

Sharpening Your C.P.M. and A.P.P. Study and Test Taking Skills

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Abstract: This paper briefly reviews the requirements for the Certified Purchasing Manager (C.P.M.) and Accredited Purchasing Practitioner (A.P.P.) designations and discusses study and test taking skills many have found useful when preparing for their C.P.M. or A.P.P. examinations. The last two sections discuss how to use the C.P.M. and A.P.P. *Diagnostic Kits* to prepare for the examinations and provide helpful test taking tips.

I. Overview of the Requirements for the C.P.M. and A.P.P. Applicants for the C.P.M. certification must (a) pass all four modules of the C.P.M. examination and have either (b) five years full-time purchasing and supply management experience, or (c) a four-year degree from an accredited institution and three years of full-time experience in purchasing and supply management. Applicants for the A.P.P. must (a) pass both modules of the A.P.P. examination and have either (b) two years of professional work experience, or (3) an associate's degree from and accredited institution and one year of professional experience. For detailed requirements for original, renewal, and lifetime certification, visit the ISM Website at www.ism.ws and click on "Certification (C.P.M. & A.P.P.)".

II. Developing C.P.M./A.P.P. Examination Study and Test Taking Skills. Many individuals preparing for the C.P.M. or A.P.P. examinations have not studied or taken a major examination in years. As a result, there is a need for these people to develop their study and test taking skills.

Study Skills. This section focuses on the basics of study and provides guidance on time management as it relates to studying for the C.P.M or A.P.P. examinations. The objectives of study are to develop an overview of the material to be learned, capture that material in short-term memory and then move the material into long-term memory, where it can be retrieved during the examination and beyond. These basics are referred to as S-Q-R-R-R, or S, Q, R-cubed. The following summarizes these five steps:

S: SURVEY or scan the material to get an overview of the concepts to be learned. This provides a "map" of the material to be studied. For example, an overview of the C.P.M. Examination indicates that it is organized into four modules and that each module is subdivided into parts and tasks. Module 1, Purchasing Process, is divided into four parts and 20 tasks. Module 2, Supply Environment, is divided into five parts and 17 tasks. Module 3, Value Enhancement Strategies, is divided into four parts and 16 tasks. Finally, Module 4, Management, is divided into two parts and 14 tasks. Notice that the C.P.M. Examination can

be broken down into 67 relatively manageable tasks (The A.P.P. Examination is comprised of Modules 1 and 2 of the C.P.M. examination and can be broken down into 37 tasks).

Q: QUESTION what are the main concepts? In the case of the C.P.M. and A.P.P. examinations, studying the tasks within each module provide a great deal of insight into the importance of the various concepts.

R: READ and re-read is not the most efficient method of study for most students. Developing outlines, highlighting key concepts, underlining important points, and making notes in page margins all help focus on the main concepts and begin to move these concepts into long-term memory.

R: RECITE and/or write down the information, depending on one's learning style. This helps to better move information into long-term memory, and to better retrieve that material from long-term memory.

R: REVIEW the material. This phase of study helps develop and practice the skills of retrieving information from long-term memory.

Time Management. This section provides guidance on when to study, where to study, and how to handle the rest of the world.

- **When to Study.** If one has not studied recently, studying will be difficult and/or boring at first. As time goes by, and as new information is learned, the level of boredom will decrease. It never disappears. Be aware of your best time of day to study. Consider using waiting time and other nonproductive times.
- **Where to Study.** Find a regular study area where there will be few distractions. Consider organizing materials into a brief-case, closet, shelf, or drawer where they can be found with a minimum of lost time. Some prefer a quiet location while others prefer background noise. Places that have been useful for study include libraries, offices, bedrooms, basements, restaurants, parks, and laundries.
- **How to Handle the Rest of the World.** The following are some helpful hints that can help manage time more effectively. Pay attention to the use of time. Make an agreement with living mates about study time. Get off the phone! Learn to say "no" to other people when studying. Hang a "Do Not Disturb" sign on the door. Organize study materials so that studying can begin with a minimum of preparation. Avoid distractions, learn to tune out the surroundings. Notice and minimize how others misuse your time.

Test Taking Skills. This section focuses on the basics of taking multiple-choice examinations and provides insights into stress management as it relates to study and test-taking.

WELL STUDIED INDIVIDUALS have the knowledge base to pass all modules of the C.P.M. or A.P.P. examination. Remember, a perfect score is not necessary. A scaled score of 55 or better is needed to pass any module. Examination of the diagnostic kit suggests that a raw score of 70% or better on any version of any of the examinations will yield a passing scaled score of 55 or better.

The majority of questions on the C.P.M. and A.P.P. examinations will be 'cake' questions can be answered correctly **FOR THE WELL STUDIED**. A typical four item multiple choice question will have one correct answer, one distractor (to catch those who are not well studied or who misread the question), and two incorrect answers.

IF YOUR ARE WELL STUDIED, three answers do not make sense, and the fourth answer is not recognizable, choose the fourth answer. Use a sound knowledge base to eliminate the wrong answers!

FOR THE WELL STUDIED the first inclination is usually the best choice. Except when a question has been previously misread, changing answers will move more correct answers to incorrect answers than incorrect answers to correct answers. Be careful about letting self-doubts change correct answers.

Stress Reducing Techniques. Some stress is normal (a lack of stress is called 'boredom'). Stress is part of the 'fight or flight' responses that result from challenges of life. Some suggestions for managing examination stress include:

- Beware of 'pre-test sabotage.' Hurried question and answer sessions before beginning the examine can undermine one's self-confidence. Don't do it.
- Answer the easy questions and come back to the harder ones. This improves performance and builds self-confidence. Test takers may also recall information from answering known questions. This also removes the time pressure resulting from having dwelled too long on frustrating questions early in the examination.
- Remember to practice any one of several relaxation techniques to reduce tension both when studying and during the test. They include deep breathing exercises, tense-relax techniques, and mental imagery.

III. Getting the Most From the C.P.M. AND A.P.P. Examination Diagnostic Kits.

Developing an ability to effectively use the C.P.M. and A.P.P. diagnostic kits can help evaluate one's knowledge base, focus efforts, and improve the chances of doing well on the C.P.M. and A.P.P. examinations.

Using the Diagnostic Kits. This material is based on the *C.P.M. Diagnostic Kit, Volume 1 - 2000*. This diagnostic kit is organized into five sections. They are (1) introduction; (2) overview of the test; (3) how to use the diagnostic kit; (4) the diagnostic kit modules; and (5) answer keys, scoring tables, conversion tables, and explanations for answers. It is a good idea to make photocopies of the scoring tables. This enables one to repeat the test without being influenced by answers that have been written in the scoring tables.

The process for using the diagnostic kit can be described in six steps. They are: (1) take the test, (2) score the test, (3) evaluate your overall performance on each module, (4) evaluate your performance on each task, (5) focus your study efforts, and (6) repeat steps one through five as necessary.

Step 1: Take the Test. Module 1 is used in this exercise because it is common to the C.P.M. and A.P.P. examinations. When taking the test try to find a place that will be free of noise and other distractions. Schedule 105 minutes for Modules 1, 2, and 3. Schedule 130 minutes for

Module 4. Use the paper or computerized diagnostic kit. If at all possible, schedule two or three testing sessions at least two weeks apart. This enables the student to critique knowledge base improvements without becoming sensitized to the test answers.

A sample scoring table for Module 1 is shown as Exhibit 1. A review of Exhibit 1 reveals that Module 1 has four parts and 90 questions. Please note that each group of questions is keyed to a specific task. For example, questions one through six test understanding of Task 101.

Step 2: Score The Test. In Exhibit 1 a pattern of right and wrong answers for a hypothetical test taker is shown.

Step 3: Evaluate Your Performance on Each Module: The Conversion Table in your diagnostic kit indicates the raw score of 46 on Exhibit 1 converts into a scaled score of 50, below that needed to pass.

Step 4: Evaluate Your Performance on Each Task: For purposes of this paper 70% or more correct responses on a task are considered excellent, 50 to 69% are considered marginal, and below 50% are poor. Because of test equating, some versions of some modules require raw scores of less than 70% in order to achieve a scaled score of 55 but none require a raw score of 70% or higher. Inspection of the responses in Exhibit 1 indicate that three tasks (107, 116, and 118) have excellent scores - 70% or higher, 11 tasks (102, 103, 104, 105, 108, 109, 110, 112, 114, 117, and 120) have marginal scores - 50 to 69%, and six tasks (101, 106, 111, 113, 115, and 119) have poor scores - below 50%.

Exhibit 1
INITIAL SCORING TABLE FOR MODULE 1

MODULE 1 - ANSWER TALLY

<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>	
101	2/6	106	2/7	111	2/6	116	2/2
102	2/3	107	5/6	112	3/5	117	2/4
103	4/6	108	3/6	113	0/4	118	2/2
104	3/5	109	2/3	114	3/5	119	1/4
105	2/3	110	4/8	115	1/3	120	1/2

Total Correct Module 1 $\frac{46}{90} = 51.1\%$

Scaled Score Module 1 50

Note: A Scaled Score of 55 or Higher is Need to Pass

Step 5: Focus Your Study Efforts. As a general guideline, study efforts should focus on the tasks that need the most improvement. A rule of thumb is that tasks with raw scores below 50% should receive three times the study effort of tasks with raw scores of 70% or higher. Tasks with scores of 50 - 69% should receive about twice the study effort. While less time is spent reviewing tasks whose raw scores were 70% or higher, this review is still essential for maintaining your knowledge base.

There are several approaches to studying and reviewing tasks. First, one may use the C.P.M. or A.P.P. *Study Guide*. Second, one may use the "Explanations for Answers" in the *Diagnostic Kit*. Many find that these explanations increase the student's knowledge, provide additional insights into the task, and help understand how members of test writing workshops think. Third, other sources recommended for C.P.M. and/or A.P.P. preparation may be used. Finally, a combination of approaches may be used. The authors' experience is that the *Study Guide* and "Explanations for Answers" work very well. Some students may want to read additional materials.

Many have expressed confusion between what the study materials indicate and what is practiced on-the-job. There is room for different good faith points of view regarding purchasing and supply management practice. The purchasing professional needs to recognize that these differences will occur from time to time. Our advice is when studying for the C.P.M./A.P.P. examinations focus on the study materials.

Step 6: Repeat Steps 1 Through 5. After your study and review have been completed, repeat the examination. A gap of two or more weeks should reduce the chance of becoming conditioned to the diagnostic examination. Effective study should result in improved overall scores. Exhibit 2 is what a hypothetical scoring table might look like for someone who is well studied. Here the *Diagnostic Kit* can help further refine your knowledge base and increase the chances of passing the C.P.M./A.P.P. examination.

Exhibit 2
SUBSEQUENT SCORING TABLE FOR MODULE 1

MODULE 1 - ANSWER TALLY

<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>		<u>Correct/ Module - Number</u>	
101	4/6	106	5/7	111	4/6	116	2/2
102	3/3	107	5/6	112	2/5	117	2/4
103	4/6	108	4/6	113	2/4	118	2/2
104	4/5	109	3/3	114	3/5	119	2/4
105	2/3	110	6/8	115	1/3	120	1/2

Total Correct Module 1 $\frac{61}{90} = 67.8\%$

Scaled Score Module 1 58

Note: A Scaled Score of 55 or Higher is Need to Pass

The following paragraphs discuss using the *Diagnostic Kit* to improve on an already strong performance. **Since Exhibit 2 presents the results of Steps 1 (Take the test) and 2 (Score the test), the discussion begins with Step 3.**

Step 3: Evaluate Overall Performance on Each Module: The raw score of 61 in Exhibit 2 converts into a scaled score of 58, above that needed to pass. However, further examination reveals that eight tasks have excellent scores (70% or greater), ten tasks have marginal scores (50 - 69%), and two tasks have weak scores (less than 50%). Further study and review should focus on the marginal and weak tasks.

Step 4: Evaluate Performance on Each Task: Examination of Exhibit 2 reveals that eight tasks (102, 104, 106, 107, 109, 110, 116, and 118) have excellent raw scores and need only review. Ten tasks (101, 103, 105, 108, 111, 113, 114, 117, 119, and 120) have marginal scores and need additional study. Two tasks (112 and 115) have poor scores and need much additional study. While a passing score has been achieved, the marginal and poor tasks could leave the individual vulnerable if his/her performance slips during the examination.

Step 5: Focus Study Efforts: The study strategy suggested by Exhibit 2 is to schedule a test of the module. Before the actual test focus on the 12 tasks that have raw scores below 70% while continuing to review the eight tasks that have raw scores of 70% or higher.

IV. Test Taking Tips. This section focuses on some of the details of taking the C.P.M. and A.P.P. examinations at a computerized testing center. The majority of testing is now done at such centers.

1. Examinations are designed so that one cannot "accidentally" begin or end the examination.
2. The computerized examination has the capability to skip questions and mark questions for later review.
3. If possible, take the time to visit the test location before taking the examination.
4. Get a good night's rest before the examination, do not over eat and drink before the examination. Remember that if your performance on the *Diagnostic Kit* was good probable scores on the examination should also be good.
5. Travel to the examination center so that there is adequate time before the test appointment.
6. Wear loose comfortable garments that are layered. Remove clothes if the testing center is too warm, or put something on if it is too chilly. Remember that feet can also be too warm or too cold!
7. Bring only a pencil (or pen) and a non-programmable calculator to the examination. Paper will be provided.
8. After completing the examination, the testing center will provide the examinee's score, a printout of the score, and a performance diagnostic of each task.

Conclusion. Many students have found that a well organized study strategy, together with the *Diagnostic Kits*, have been major contributors to successfully passing the modules needed for their C.P.M. or A.P.P. examinations. We hope the insights provided in this paper are useful.