Introduction to Online Learning



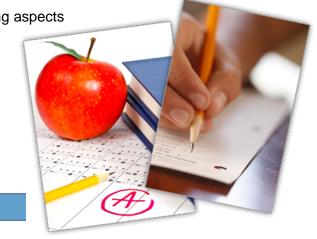
Exam Preparation and Success

Objectives

- Discuss the various types of examination questions.
- Plan study preparation time and spaced study.
- Differentiate among the various study tools and techniques, including note cards, quiz and recall, and study sheets/guides.
- Identify study strategies for technical versus nontechnical courses.
- Define test anxiety and determine strategies for coping with test anxiety.
- Identify basic test-taking strategies for online students for multiple choice, true/false, matching, math, and essay exams.

Introduction

Taking a test can be one of the most anxiety-inducing aspects of any course, whether the test occurs in the classroom or online. However, if you prepare for the test and establish attainable, challenging goals, you will find yourself properly equipped to handle exams when the need arises. Specific exam preparation techniques can help you reduce stress and anxiety related to taking tests. This lesson discusses test-taking strategies for multiple-choice, true/false, matching, math, and essay tests.



Examination Question Types

Instead of fretting about an upcoming exam, find out what content the exam might include. If your instructor has not discussed this explicitly, do not be afraid to ask. You will benefit greatly from knowing what type of questions the exam will include (multiple choice, true/false, essay, etc.), how many questions the exam will contain, what material the exam will cover, and how much time you will have to complete it. Also consider the different levels of questions you may find on the exam: knowledge-level questions, comprehension-level questions, application-level questions, analysis-level questions, synthesis-level questions, and evaluation-level questions. The following chart explains the differences among the various levels of questions (Van Blerkom, 2010, p. 231):

Question Type	Purpose	Example
Knowledge-level questions	Test your ability to memorize information without necessarily restating it in your own words	Recall terms, facts, dates, lists, etc.
Comprehension-level questions	Test your ability to recognize concepts when they use different words than the original source did (in lecture or in one of your readings)	Multiple-choice, true/false, matching exams
Application-level questions	Test your ability to build on skills, concepts, or equations previously learned	Math, algebra, chemistry, geometry, biological sciences, and natural science exams
Analysis-level questions	Require the test-taker to break down more complex concepts into components	Essay exams

Synthesis-level questions	Require the test-taker to separate pieces of information and unite them into a cohesive whole	Essay exams
Evaluation-level questions	Require the test-taker to make a judgment about an idea, analyze its merits, and synthesize various pieces of information to prove critical-thinking skills	Case studies or essay exams

In preparation for a test, ask yourself what the instructor would want a student to know upon completion of the test. Ask your instructor questions such as the following:

- ❖ What assignments or problem sets will the exam focus on?
- What type of questions will the exam contain?
- How many questions will the test have?
- How much time will I have to complete the exam?

Planning Study Time

If you have reviewed your notes regularly, you will find studying for an upcoming test far less stressful than if you have not. Consistently reviewing and revising your notes will help you recall information rather than having to relearn the information almost from scratch. Plan your study time carefully. Give yourself enough time to prepare and spread your time out instead of trying to cram in 8 solid hours of studying at once.

Are you experiencing brain overload? Researchers recommend not to organize your notes and study at the same time of day (Newport, 2007, p. 103).

Plan times to study, and decide ahead of time what information you want to review during those times. Divide the material first, and then modify your plan as you go. You can also use **spaced study**, in which you study the same material over a series of days rather than studying various pieces of information in just one sitting (Van Blerkom, 2010, p. 230). For example, you can break down a comprehensive unit review into 30- to 60-minute chapter reviews over a 5-day period preceding the actual test. To see how you could plan this, refer to the following calendar:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Review PSY100 ch. 1 notes for 30 min.	3 Review PSY100 ch. 2 notes for 30 min. Review PSY100 ch. 1 notes for 15 min.	4 Review PSY100 ch. 3 notes for 30 min. Review ch. 2 notes for 15 min. Review ch. 1 notes for 15 min.	5 Review PSY100 ch. 4 notes for 30 min. Review ch. 3 notes for 15 min. Review ch. 2 notes for 15 min. Review ch. 1 notes for 15 min.	6 Work Review PSY100 ch. 4 notes for 15 min.	7 Attend committee meeting. Review PSY100 ch. 1-4 notes for 1 ½ hr.

8	9	10	11	12	13	14
Complete a	Take					
PSY100	PSY100 5					
online pre-	unit test.					
test.						

Study Tools and Techniques

One cannot underestimate the value of reviewing your notes. Several study tools and techniques can help you condense your class notes so that you study only the key exam elements and quickly recall information without any additional or external cues.

Note Cards

Create a set of note cards highlighting words, technical terms, or definitions that you will need to recall on an exam. You may be surprised by how many cards you need to make for just one chapter. Preparing these note cards can take a significant amount of time, so start a week before you plan to study for your exam (i.e., 2 weeks prior to the exam). Recite the information out loud, and gradually try to recall the answer or expansive material related to the information. Plan to spend 1 hour per day reviewing your note cards. You may use note cards for any subject, including math formulas, chemical equations, artwork, dates, and chronologies.

There are several online note-taking tools. Some are free, and others some require a subscription.

Webnote™	http://www.aypwip.org/webnote/
Stickies TM	http://www.zhornsoftware.co.uk/stickies/
Ubernote™	http://www.ubernote.com/webnote/pages/default.aspx
WebNotes Academic [™]	http://www.webnotes.net/Solutions/Academic/
NoteMesh TM	http://www.notemesh.com/?a=home
NoteCentric [™]	http://www.notecentric.com/
Evernote [™]	http://www.evernote.com/

Ouiz and **Recall**

The quiz-and-recall method prompts students to review lecture concepts by anticipating a potential question, finding evidence to answer the question, and drawing a conclusion from the evidence (Newport, 2007, p. 105). Essentially, the quiz-and-recall method discourages passive reading because the student reviews the content for potential questions and then explains the answers (or conclusions) to the questions. Lastly, the student supports this answer with evidence gathered through lecture content or notes.

The quiz-and-recall method works extremely well for both technical and nontechnical courses because it encourages active reading rather than a cursory read-over of the content. It also requires students to support their answers with evidence from the material.

Technical courses

- Start with technical explanation questions or general concepts.
- Use practice exams to review problem questions.
- Write the answer or equation for each sample problem.
- Are you having trouble answering? Checkmark and review solutions to these problems.

Nontechnical courses

- ·Read over the lecture or textbook.
- Develop questions stemming from what you have read.
- Explain the answers to the questions posed.
- •Support your answer with evidence or examples.

Newport, 2007, p. 106

One of the tools for the quiz-and-recall method is the use of **questions cards** (Van Blerkom, 2010, p. 240). Question cards prove especially useful when you have taken notes using the Cornell method. To use this tool, take your question cues from your Cornell method notes and write each question on a note card. On the back side, write all of the supporting evidence that answers the question. When you review your question cards, recite each question aloud and attempt to answer it to your fullest ability until you can recall the information comfortably. Spend more time on the questions you have trouble answering. If you have great difficulty answering a question, consider developing a study guide.

Question:

What was Sosua?

Answer:

- First and only Jewish agricultural refugee colony in the Caribbean
- Originated out of the 1938 Evian Conference
- Addressed growing Jewish refugee displacement out of Nazi Germany



The Cornell Notes Slideshow demonstrates how to take Cornell method notes.

Study Sheets/Guides

A **study sheet/guide** compiles important information into a condensed format, generally one page, on a specific topic. These study sheets can come in a variety of forms: lists, outlines, graphs, maps, or tables. This method proves beneficial because it allows you to easily link and recognize the connections among various topics and ideas. Study sheets and guides illustrate relationships among the material's themes, topics, or concepts instead of displaying the topics

as isolated concepts (Van Blerkom, 2010, p. 243). Understanding the relationships among various bits of information will help you analyze larger issues and compose insightful essays on an exam. Additionally, study sheets provide you with summaries of the critical information from numerous chapters, which allows for quick, comprehensive reviews.

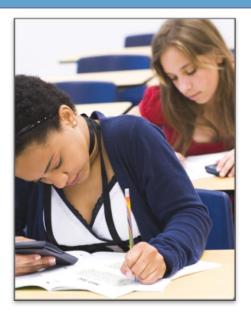
You can develop study sheets in one of two ways, depending on whether your course is technical or nontechnical (Newport, 2007, p. 104). These two step-by-step approaches use the following formats:

Technical Course	Nontechnical Course
Start a pile for each problem set that might appear on the exam.	Assemble notes from lectures and reading assignments that the exam might cover.
Supplement problem sets with sample problems from your lecture notes.	Cluster these pages into piles separated by general topic (e.g., "chapters").
Match lecture notes to the problem set.	Label each of these piles with its topic.
Copy sample problems from lecture notes onto a blank sheet of paper. (Do not worry about the steps or answers.)	Paper-clip the piles for portability.
Label the blank sheet with the date of the lecture. (This helps you know where these problems came from.)	The study guide consists of a chapter or topic with reading and lecture notes for each general topic on the exam.
Fasten this sheet with a paper clip to the problem set you matched it to in the first step.	

Technical and Nontechnical Course Study Techniques

Choosing the best study method often depends on whether the course is technical or nontechnical in nature. For technical courses (e.g., math, science, engineering), make sure you ask your instructor what concepts or topics the exam might cover. If you use the quiz-and-recall method, eliminate all checkmarks you jotted down during this exercise. Then, build a study sheet/guide with problem sets, and see if your course textbook has a companion CD-ROM or Web site with practice problems you can use to build your study guide or practice tests you can take.

As with technical courses, students in nontechnical courses (e.g., literature, social science, art) should always ask their instructors which lectures, readings, or assignments the test will cover. Many times, an instructor may set up a chat session or even a discussion board forum to field questions



from students about the exam. This provides the perfect opportunity for you to find out the types of questions your instructor might ask: questions about dates, biographical questions, geographical questions, demographical questions, questions about major themes, questions about arguments, etc. (Newport, 2007, p. 106). Consider using the quiz-and-recall method for multiple-choice, true/false, or matching questions. Study sheets and guides work well for broad synthesis of text or essay exams.

Test Anxiety

Even if you have prepared well for an exam, anxiety can inhibit your performance despite your hard work. **Test anxiety** is the psychological stress a person experiences before, during, or after a test.

Manifestations of test anxiety range from physical responses (e.g., sweating, rapid breathing, or heart palpitations) to behavioral responses (e.g., squirming, fidgeting, or even cheating). Still, test anxiety is completely normal, and every student experiences at least some level of anxiety relating to exams. A healthy level of anxiety, called **facilitating test anxiety**, is anxiety that motivates you to prepare for your exam (Van Blerkom, 2010, p. 257). On the other hand,



debilitating anxiety is anxiety that prevents you from functioning and concentrating during an exam (Van Blerkom, 2010, p. 257). While some anxiety may actually be good and productive, uncontrolled test anxiety can quickly turn into debilitating anxiety.

According to Mealey and Host (1992), three categories of test anxiety exist (p. 148). First, some students lack adequate study and test-preparation strategies. Some students, however, may actually maintain consistent study and test-prep strategies but become distracted during testing. Finally, some students mistakenly believe that they have adequate study strategies, but they perform poorly on a test and then question why.

Certain strategies can help online students, busy taking classes between work and personal obligations, reduce test anxiety. Unlike traditional on-campus students, online students generally have the advantage of taking tests at their convenience. Even so, make sure you create an environment conducive to test taking. Avoid taking tests at work, during hectic family hours, or if you are feeling ill. Also, make sure you have all of the necessary tools and equipment before you take a test. Online tests often have time limits, so you will lose valuable time if you cannot find your TI-84 calculator after you have already started an algebra trignometry test.

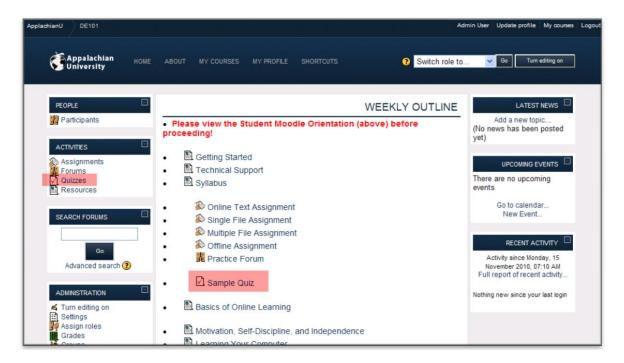
Researchers have spent considerable time evaluating the causes of test anxiety. From this research, they have concluded that the following techniques can help online students reduce test anxiety (Cizek & Burg, 2006, p. 103; Van Blerkom, 2010, p. 258):

Self-talk	 Replace negative self-talk with positive self- confidence statements.
	 Think of the old adage, "I think I can."

Relaxation	 Use breathing and muscle-relaxing techniques to calm down. Get plenty of rest and eat well prior to the exam.
Study skills	 Study systematically, and review several days prior to an exam. Use the quiz-and-recall method, question cards, or study sheets/guides. Avoid cramming or cheating.
Avoid excuses	 Do not use test anxiety as an excuse. Identify poor habits of preparation and find ways to correct them.

Basic Test-Taking Strategies

The day of the test has arrived! Online students take most tests within their LMS course shells. Your instructor will give specific directions concerning where you should go to access your test. Most LMS course shells have multiple access points for taking a test. The following screenshot illustrates the two most common areas on an LMS course shell to access a test.



Sample Moodle™ course shell with quiz links

Online students using dial-up modem connections should open another browser window (CTRL button + N) and log into the same LMS course shell. Essentially, they will have two windows open in the same LMS course shell. During an online test, dial-up students should toggle back and forth between these two windows to keep their connection from timing out during the test. If a dial-up student's connection times out before he or she completes a test, the student should

contact the course instructor immediately. If you experience any computer problems at the start of the online test, contact your LMS help desk.

Regardless of the specific type of exam you must take, you will want to use the following basic test-taking strategies: follow the directions carefully, budget your time, work systematically, and guess strategically.

Follow Directions

Read the instructions carefully to make sure you comply with them explicitly (Van Blerkom, 2010, p. 259). Oftentimes, one or two words in the instructions can change the meaning for an entire sentence. For example, the directions may indicate how the test will be constructed (e.g., multiple-choice questions versus short-answer questions), which will help you determine how much time you will need for each question.

Budget Your Time

Depending on how your instructor has created the online test, you may or may not be able to review the entire test to see which parts you will need to spend the most time on. Some online tests display all of the questions on one screen, but other tests require students to answer one question before proceeding to the next question. Each scenario depends on the instructor's input. The instructor also establishes timing for the test, so if you have the opportunity to review the whole test first, make sure you figure out how much time you have for each question.

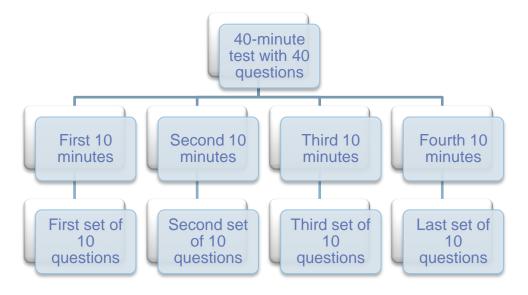


One way to determine how much time you should devote to each question involves taking the allotted test time and subtracting 10 minutes from that amount. Then divide the resulting amount by the number of questions (Newport, 2007, p. 105). This rule only applies if the instructor has noted the overall test time and the number of questions in the initial directions. During the subtracted 10 minutes, you can check and recheck your answers. The following diagram illustrates this method of allocating time per question in a hypothetical multiple-choice test.



Another approach for pacing time during a non-essay test involves dividing the test into sections and setting time goals for each third, fourth, or fifth of the exam. As the illustration below demonstrates, for a test with 40 questions to answer in 40 minutes, a student might divide the test by sets of 10 questions (Van Blerkom, 2010, p. 261). Pace yourself even in exams that use only one question type (e.g., multiple choice, fill-in-the-blanks). If possible, answer questions in order of increasing difficulty. Dial-up students should open two browser windows and toggle

between them during the test to keep their connection from timing out (see sidebar). Some LMS quizzes feature a clock that lets a student know how much time he or she has left in the exam.



Guess Strategically

Even well-prepared students may find a question or a series of questions challenging. When this happens, start by using the strategies to help you retrieve obscure information from your memory bank. If this does not work, you must guess. Guessing, however, does not have to equate to random selection. Instead, you can make an educated and strategic guess to increase your chances of guessing correctly. Make sure you periodically select the *Save* button for your completed answers; however, be careful not to select the *Submit* button inadvertently before you are ready to finalize the test. Dianna Van Blerkom (2010) suggested the following useful tips for guessing strategically (pp. 262-264):

Suggestion	Example
Study and prepare for the test.	The importance of this cannot be understated.
Look for patterns.	 Do not guess as you go. You will rarely find the same answer choice for more than three consecutive questions. Example: If Questions 6, 7, and 8 all have answer choice "B" as the correct answer, Question 9 will probably not have "B" as its correct answer choice.
Use the process of elimination.	 Scan through the answer choices and eliminate ones that you know are incorrect.

Check for balanced answer keys.	 Some instructors use the exact same number of As, Bs, Cs, and Ds. Count how many letters you have already used and see if you have fewer of one letter than another for answer
	selection.

Specific Test-taking Strategies

Multiple-Choice Strategies

When studying for multiple-choice exams, make sure you do not limit your knowledge by simply memorizing the material. Instead, learn the material on a deeper level, as this will help you analyze and understand the material itself so that you can determine the correct answers for multiple-choice questions even without specific contextual cues.

One specific type of strategy you can apply to multiple-choice questions is the **problem-solving strategy**, which helps you determine the answer by identifying distractions or decoys (Van Blerkom, 2010, p. 265; Kesselman-Turkel & Peterson, p. 38). This process suggests the following steps:

- 1. Read the question quickly and read *every* word that counts.
- 2. Break down long, complicated questions into individual parts.
 - ❖ Your answer must satisfy every part of the complicated question.
- 3. Underline key words.
 - Key words help narrow your focus and determine what specifically the question is asking.
 - Key words may also trigger your memory of the material.
- 4. Eliminate incorrect choices rather than trying to identify the correct answer from all of the possible answers.
 - This will limit your possible correct answers.
- 5. Be wary of "all of the above" and "none of the above" answer choices.
- 6. Guess before you choose.
- 7. Choose the closest answer.
 - All answers may seem plausible, but the correct answer may have a clue word that distinguishes it from the rest.

Another type of strategy you can apply to multiple-choice questions is the **test-wise strategy**. It is important that you use this strategy sparingly and only after you have tried all of the other strategies and still have not determined the correct answer (Van Blerkom, 2010, pp. 266-267). Here are some examples of the test-wise strategy:

An answer that contains a "typo" is probably wrong.

An answer that contains more specific, detailed information is probably correct.

An answer that is grammatically correct probably is right if the other choices are not grammatically correct.

An answer that is about in the middle numerically is probably correct.

An answer that contains the most words, especially if it also contains the most specific information, is probably correct.

True/False Strategies

While true/false questions may appear relatively easy to answer, the verbiage of these statements can pose a problem because instructors often change key words, add extraneous information, etc., to make it harder for students to discern the truth value regarding the statements. The following nine basic strategies can help you in dealing with these question types:

Strategy	Reason
Read carefully.	Whether in the instructor's directions or the actual question, if you find a phrase that does not belong, figure out why.
For an answer to be true, the entirety of the answer must be true.	No part of the statement can be false.
True/false questions are not all tricky.	If you are prepared, many will likely appear easy to answer.
Determine key words or phrases.	Key words or phrases ensure that your instructor has not altered an answer choice to distract you from the correct one.
Statements with absolute words or generalizations (e.g. <i>all</i> , <i>only</i> , <i>every</i> , <i>always</i> , or <i>because</i>) are typically false.	These words imply that no exceptions to the statement exist.
Statements that contain qualifying words (e.g., often, none, generally, usually, may, can, sometimes, rarely) are typically true statements.	These words qualify the statement for possible exceptions.
Statements with negative words require careful attention, particularly statements that contain double negatives.	If a statement contains a double negative, cross off the "not" and then evaluate the sentence to determine its truth value.

Underline the word(s) that make a statement false.

The only exception to this is when a statement is false by omission (i.e., a key word/phrase has been omitted from the statement). In that case, you should still mark the answer false, even though you cannot identify the specific word that indicates the answer's falsehood.

(Van Blerkom, 2010, p. 267; Kesselman-Turkel & Peterson, 1981, p. 44)

Matching Strategies

According to Dianna Van Blerkom (2010), when you approach matching questions, you should begin by working from one side, preferably from the definition side rather than the term side, crossing off items from only the one side to save time (pp. 264-269). Next, match the items that you are sure of first so that you can eliminate answer choices for more ambiguous or difficult choices (Kesselman-Turkel & Peterson, 1981, p. 48). Third, as you go through matching questions, cross off the ones you have used so that you have fewer answer choices when you approach the questions you are unsure of. Finally, double-check your completed work to ensure that you have not used the same answer choice twice (unless this is an option) and to double-check for careless errors.

Math or Equation Problems

Math and equation tests are designed to test deductive reasoning rather than textual ability. Using study sheets/guides with practice tests or problems sets will help you prepare for math or equation problems. Some useful math strategies include the following (Kesselman-Turkel & Peterson, 1981, p. 67; Rozakis, 2003, p. 167):

- 1. Try to predict the answer.
- 2. Reread every question carefully.
 - Jot down all information that is given.
 - Do the same for what is supposed to be covered.
- 3. Draw diagrams or pictures to help solve length, distance, and size problems.
- 4. Rephrase word problems in your own words to help you understand the problem and its different parts.
- **5. Check your answers t**o verify that they include no errors in counting, signs, or logic.

Essay Exams

When preparing for exams with essay questions, you should predict potential questions that could appear on the exam and prepare sample answer responses to these questions after

carefully evaluating all related material and notes. When working on a short-answer question or an essay, read the essay question completely and draft a mini-outline using essay questions (Newport, 2007, p. 105). Write three to four mini questions from the essay question. Then, use scrap paper to jot down any relevant points or evidence you have to support an answer to these questions. Number these supporting points in the order in which you will write about them, and then begin typing your essay. Depending on your instructor's directions, you may either cut and paste or e-mail the essay as an attachment.



Online students may or may not have a time limit on their essay exams. Your instructor will determine this. If the essay exam is timed, you must make sure you know how to budget your time when you take a test. The first factor to consider is how much of your grade depends on a particular section of the exam. For example, the essay section may be worth 50% of your grade, whereas multiple-choice questions may be worth 20%, shortresponse questions may be worth 15%, and matching may be worth 15%. If the testing parameters allow for it, you should allot the most time to the essay questions. Even if the essay questions occur at the end of the exam itself, you may want to start there, giving yourself a set amount of time to complete the essay(s) before moving on to the multiple-choice questions. As a general rule, you should give sections with a higher percentage of the total points of the exam a commensurate amount of time to complete them.

The following review will recap the basic considerations for test taking in the online environment:

Quizzes and exams are one of the most important ways for instructors to test your understanding of material in your course. During your tests you will have several types of questions. These include fill in the blank, matching, multiple choice, and essay questions just like you might have on a test in a live class.

You should be familiar with the format of most questions, but this lesson includes an example test of the most common question types.

One important thing to remember about taking online tests is to save your answers often. On longer tests it is possible that your browser could time out and require you to log in again. If you have not saved your answers, there is a chance you could lose your work and be required to refill in answers.

References

Casbarro, J. (2005). Test anxiety & what you can do about it: A practical guide for teachers, parents and kids. Port Chester, NY: Dude Publishing.

Cizek, G., & Brug, S. (2006). Addressing test anxiety in a high-stakes environment: Strategies for classrooms and schools. Thousand Oaks, CA: Sage Publications.

- Kesselman-Turkel, J., & Peterson, F. (1981). *Test taking strategies*. Chicago, IL: Contemporary Books.
- Mealey, D., & Hist, T. (1992). Coping with test anxiety. College Teaching, 40(4).
- Newport, C. (2007). How to become a straight-A student: Unconventional strategies real college students use to score high while studying less. New York, NY: Broadway Books.
- Rozakis, L. (2003). *Test-taking strategies & study skills for the utterly confused*. New York, NY: McGraw-Hill Companies.
- Van Blerkom, D. (2010). *Orientation to college learning* (6th ed.). Boston, MA: Wadsworth Cengage Learning.

Glossary

Analysis-level questions: Ask you to break down more complex concepts into components.

Application-level questions: Ask you to apply information you have already learned to a new situation.

Comprehension-level questions: Test you on your ability to recognize concepts when they use different wording than the original source did (in a lecture or in one of your readings).

Debilitating anxiety: Anxiety that prevents you from functioning and concentrating during an exam time.

Evaluation-level questions: Require you to make a judgment about an idea, analyzing its merits and synthesizing various pieces of information to prove critical thinking skills.

Facilitating test anxiety: Anxiety that motivates you to prepare for your exam; this is a healthy level of anxiety.

Knowledge-level questions: Test you on your ability to memorize information without necessarily restating it in your own words.

Main points: The points of an essay that directly answer the essay question.

Problem-solving strategy: Strategy that enables you to determine the answer of a multiple-choice question by identifying distractions/decoys.

Question cards: Cards that include a question on one side and provide relevant components to the answer on the back.

Spaced study: Study technique in which you study the same material over a series of days rather than studying various pieces of information in just one sitting.

Study sheet/guide: A compilation of important information into a condensed format (one page) on a specific topic. These study sheets can take on a variety of forms, such as a list, an outline with headings and subheadings, or a graph or table.

Supporting details: The facts, details, or examples of an essay that support the main point, including the causes.

Synthesis-level questions: Require that you take separate pieces of information and unite them into a cohesive whole.

Test anxiety: Psychological stress a person experiences before, during, or after a test.

Test-wise strategy: The strategy you use when you have exhausted all other strategies applicable to multiple-choice questions.