

### What does your professor expect?

Many faculty members include short-and long-answer essay questions as a part of their major exams. What does the faculty member expect from your answer?

1. **Your essay answers the question.** In an essay exam, most professors want more than just the facts. Your grade will be determined by how well you demonstrate your knowledge of the facts and your understanding of those facts in a greater context (i.e. *how these facts affected a period of history, how the introduction of this organism into the ecosystem effects the environment, how this sequence of events led to the development of ...*).
2. **Your answer is well written.** Most professors will look for specific elements when reading an essay exam. These are the building blocks of a good exam essay and include:

**FOCUSED:** Your answer should answer all parts of the question without a lot of random ideas which have little or nothing to do with the question. Students often think that adding random facts or ideas will help improve their grade because they know them. The opposite is true – adding random, unrelated ideas or facts almost always result in the reduction of points from your grade.

*i.e.*  
 PURPOSEFUL . . .  
 DIRECTED . . .  
 CENTERED . . .  
 POINTED

**STRUCTURED:** You know the answer to the question but your ability to communicate that knowledge to your professor depends on how well you structure your answer. Take the time to make a rough outline of what you want to write and in what order you want to present it. Always begin with a “thesis statement” and end with a “conclusion”. Stream of consciousness writing (putting things on paper as you think of them) will result in a mediocre grade at best.

*i.e.*  
 ORGANIZED . . .  
 PLANNED . . .  
 TIGHT . . .  
 APPROPRIATE . . .  
 THOUGHT-OUT

**DOCUMENTED:** Contrary to the True/False or Multiple Choice Question, your essay answer must go beyond a simple statement of fact. The professor is looking for the correct answer, yes, but more importantly, for your understanding of the answer. So, always include relevant facts, figures, examples, and tests (*the phosphate test showed a ph of ...*), etc. With the essay question

*i.e.*  
 TEST RESULTS . . .  
 DATA . . .  
 PROOFS . . .  
 SPECIFICS . . .  
 EVIDENCES

(short or long), how well you document your answer will often make the difference between an A and B grade.

**WELL PRESENTED:** Students who do not use the accepted rules of English are often thought to be less competent or knowledgeable than those who do. If you have all of the elements of a well-written paper but your use of language, sentence structure, spelling or (in the case of an in-class essay) handwriting make it difficult to read or understand what you are trying to say, your grade will suffer. Make sure you use good sentence structure, grammar, spelling and legible handwriting. These elements will make a good grade better.

*i.e.*  
GOOD GRAMMAR . . .  
CORRECT SPELLING . . .  
NEAT . . .  
ORGANIZED . . .  
READABLE

## How do you write an effective answer to an essay exam question?

Now that you have a better idea of what your professor expects from you when s/he gives you an essay question, how do you approach the actual writing of your answer?

Most faculty members would agree that there are a number of steps which will help you write an effective essay which demonstrates both your knowledge and understanding of the question.

1. Read through all of the questions carefully making sure you understand each question.
2. In order to manage your time effectively, underline or highlight the key word(s) in each question and decide which questions you feel most confident in answering. These should be the questions you answer first.
3. Circle the action word(s) which tell you how to organize your answer. (*See Prompts & Patterns of Response below.*)
4. Chose the appropriate pattern of response for each action word and outline your answer on scratch paper or in the margins of your examination booklet.
5. Write your answer as quickly and legibly as possible. Don't plan on rewriting your essay – there is rarely enough time to do anything but proof your answer.
6. Start your answer by re-writing the question as a thesis statement. A well-written thesis statement answers the question directly. What remains is to provide the documentation which supports your answer using the material you have studied.
7. Proofread your answer and correct any errors in grammar, spelling or syntax.



## FACULTY PROMPTS & PATTERNS OF RESPONSE

Most essay questions contain an Action Word that you can use to help you organize your response to that question. In general, there are six of these Action Words:

Define / Definition of  
Compare / Contrast

Analyze / Analysis of  
Defend / Refute

Cause & Effect  
Process Analysis / Describe / List

## DEFINE / DEFINITION OF

***PLEASE NOTE: ALL SAMPLE ANSWERS ARE SHORT – YOU SHOULD ALWAYS GIVE MORE DETAIL IN YOUR ANSWERS!***

### Answering definition questions:

1. State the term.
2. State the class or group to which the term belongs, if appropriate.
3. Differentiate the term from other members of the class, if appropriate.

### Strategies to use in answering definition questions:

1. Give details which describe the term
2. Provide examples and/or historical incidents which illustrate this term.
3. Give comparisons to familiar terms.
4. Classification (i.e., break it down into parts)
5. Provide an illustration of origins or causes

### Illustrations of definition answers:

#### Typical define or definition questions would look like these:

1. Define acid precipitation.
2. Choose 2 terms from the following list and define them: Elements, Compounds, Chemical Bonds, Polarity, Solution
3. Define a citation-sequence format in the Council of Science Editors (CSE) style.
4. What is Kinesthesia?

#### Answers to these questions could look like these:

1. Acid precipitation is rain, snow or fog with a pH lower than the pH of un-contaminated rain (5.6).
2. - Elements cannot be broken down to other substances by ordinary chemical means.

- A solution is a liquid consisting of a uniform mixture of two or more substances.
- 3. The citation-sequence format is one of three in-text CSE formats. It uses a superscript number or a number in parentheses after any mention of a source. The sources are numbered in the order they appear and each number refers to the same source every time it is used.
- 4. Kinesthesia is the sense that tells you where the parts of your body are with respect to each other.

 **Avoid answers that look like these:**

1. Acid rain damages lakes and trees, and kills fish. *(This answer assumes that acid rain is the same as acid precipitation and what it does, not what it is. This information added to the answer above would be OK.)*
2. - There are 92 elements. *(This tells you how many elements exist not what an element is.)*  
- A solution has both solvents and solutes. *(This tells you the sub-parts of the term without the definition.)*
3. The citation-sequence format is one of 3 formats used for in-text citations. *(While this tells you how many formats there are in CSE, it does not define the citation-sequence format. This answer does not differentiate the citation-sequence format from the other three in the group.)*
4. Kinesthesia helps guide eye-hand coordination. *(This answer gives an example of kinesthesia not the definition.)*

## ANALYZE / ANALYSIS

### Answering analyze/ analysis questions:

1. The analyze/analysis question asks you to break something down into its component parts and, in some instances, relating those parts to other parts or systems within the whole.
2. Identify the component parts in an outline.
3. Identify the relationship between the parts, if asked.
4. Summarize how the component parts make up the whole.

### Strategies to use in answering analyze/analysis questions:

1. If asked, sketch the relationship between the parts as a way of helping you write your answer without forgetting a component.
2. As you write your essay, take advantage of transitional phrases which will help you make the links between the component parts. Examples of these transitional phrases are:

|          |                 |             |             |
|----------|-----------------|-------------|-------------|
| first    | second          | third       | in addition |
| moreover | contributing to | while alike | another     |
| besides  | likewise        | furthermore |             |

## Illustrations of analyze/analysis answers:

### Typical analyze/analysis questions would look like these:

1. Analyze the five major types of hormones that regulate plant growth and development.
2. Discuss the three approaches psychologists have taken to understand human perception.

### Answers to these questions could look like these:

1. The five major types of hormones that regulate plant growth and development are: Auxins, Cytokinins, Gibberellins, Absciscic Acid, and Ethylene.

First, Auxins stimulate stem . . . and are found in . . . as well as . . .

Second, Cytokinins affect . . . and are found in roots and transported to other parts.

Third, Gibberellins promote seed germination, . . . and are found in young leaves. . .

Fourth, Absciscic Acid inhibit growth, . . . and are found in leaves, stems, . . . and

Fifth, Ethylene promotes fruit ripening, . . .

Each hormone has multiple effects, depending on its site of action, its concentration, and developmental stage of the plant. Generally, no single hormone acts alone. Instead, it is usually the behavior of several plant hormones and their relative concentrations that controls the growth and development of a plant.

2. Psychologists have taken three main approaches in their efforts to understand human perception.

First, is the computational approach. These psychologists try to determine the computations that a machine would have to perform to solve perceptual problems in an effort to help explain how complex computations within the human nervous system might turn raw sensory stimulation into a representation of the world.

The computational approach owes much to two earlier approaches: The constructive approach which . . . and the ecological approach which . . .

### Avoid answers that look like these:

1. There are five hormones that sort-of work together to promote plant growth. *(This answer has insufficient information for your professor to judge how much you know and understand about this question.)*
2. There are a couple of approaches (constructive and ecological) that have led to the computational approach. All three do things differently in experiments with human and animal perception. *(This answer is both imprecise and has insufficient information for your professor to judge how much you know and understand about this question.)*

# CAUSE AND EFFECT

## Answering cause and effect questions:

1. Cause and effect questions usually are one of two types: First, the question that gives you a “cause” and asks you to trace the probable “effects” of that cause; and Second, the question that gives you an “effect” and asks you to discuss or analyze the probable “cause(s)” of that effect.
2. Identify what is the cause or effect that you are being asked to analyze. For Example:
  - A. Discuss the impact of a level five hurricane on the gulf coast. (Type 1)The cause in this question is a “level five hurricane” and the effect is the “impact on the gulf coast”.
  - B. What are the cause(s) of dehydration. (Type 2)
  - C. What would be the effects be of a major movement of the plates which make up the San Andreas Fault? (Type 1)
  - D. What were the contributing factors that led to the American Civil War? (Type 2)
3. Outline the cause or effect you are being asked to illustrate.

## Strategies to use in answering cause and effect questions:

4. If asked, sketch the relationship between the parts as a way of helping you write your answer without forgetting a component.
5. As you write your essay, take advantage of transitional phrases which will help you make the links between the cause and effect(s) you are analyzing.

Examples of these transitional phrases are:

|             |              |                 |              |
|-------------|--------------|-----------------|--------------|
| because     | consequently | for this reason | therefore    |
| as a result | hence        | for that reason | subsequently |
| accordingly | thus         |                 |              |

## Illustrations of cause and effect answers:

### Typical cause and effect questions would look like these:

1. In 100 words or less describe the effects of major movement between the North American and Pacific plates along the San Andreas Fault?
2. Discuss the three approaches psychologists have taken to understand human perception.

### Answers to these questions could look like these:

1. The movement of the North American and Pacific crustal plates led to the formation of the mountain ranges on the western coast of North America. As the two plates continue to grind along their boundaries they are potential sources of earthquakes and volcanoes as demonstrated by California’s frequent earthquakes.

2. The three approaches to understanding human perception are the computational approach, the constructivist approach and the ecological approach. Psychologists who use the computational approach try to determine the computations a machine would have to perform to solve perceptual problems. By so doing, they believe these computations in machines will help to understand how humans and animals to turn sensory stimuli into a representation of the world.

The computational approach uses much information from two earlier, but still influential, views of perception: the constructivist approach and the ecological approach. The constructivist approach emphasizes the theory that perception is strongly influenced by expectations and inferences built on past experiences, i.e. prior knowledge whereas the ecological approach emphasizes the information provided by the environment.

 **Avoid Answers that look like these:**

1. When the plates move they cause earthquakes and cause all kind of destruction. *(This answer is not precise and does not give your instructor enough information to give you a good grade.)*
2. There are a couple of approaches that look at perception that are old and one that is in use now. *(This answer demonstrates how little you know and will result in a poor grade.)*

## COMPARE AND CONTRAST

### Answering compare and contrast questions:

1. Compare and contrast usually are phrased in one of three ways: questions usually are one of two
  - A. How do stocks and bonds differ?
  - B. Compare the Democratic and Republic platforms.
  - C. What are the advantages and disadvantages of sales taxes and income taxes?

### Strategies to use in answering compare and contrast questions:

2. In preparation for writing your essay, make a list of differences and similarities for the each of the two components of your compare and contrast question (i.e. iPhone vs. Blackberry phone).
3. As you write your essay, take advantage of transitional phrases which will help you make the links between the compare and contrast you are analyzing.

Examples of these transitional phrases are:

|             |                   |                 |                  |
|-------------|-------------------|-----------------|------------------|
| however     | on the other hand | similarly       | in the same way  |
| but         | nevertheless      | on the contrary | although         |
| though      | while             | even though     | even if          |
| nonetheless | conversely        | then again      | in spite of this |

↪ **Typical compare and contrast questions would look like these:**

1. Which musical genre would you prefer to listen to: Jazz or Reggae? Why?
2. Compare and contrast voter trends in the United States since the 1950's.

↪ **Answers to these questions could look like these:**

1. I would prefer to listen to Jazz because of the heavy reliance of Jazz on brass and piano versus the use of drums in Reggae. In addition, I prefer the slower rhythms of Jazz versus the quicker, more animated rhythms of Reggae.
2. Voter turnout since 1952 has steadily declined in the United States with turnout in non-southern states declining from over 70% to less than 60% while voter turnout increased in southern states from less than 40% to over 50%. A number of socioeconomic factors which impacted the rate of turnout in the 1950's (race, gender, age) have been found to have very little impact on voter turnout in the 2000's. Nonetheless, level of education appears to have a continued impact on voter turnout. This is demonstrated by data from a 2004 study which showed that level of education is directly related to 5 different forms of political participation. For instance, those individuals with a college degree voting at a rate of 93% as compared to 54% of those individuals with a grade school diploma. Even with these changes, there remains a 10% drop in voter turnout in the U. S. which researchers have yet to explain.

↪ **Avoid answers that look like these:**

1. I don't like either one. I only listen to rockers. *(Not only does this response not answer the question, it shows no knowledge of either musical genre the professor asks about.)*
2. Voter turnout has declined since the 1950's and is lower than all of the European elections. *(This response provides a sketchy comparison of U. S. voter turnout with European voter turnout. Unfortunately, it does not answer the question the professor asked.)*



# PROCESS

## Answering process questions:

1. Process questions are designed to test the depth of your knowledge about a subject and your ability to analyze how the various components (i.e. processes) of a system contributed to create the whole.
2. As such, process questions are almost always chronological or linear and involve multiple, sequential steps.
3. Process questions will most often look like:
  - A. Describe how DNA is used for forensic use.
  - B. List the steps in osmosis.
  - C. Explain what the evolution of the two-party system in America from 1796 forward. .
  - D. Analyze the flow of electricity through a copper filament.
  - E. What are the procedures involved in supply and demand?

## Strategies to use in answering process questions:

4. If you are asked about a complex process, jot down the steps or draw a schematic of the process before you begin to write. This will help you to not forget a critical step in your answer.
5. As you write your essay, take advantage of transitional phrases which will help you make the links between the steps of the process you are analyzing.

Examples of these transitional phrases are:

|                            |              |            |                  |
|----------------------------|--------------|------------|------------------|
| first, second, third . . . | next         | successive | following this   |
| afterward(s)               | subsequently | after that | later            |
| at that juncture           | concurrently | in tandem  | at the same time |
| finally                    |              |            |                  |

## Illustrations of process answers:

### Typical process questions would look like these:

1. List the levels in a hierarchical classification and concomitant binomial of the domestic cat.
2. Define the three basic memory processes and the Process Types which support them.

### Answers to these questions could look like these:

1. From specific to more general, the classification of the domestic cat includes Species (*Felis Catus*), Genus (*Felix*), Family (*Felidae*), Order (*Carnivora*), Class (*Mammalia*), Phylum (*Chordata*), Kingdom (*Animalia*), and Domain (*Eukarya*).
2. The three basic memory processes are Encoding, Storage and Retrieval. Encoding involves using

Acoustic, Visual, or Semantic Codes to help store an item in memory. The storage process involves maintaining the item in memory using episodic, procedural or semantic types of long-term memory. The retrieval involves recovering the item from memory using recall or recognition.

 **Avoid Answers that look like these:**

1. The domestic housecat is a mammal and carnivore. *(This answer only provides a partial answer to two steps of the classification system. As such, it would clearly demonstrate that you do not understand the classification system in general.)*
2. The three processes of memory are encoding, storage and retrieval. *(While correct, this answer does not answer the whole question.)*

## SUPPORTED OPINION

### Answering supported opinion questions:

1. The supported opinion essay is the most demanding essay question your professor will ask. Not only do you have to know the material, you have to have analyzed it and taken an opinion about the material that you can support with facts and figures (i.e. documented).
2. This type of question is not one you can cram for the night before the class. Rather it requires consistent long-term study and internalization of the content.
3. Typical supported opinion questions can look like:
  - A. Discuss the socio-economic factors which support or hinder participation in the political process.
  - B. Researchers find that the tectonic strain that had accumulated in Enriquillo-Plantain Garden fault system was only slightly released in the January 12 earthquake in Haiti. What is your opinion about future development of that country? Defend your position.
  - C. Defend or refute the use of acupuncture to relieve pain.

### Strategies to use in answering process questions:

4. Start your answer by writing a clearly worded statement of your opinion or interpretation.
5. Defend your statement with all of the data, examples, facts, and research that you have studied which led you to take the position you have taken.
6. As you write your essay, take advantage of transitional phrases which will help you make the links between the steps of the process you are analyzing.

Examples of these transitional phrases are:

therefore  
it follows that  
because

as a result  
however  
accordingly

consequently  
hence  
so

for this reason  
and so

### Illustration of supported opinion answers:

#### ↪ Typical supported opinion questions would look like this:

1. Despite criticism to the contrary, television and video games aids in the socializing process of our children. Defend or refute.

#### ↪ Answers to this questions could look like this:

1. I believe television and/or video games are detrimental to the socialization of children for the following reasons: Lack of parental monitoring, exposure to repeated violence, inactivity leading to obesity and poor large muscle development and strength, and lack of socialization with peers. *(The remainder of the essay would provide the documentation of each point.)*

#### ↪ Avoid Answers that look like these:

1. I believe television and/or video games are detrimental to the socialization of children for several reasons such as lots of seat time, sleeping late, and loosing track of time. *(Even if you have the documentation, this weak thesis statement will make it difficult to finish the question effectively.)*

