

## AP Psychology Free Response Questions (1994-2009)

### Psychology Exam Section II

Time-50 minutes Percent of total grade- 33 1/3

**Directions:** You have 50 minutes to answer BOTH of the following questions. It is not enough to answer a question by merely listing facts. You should present a **cogent** (powerfully persuasive) argument based on your critical analysis of the questions posed, using appropriate psychological terminology.

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1994-- 1. Design an experiment to determine whether a new drug that is supposed to reduce hyperactivity in children actually does. Your essay should include an identification and description of all the components of your experimental design, including sampling, independent and dependent variables, controls, and the method that you would employ to evaluate the outcome.

1994-- 2. One of the most useful generalizations in psychology is that "behavior is adaptive." Explain this generalization and then identify each of the following and describe how each could be adaptive.

- A. Repression
- B. Conformity
- C. Imprinting
- D. Displaced aggression
- E. Loss of information from short-term memory

1995-- 1. Compare and contrast the experimental method and the survey method in terms of their suitability for investigating the hypothesis that frustration leads to aggressive behavior.

In comparing and contrasting the two methods, be sure to identify and discuss each of the following.

- A. Independent variable
- B. Dependent variable
- C. Control
- D. Experimenter and response bias
- E. Ethical issues

1995--2. Define each of the following concepts and explain how each contributes to the phenomenon of prejudice.

- A. Stereotyping
- B. Self-fulfilling prophecy
- C. Fundamental attribution error
- D. Projection
- E. Schema

1996--1. Discuss how social and biological factors have an impact on each of the following in the individual.

- A. Body weight
- B. Perception
- C. Alcoholism
- D. Extraversion
- E. Schizophrenia

1996--2. Professor Jackson believes that frustration increases the need for achievement. She decides to test her hypothesis with her introductory psychology class of about 100 students. The first 50 students who arrive for class one day are taken to a separate room and given a series of easy puzzles to complete. Professor Jackson then asks each student about his or her professional goals. She rated the statement of each on a 7-point scale for strength of achievement motivation.

When they arrive, the remaining students are taken to another room and given a series of difficult puzzles by Professor Jackson's teaching assistant, Jim. Jim also asks each student about his or her professional goals and, like Professor Jackson, then rates them on a 7-point scale.

The group given the difficult puzzles has, on the average, higher achievement motivation scores than the group given the easy puzzle. Professor Jackson concludes that her hypothesis is supported.

Show how each of the following aspects of Professor Jackson's experimental design is flawed. Indicate how you would correct each problem.

- A. Sampling
- B. Assignment of participants
- C. Dependent variable
- D. Control for experimenter bias
- E. Control for confounding variables (You need cite only one.)

1997--1. Many people are concerned about the effects of the use of physical punishment to modify undesirable behavior of children.

- A. Basing your answer on psychological knowledge, apply each of the following in an argument against the use of physical punishment.
  - ◆ -Modeling
  - ◆ -Classical conditioning of fear
  - ◆ -Displacement
- B. How would psychologists use the following processes to modify children's undesirable behavior?
  - ◆ -Positive reinforcement
  - ◆ -Extinction

1997--2. Although personality is generally consistent throughout the life span, some people exhibit major personality changes.

- A. How does each of the following help to explain BOTH continuity and change in personality?
  - ◆ -Biological Factors
  - ◆ -Learning factors
  - ◆ -Situational factors
  - ◆ -Cognitive factors
- B. How would any TWO of the above interact to produce change in the trait of shyness?

1998—1. Read the following abstract of a student research paper on bystander intervention and then answer the questions that follow.

*The ten participants in the study were unaware of its purpose. The first five who signed up to be tested were assigned to the Alone condition and the next five were assigned to the With Others condition. The Alone condition was run in the morning and the With Others condition in the afternoon.*

*In the Alone condition, each of the five participants was asked to wait alone in a room. While the participant waited, a female voice in the next room screamed out, asking for help. In the With Others condition, each of the five participants was asked to wait in a room with several confederates of the researcher. During this waiting period, a male voice in the next room screamed out, asking for help.*

*In each condition, the percentage of participants who responded to the cry for help was recorded.*

- a. Identify the independent and dependent variables in this study.
- b. Identify the four flaws in the design of this study and the recommendations you would make to correct these flaws.
- c. Discuss an ethical issue raised by the design of this study.
- d. Use your knowledge of research in social psychology to describe the likely results of this study if correct methodology had been used.

1998—2. Discuss the causes(s) and treatments(s) of depression from the perspective of each of the following psychological approaches.

- a. psychodynamic/psychoanalytic

- b. biological/medical
- c. cognitive

1999--1. A. Describe the role of each of the following mechanisms in determining an individual's eating habits and body weight.

<u>Biological Mechanisms</u>	<u>Learning Mechanisms</u>
Body or brain chemistry	Reinforcement
Brain structure	Modeling
Genetics	Cultural factors

B. Select *one* biological and *one* learning mechanism and discuss the implication of each for weight management.

1999--2. In a study, researchers use a photograph taken in a public park to examine how people perceive, learn and remember information. In the photograph, a woman is standing near a man who is seated on a park bench. The woman appears to be shouting at the man. *Participants in the study were exposed to the photograph for ten seconds and then are shown, each for ten seconds, several other photographs of people interacting. When all the photographs have been shown, the participants are asked about what they saw in the "public park" photograph. A significant number of participants describe the man as being the aggressor in an apparent disagreement with the woman.*

Describe how each of the following concepts helps explain the perception of these participants. Be sure to begin by defining each concept in psychological terms.

- ◆ -schema
- ◆ -retroactive interference
- ◆ -representativeness heuristic
- ◆ -confirmation bias
- ◆ -framing

2000--1. Your high school is proposing moving to a system in which grades are no longer given or used to evaluate student progress. Define each of the following concepts and state how each might either positively or negatively change student behavior under such a system.

- a. Extrinsic motivation
- b. Arousal theory (Yerkes-Dodson Law)
- c. Learned helplessness
- d. Self-fulfilling prophecy

2000--2. The police chief of New York City states publicly that she sees a direct relationship between teenage arrests in New City for violent crimes and the popularity among New City teens of especially violent television shows.

A. Design a correlation study to research this claimed relationship, being sure to address how each of the following design elements would apply to your study.

- ◆ -operational definition of variables
- ◆ -selection of participants
- ◆ -generalizability
- ◆ -two ethical considerations

The police chief concludes that watching violent television shows leads to teens' committing violent crimes in New City. Do you support her conclusion? Explain your response.

2001--1. a. Discuss the cause of anxiety from each of the following perspectives.

- ◆ -Behavioral
- ◆ -Psychoanalytical/psychodynamic
- ◆ -Biological
- ◆ -Cognitive

b. Discuss a specific treatment technique for reducing anxiety used by professionals representing each of the four perspectives.

2001--2. Describe the psychological concept of expectancy or set. Discuss a specific example of how expectancy or set affects each of the following.

- ◆ -Human perception
- ◆ -The effects of a psychoactive drug on a human
- ◆ -A student's performance in the classroom
- ◆ -Human problem solving
- ◆ -Memory

2002--1. The human organism displays various reactions that are characterized by opposing tendencies. Use a specific physiological or psychological mechanism to explain how both aspects of opposing processes apply to EACH of the following.

- ◆ -Appetite
- ◆ -Autonomic nervous system
- ◆ -Color vision
- ◆ -Drug use
- ◆ -Nerve firing

2002--2. Five-year-old Jessie went to a fire station with her kindergarten class. When she got home, Jessie, who is in the preoperational stage of cognitive development, eagerly told the story of her adventure to her older brother. Describe how the following factors might have influenced the story she told. Be sure to define and provide an appropriate example of EACH factor.

- ◆ -Egocentrism
- ◆ -Observational learning
- ◆ -Over regularization or overgeneralization in language
- ◆ -Reconstructive memory
- ◆ -Schema

2003--1.A. Statistics are often used to describe and interpret the results of intelligence testing.

- ◆ -Describe three measures of the central tendency (mean, median, and mode).
- ◆ -Describe a skewed distribution.
- ◆ -Relate the three measures of central tendency to a normal distribution.
- ◆ -Relate the three measures of central tendency to a positively skewed distribution.
- ◆ -An intelligence test for which the scores are normally distributed has a mean of 100 and a standard deviation of 15. Use this information to describe how the scores are distributed.
- ◆ -In two normal distributions, the means are 100 for group I and 115 for group II. Can an individual in group I have a higher score than the mean score for group II? Explain.

B. Apply knowledge of psychological research in answering the following questions about intelligence scores.

- ◆ Explain why norms for standardized intelligence tests are periodically updated.
- ◆ Describe how to determine whether an intelligence test is biased.

2003—2. A. Define the following psychological concepts.

- ◆ Cognitive dissonance
- ◆ -Conformity
- ◆ -Incentive motivation
- ◆ -Negative reinforcement
- ◆ -Physiological addiction

B. Use one specific example for each of the concepts in part A to explain how the concept might relate to either the development or the continuation of a smoking habit. It is not necessary to use the same example for each concept.

2004—1. Dr. Franklin investigated the relationship between stress and physical illness. She persuaded a high school principal to require all female athletes in the school to participate in her study. She explained the purpose of her research to the athletes and asked them to use a standard form to rate the severity of their stress over the last six months. More than 250 athletes completed the form. Then Dr. Franklin analyzed the forms returned by the first 100 athletes. She requested the attendance records from the nurse's office for each of those athletes to verify the number of days absent due to illness during the same six-month period. In the debriefing summary that Dr. Franklin sent to the 100 athletes after she completed the study, she stated that athletes who reported more stress also experienced more frequent illness. Dr. Franklin concluded that stress causes physical illness.

- ◆ Identify the research method used by Dr. Franklin.
- ◆ Describe the operational definition of the TWO key variables that Dr. Franklin used in the study.
- ◆ Based on the information provided, describe ONE appropriate and ONE inappropriate ethical feature of the study.

**REMEMBER: TDA- Terms, Definitions & Examples, Application!!!!!!**

- ◆ Identify ONE statistical technique that Dr. Franklin could use to represent the relationship between the variables in the study.
- ◆ Describe TWO aspects of research design that weaken the validity of Dr. Franklin's conclusion that stress causes physical illness.

2004—2. Time is an important variable in many psychological concepts. Describe a specific example that clearly demonstrates an understanding of each of the following concepts and how it relates to or is affected by time. Use a different example for each concept.

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| <ul style="list-style-type: none"> <li>◆ Critical period</li> <li>◆ Fluid intelligence</li> <li>◆ Group polarization</li> <li>◆ James-Lange theory of emotion</li> </ul> | <ul style="list-style-type: none"> <li>◆ Presentation of the conditioned stimulus (CS) and the unconditioned stimulus (UCS) in classical conditioning.</li> <li>◆ Refractory period in neural firing</li> <li>◆ Sound localization</li> <li>◆ Spontaneous recovery.</li> </ul> |
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2005- Describe a specific example that clearly demonstrates and understanding of how each of the following concepts can lead to an inaccurate perception, cognition, or conclusion. Each example must include an explanation of the relationship between concept and the inaccuracy.

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|---|---|
| <ul style="list-style-type: none"> <li>• Afterimage effect</li> <li>• Availability heuristic</li> <li>• Ethnocentrism</li> <li>• Groupthink</li> <li>• Lack of object permanence</li> </ul> | <ul style="list-style-type: none"> <li>• Nonrandom assignment of research participants</li> <li>• Optimistic explanatory style</li> <li>• Proactive interference</li> </ul> |
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2006-1 Psychologists use a variety of research methods to study behavior. Three of the main research methods used are

- Case study
- Correlational study, and
- Experiment

- A. Discuss one advantage of each research method listed above
- B. Discuss one disadvantage of each research method listed above.

*Pretend you are a psychologist who will use each of the three research methods- case study, correlational study, and experiment- to determine the effect of taking vitamin J on improving memory.*

- C. For each method listed above, explain key characteristics of the basic approach you could use to reach a scientific conclusion about the relationship between taking vitamin J and improving memory. You need not design a complete study.

2006-2 Zoey wants to buy a new car but is having trouble deciding what kind of car to buy. She is feeling anxious and wants to make a decision soon. Zoey visits several local car dealers and asks for the advice of some of her friends. Explain how each of the following could influence her decision. Be sure to discuss each concept in the context of Zoey's decision.

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|---|---|
| <ul style="list-style-type: none"> <li>• Approach-avoidance conflict</li> <li>• Central route to persuasion</li> <li>• Heuristics</li> <li>• Individualism</li> </ul> | <ul style="list-style-type: none"> <li>• Rationalism</li> <li>• Self-efficiency</li> <li>• The autonomic nervous system</li> <li>• The foot-in-the door phenomenon</li> </ul> |
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2007- 1 Ellie, a new student at Skinner High School, is determined to make friends. When she attends the first psychology club meeting she finds herself in the room with twenty strangers who seem to know each other well. She plans to attend a few more meetings before deciding whether she will join.

- A. Demonstrate how each of the following could HELP play a role in Ellie’s quest for friendship. You may use a different example for each concept. Definitions will not score.

HELP

- The mere exposure effect
- Mnemonic device
- Schachter two-factor theory
- Locus of control

- B. Demonstrate how each of the following could HINDER Ellie’s quest for friendship. You may use a different example for each concept. Definitions will not score.

HINDER

- In-group bias
- Regression
- Operant conditioning
- Circadian rhythm

2007-2. Often misunderstood, schizophrenia is a psychological disorder affecting one percent of the population. In addition to treating the disorder, psychologists work to identify its nature and origins.

- Identify two characteristic symptoms used to diagnose schizophrenia.
- Discuss a research finding that supports a genetic basis for schizophrenia.
- What is the dopamine hypothesis regarding the origin of schizophrenia?
- Describe how medications used to treat schizophrenia affect the actions of neurotransmitters at the synapses.
- Identify a risk inherent in using medications in the treatment of schizophrenia.
- People sometimes confuse schizophrenia with dissociative identity disorder (DID). Identify two key characteristics that differentiate DI from schizophrenia.

2008-1. The Smith-Garcias are planning for their first baby. Both parents-to-be have had a psychology course and are looking forward to applying the principles they learned from theories and research that address child development.

A. Summarize one main idea or finding of each of the following four researchers:

- Skinner’s operant conditioning
- Bandura’s social learning theory
- Ainsworth’s attachment research
- Baumrind’s research on parenting styles

B. Provide a specific example of actions the Smith-Garcias might take to raise their child to produce positive outcomes using each of the theories below to address the corresponding psychological concept.

- Skinner’s operant conditioning: tantrum management
- Bandura’s social learning theory: sharing behavior
- Ainsworth’s attachment research: self-reliance
- Baumrind’s research on parenting styles: self-esteem

2008-2. We conducted a variation of Asch's (1951) conformity study in which participants made judgments about the length of lines. We randomly assigned participants to one of two conditions and told them that the study involved perceptual abilities. In the first condition, participants estimated the length of lines after hearing five people pretending to be participants (confederates) give inaccurate estimates. In the second condition, participants estimated the length of lines without hearing estimates of confederates. As we expected, participants in the first condition were less accurate in their estimates of line length, demonstrating the tendency to conform to majority influence.

A. How would each element below be related to the specific content of the experiment in the abstract?

- Control group
- Deception
- Operational definition of the dependent variable
- Hypothesis
- Debriefing

B. How might participants' estimates of line length in the study be related to the following?

- Cognitive dissonance
- Maslow's hierarchy of needs

2009-1. Dimitri and Linda are trying to learn a new routine to compete successfully in a dance competition. Give an example of how each of the following could affect their performance. Definitions without applications do not score.

- Extrinsic motivation
- Punishment
- Proactive interference
- Endorphins
- Vestibular system
- Divergent thinking
- Introversion

2009-2. James is in a driver's education course preparing to take his driving test. The course includes both book work and driving on the road to prepare students for a written test and a road test.

A) Describe how each of the following might influence his ability to drive a car during the road test. Definitions without application do not score.

- Cognitive map
- Cerebellum
- Observational Learning
- Human factors

B) Describe how each of the following might influence his ability to drive a car during the road test. Definitions without application do not score.

- Reticular formation
- Predictive validity
- Semantic memory