

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 06 OF RESPONSE BOOKLET
26	MODIFY OR WRITE NEW TECHNICAL PROCEDURES
27	INITIATE NEW OR CHANGED TECHNICAL PROCEDURES
28	CONSULT WITH STAFF TO DESIGN/AMEND/UPDATE PROCEDURES /TECHNIQUES
29	PREPARE RADIOPHARMACEUTICAL CONTRACTS
30	COORDINATE PROCEDURES FOR DATA PROCESSING
31	ADMINISTER/MAINTAIN UNIT LIBRARY
32	COORDINATE/ARRANGE TOURS OF FACILITIES
33	COORDINATE STAFFING ARRANGEMENTS
34	COORDINATE WITH LEGAL SERVICES
35	DETERMINE PARKING AREAS/GARAGE ARRANGEMENTS FOR VEHICLES
36	COMPOSE/OR REVISE JOB/POSITION DESCRIPTIONS
37	CONDUCT STAFF MEETINGS TO DISCUSS PLANS/ACTIVITIES/PROBLEMS
38	DETERMINE THE PHYSICAL LAYOUT OF WORK AREA FURNITURE/EQUIPMENT
39	GIVE DIRECT SUPERVISION TO EMPLOYEES
40	GIVE DIRECT SUPERVISION TO CORPSMEN/TECHNICIANS
41	DETERMINE CONTENT OF MILITARY REPORTS ON PERSONNEL, E.G. EVALUATION REPORTS
42	DETERMINE CONTENT OF CIVILIAN PERFORMANCE APPRAISAL REPORTS
43	RECOMMEND DISCIPLINARY ACTION FOR PERSONNEL AS REQUIRED
44	REVIEW SUGGESTIONS AND COMPLAINTS FROM PERSONNEL
45	EVALUATE THE PERFORMANCE OF PERSONNEL
46	SERVE ON PROMOTION/DEMOTION OR RECLASSIFICATION BOARDS
47	RECOMMEND PERSONNEL FOR EDUCATION/TRAINING
48	SUPERVISE THE MAINTENANCE OF OFFICE RECORDS
49	ENSURE THAT SAFE INDUSTRIAL PRACTICES ARE ADHERED TO, E.G. USE OF PROTECTIVE EYE GLASSES
50	APPROVE/DISAPPROVE REQUESTS FOR ADDITIONAL PERSONNEL

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 07
OF RESPONSE BOOKLET

- 1 | DRAFT COMMENDATORY AWARDS FOR SUBORDINATES, E.G. LETTERS OF APPRECIATION
- 2 | ARRANGE TIME/DETAIL SCHEDULES
- 3 | APPROVE TIME/DETAIL SCHEDULES
- 4 | DETERMINE DUTIES FOR PERSONNEL
- 5 | REQUEST/RECOMMEND ADDITIONAL PERSONNEL WHEN REQUIRED
- 6 | COORDINATE WITH BUMED ON MATTERS PERTAINING TO PERSONNEL
- 7 | INTERVIEW/COUNSEL/ADVISE STAFF
- 8 | COUNSEL/ADVISE/GUIDE PERSONNEL TOWARD ADVANCEMENT
- 9 | SUPERVISE/DIRECT UNITS'S OJT PROGRAM
- 10 | PLAN CONTENT FOR OJT PROGRAM
- 11 | SCHEDULE LECTURES
- 12 | DESIGN TRAINING AIDS, ILLUSTRATIONS, GRAPHICS
- 13 | SELECT CLINICAL MATERIAL FOR INSTRUCTIONAL PURPOSES, E.G. PATIENTS, CASE STUDIES
- 14 | EVALUATE/SELECT AUDIOVISUAL MATERIALS, E.G. FILMS
- 15 | CONDUCT SEMINARS
- 16 | PLAN CONFERENCES FOR STUDENTS DURING PRACTICAL TRAINING
- 17 | TEACH FORMAL CLASSES
- 18 | ADMINISTER EXAMINATIONS
- 19 | COMPUTE TEST GRADES
- 20 | DEMONSTRATE CLINICAL PROCEDURES USING PATIENT/SUBJECT
- 21 | SELECT WORK EXPERIENCES FOR STUDENT/TRAINEE
- 22 | EVALUATE STUDENTS PERFORMANCE/PROGRESS
- 23 | COORDINATE WITH SUPERVISORS/INSTRUCTORS ON STUDENT TRAINING
- 24 | DESIGN SPECIAL RESEARCH EQUIPMENT/DEVICES
- 25 | BUILD SPECIAL EQUIPMENT/DEVICES FOR RESEARCH

TASK NO.	ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 07 OF RESPONSE BOOKLET
26	CALCULATE DOSAGES FOR PRESCRIBED EXPERIMENTS
27	RECORD/MAINTAIN RECORDS OF EXPERIMENTAL FINDINGS/TESTS
28	CONDUCT RESEARCH LITERATURE SEARCH/SURVEY
29	CALCULATE MEANS, STANDARD DEVIATIONS
30	PERFORM CALCULATIONS FOR ANALYSIS OF VARIANCE, CORRELATIONS, OR RELIABILITY MEASURES
31	MAINTAIN ANIMAL COLONY
32	ACT AS OBSERVER OF EXPERIMENTAL SUBJECTS/ANIMALS
33	OPERATE/CONTROL EQUIPMENT FOR EXPERIMENTAL TESTS
34	CALIBRATE/TEST EXPERIMENTAL EQUIPMENT/APPARATUS
35	WRITE RESEARCH PROGRESS REPORTS
36	SELECT EXPERIMENTAL SUBJECTS/ANIMALS
37	WRITE TECHNICAL PAPERS/REPORTS FOR PUBLICATION

Part II B

LIST OF INSTRUMENTS AND EQUIPMENT

TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 08
| OF RESPONSE BOOKLET

- 1 | BURN PACK
- 2 | FIRST AID KIT
- 3 | EMERGENCY DRUG SUPPLY (KIT, BOX, DRAWER)
- 4 | MASS CASUALTY AID KIT
- 5 | IMMUNIZATION KITS
- 6 | TRAY, ANTIDOTE (POISON)
- 7 | BURETTE, MACRO
- 8 | BURET, MICRO
- 9 | CENTRIFUGE, LABORATORY (FLOOR MODEL)
- 10 | DISTILLING APPARATUS, WATER
- 11 | WATER DEMINERALIZER
- 12 | DESSICATOR
- 13 | PIPET
- 14 | STOP WATCH
- 15 | THERMOMETER LABORATORY
- 16 | TIMER, LABORATORY
- 17 | VOLUMETRIC GLASSWARE (OTHER THAN BURETS AND PIPETS)
- 18 | TUBE AGITATOR/MIXER/SHAKER
- 19 | LABORATORY STIRRER-HOT PLATE
- 20 | FLASK SHAKER
- 21 | GAS BURNERS, E.G. BUNSEN
- 22 | MELTING POINT APPARATUS
- 23 | WATER BATH WITH THERMOSTAT
- 24 | SAND BATH
- 25 | GLASS BEAD WATER BATH

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 08
OF RESPONSE BOOKLET

- | | |
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| 26 | CHEMICAL FUME HOOD |
| 27 | LAMINAR FLOW HOOD |
| 28 | FLUORIMETER |
| 29 | SPECTROPHOTOMETER, NONRECORDING, E.G. COLEMAN |
| 30 | COLORIMETER, E.G. KLETT |
| 31 | PH METER |
| 32 | PHOTOMETRIC TITRATOR |
| 33 | AIR COMPRESSOR |
| 34 | DRYING OVEN |
| 35 | SUCTION FUNNEL |
| 36 | PIPET FILLER (RUBBER BULB) |
| 37 | LAMP ALCOHOL |
| 38 | MECHANICAL SPATULATOR |
| 39 | ANALYTICAL BALANCE |
| 40 | DIRECT READ-OUT BALANCE, E.G. METTLER |
| 41 | TRIP BALANCE |
| 42 | PHARMACEUTICAL BALANCE CLASS A |
| 43 | PHARMACEUTICAL BALANCE CLASS B |
| 44 | MECHANICAL MIXER, PHARMACEUTICAL |
| 45 | MORTAR AND PESTLE |
| 46 | TRAY, COUNTING |
| 47 | CAPSULE FILLER, HAND OPERATED |
| 48 | OINTMENT FILLER, HAND OPERATED |
| 49 | OINTMENT MILL |
| 50 | MICROFILTRATION SYSTEM |

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN LEFT SIDE OF PAGE 09
OF RESPONSE BOOKLET

- | | |
|----|---|
| 1 | SUPPOSITORY MOLOS |
| 2 | TABLET PRESS |
| 3 | CHEMICAL BATH CONTAINERS |
| 4 | HOMOGENIZER/BLENDER |
| 5 | IMMERSION HEATER |
| 6 | NUMBERING MACHINE |
| 7 | TAPE MACHINE FOR PACKAGING |
| 8 | AUTOMATIC LABEL PRINTER, E.G. SOABAR |
| 9 | AUTOMATIC PRE-PACKING MACHINE (TABLETS, CAPSULES) |
| 10 | AUTOMATIC LIQUID PRE-PACKER |
| 11 | PHARMACY EQUIPMENT, FIELD USE |
| 12 | PUMP, ALSOP FILTER |
| 13 | VATS, ALSOP, 10 TO 50 GALLON |
| 14 | GLASS WASHER/DRYER |
| 15 | ULTRASONIC CLEANER |
| 16 | SUCTION/VACUUM PUMP |
| 17 | AUTOCLAVE, DRY HEAT |
| 18 | AUTOCLAVE, GAS |
| 19 | AUTOCLAVE, STEAM |
| 20 | POCKET DOSIMETER |
| 21 | FILM BADGE |
| 22 | SLIDE RULE |
| 23 | ADDING MACHINE |
| 24 | ELECTRIC DESK CALCULATOR |
| 25 | TYPEWRITER |

| TASK NO. | ENTER RESPONSES TO STATEMENTS BELOW IN RIGHT SIDE OF PAGE 09
OF RESPONSE BOOKLET

26 | ADDRESSOGRAPH MACHINE, AUTOMATIC

27 | ADDRESSOGRAPH MACHINE, MANUAL