



MCAT-TEST^{Q&As}

Medical College Admission Test: Verbal Reasoning, Biological Sciences, Physical Sciences, Writing Sample

Pass MCAT MCAT-TEST Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.passapply.com/mcat-test.html>

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by MCAT
Official Exam Center

- ⚙️ **Instant Download** After Purchase
- ⚙️ **100% Money Back** Guarantee
- ⚙️ **365 Days** Free Update
- ⚙️ **800,000+** Satisfied Customers





QUESTION 1

As we move away from nucleus, the distance between the shells:

- A. remains same.
- B. increases.
- C. decreases.
- D. sometimes increase and sometime decreases.

Correct Answer: C

QUESTION 2

According to attachment theory, which of the following children is most likely to attach to a male psychologist, previously unknown to the child, in the course of a psychological study?

- A. A two-month old female infant raised in a safe, stable environment
- B. A five-month old male infant raised in a safe, stable environment
- C. An eight-month old male infant raised by a single caregiver who frequently neglect the child
- D. A thirteen-month old female infant raised by two caregivers who occasionally neglect the child

Correct Answer: A

Attachment theory describes a series of steps that infants will progress through as they grow. During the first three months of life, an infant will indiscriminately attach to any person and will respond equally to any caregiver. Thus (A) is an apt description of attaching to a previously unknown adult. Around 4 to 6 months babies will begin to recognize certain caregivers but will still accept care from anyone. Thus in (B) the baby will probably accept care from the psychologist, but the infant in (A) is much more likely to attach to the psychologist. From 6 to 9 months a baby will exhibit a strong attachment preference for a single caregiver, although the pattern of that attachment will vary based on the relationship that has developed between the caregiver and the child. Despite the neglect, the child in (C) will still have a preference for a single caregiver. After 9 months, children slowly develop increasing independence and will slowly form multiple attachments. The child in (D) will, thus, begin to develop attachments to both caregivers, but not to the psychologist, who is a stranger.

QUESTION 3

Which of the following is called DIOL?

- A. Glycerol
- B. Glycol
- C. Methanol
- D. Ethanol



Correct Answer: B

QUESTION 4

The time has come to acknowledge the ascendancy of the humanistic psychology movement. The so-called "Third Stream" emerged at mid-century, asserting itself against the opposition of a pair of mighty, long-established currents, psychoanalysis and behaviorism. The hostility between these two older schools, as well as divisiveness within each of them, probably helped enable humanistic psychology to survive its early years. But the movement flourished because of its wealth of insights into the nature of this most inexact science.

Of the three major movements in the course of 20th century psychology, psychoanalysis is the oldest and most introspective. Conceived by Sigmund Freud as a means of treating mental and emotional disorders, psychoanalysis is based on the theory that people experience unresolved emotional conflicts in infancy and early childhood. Years later, although these experiences have largely disappeared from conscious awareness, they may continue to impair a person's ability to function in daily life. The patient experiences improvement when the psychoanalyst eventually unlocks these long-repressed memories of conflict and brings them to the patient's conscious awareness.

In the heyday of behaviorism, which occurred between the two world wars, the psychoanalytic movement was heavily criticized for being too concerned with inner subjective experience. Behavioral psychologists, dismissing ideas and feelings as unscientific, tried to deal only with observable and quantifiable facts. They perceived the human being merely as an organism which generated responses to stimuli produced by its body and the environment around it. Patients' neuroses no longer needed analysis; they could instead be modified by behavioral conditioning. Not even babies were safe: B.F. Skinner devised a container in which infants could be raised under "ideal" conditions -- if a sound-proof box can be considered the ideal environment for child-rearing.

By mid-century, a number of psychologists had grown dissatisfied with both the deterministic Freudian perspective and the mechanistic approach of behaviorism. They questioned the idea that human personality becomes permanently fixed in the first few years of life. They wondered if the purpose of psychology was really to reduce people to laboratory specimens. Was it not instead possible that human beings are greater than the sum of their parts? That psychology should speak to their search for fulfillment and meaning in life?

It is questions like these that members of the Third Stream have sought to address. While the movement cannot be simplified down to a single theoretical position, it does spring from certain fundamental propositions. Humanistic psychologists believe that conscious experience, rather than outward behavior, is the proper subject of psychology. We recognize that each human being is unique, capable of change and personal growth. We see maturity as a process dependent on the establishment of a set of values and the development of self. And we believe that the more aspects of self which are satisfactorily developed, the more positive the individual's self-image. Abraham Maslow, a pioneer of the Third Stream, articulated a hierarchy of basic human needs, starting with food, water and air, progressing upward through shelter and security, social acceptance and belonging, to love, esteem and self-expression. Progress toward the higher stages cannot occur until all of the more basic needs have been satisfied. Individuals atop the pyramid, having developed their potential to the highest possible extent, are said to be "self-actualized".

If this humanist theoretical perspective is aimed at empowering the individual, so too are the movement's efforts in the practical realm of clinical psychology. Believing that traditional psychotherapists tend to lead patients toward predetermined resolutions of their problems, Carl Rogers pressed for objective evaluations of both the process and outcome of psychotherapeutic treatment. Not content to function simply as a reformer, Rogers also pioneered the development of "client-centered" or nondirective therapy, which emphasizes the autonomy of the client (i.e., patient). In client-centered therapy, clients choose the subjects for discussion, and are encouraged to create their own solutions to their problems.

The author most probably believes that, in its early days, the humanistic psychology movement:

- I. benefited from dissension among psychologists.
- II. acknowledged Maslow and Rogers as its only leaders.



III.

was an offshoot of behaviorism.

A.

I only

B.

II only

C.

I and II only

D.

II and III only

Correct Answer: A

This is in Roman Numeral format. It asks you to infer what the author believes about the early days of humanistic psychology. The movement's early days are referred to in the opening paragraph of the passage. In sentence 2 of paragraph 1, the author says that, at first, humanistic psychology had to struggle against the two older movements, psychoanalysis and behaviorism. In the next sentence, the author says that hostility between psychoanalysts and behaviorists, and divisiveness within their respective movements, probably helped humanistic psychology to survive those early years. This last point, concerning divisiveness between and within each of the two older schools, means that Roman numeral statement I is true, and will be part of the correct answer. So choices (B) and (D), which don't contain Roman Numeral I, are already eliminated. More importantly, there is no choice that says Roman numerals I and III, we know we don't even have to look at Roman numeral statement III. So what about Roman numeral statement II? In its early days, did the humanistic psychology movement recognize Maslow and Rogers as its only leaders? No, the author never hints that this is so. Maslow and Rogers are named as early pioneers of the movement, not as its first, or unchallenged and exclusive rulers. So Roman numeral statement II is false, and the correct answer must be choice (A), statement I only. Statement III says that early humanistic psychology was an offshoot of behaviorism. This is not true; from what the author says, it seems clear that humanism was a revolt against both of the older schools, psychoanalysis and behaviorism. If anything, humanism seems to have more in common with psychoanalysis than with behaviorism, since humanism and psychoanalysis are both concerned with conscious experience. Regardless, statement III is incorrect, and choice (A), statement I only, is correct.

QUESTION 5

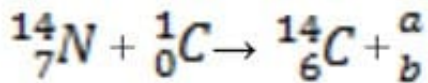
One of the most common methods that scientists use to determine the age of fossils is known as carbon dating. ^{14}C is an unstable isotope of carbon that undergoes beta decay with a half-life of approximately 5,730 years. Beta decay occurs when a neutron in the nucleus decays to form a proton and an electron which is ejected from the nucleus. ^{14}C is generated in the upper atmosphere when ^{14}N , the most common isotope of nitrogen, is bombarded by neutrons. This mechanism yields a global production rate of 7.5 kg per year of ^{14}C , which combines with oxygen in the atmosphere to produce carbon dioxide. Both the production and the decay of ^{14}C occur simultaneously. This process continues for many half-lives of ^{14}C , until the total amount of ^{14}C approaches a constant. A fixed fraction of the carbon ingested by all living organisms will be ^{14}C . Therefore, as long as an organism is alive, the ratio of ^{14}C to ^{12}C that it contains is constant. After the organism dies, no new ^{14}C is ingested, and the amount of ^{14}C contained in the organism will decrease by beta decay. The amount of ^{14}C that must have been present in the organism when it died can be calculated from the amount of ^{12}C present in a fossil. By comparing the amount of ^{14}C in the fossil to the calculated amount of ^{14}C that was present in the organism when it died, the age of the fossil can be determined.



In generating ^{14}C in the upper atmosphere, a ^{14}C nucleus combines with a neutron to form a ^{14}C nucleus and:

- A. a proton.
- B. an electron.
- C. a ^4He nucleus.
- D. a neutron.

Correct Answer: A



To answer this question, you have to balance a nuclear reaction. The question stem suggests the reaction, which has a nitrogen nucleus and a neutron on the left side and a carbon nucleus and the unknown particle on the right.

Two things must be balanced in a nuclear reaction: the charge of the nucleus (which corresponds to the number of protons), and the number of nucleons (which is the number of protons plus the number of neutrons). Balancing nuclear charge, we obtain $7 + 0 = 6 + b$, which implies $b = 1$. Balancing the number of nucleons, we obtain $14 + 1 = 14 + a$, which implies $a = 1$. Thus, the unknown particle is a nucleon with a charge of +1. The only particle that fits both criteria is the proton, choice A. Choice B is wrong because an electron is not a nucleon and it has a charge of -. Choice C is wrong because a helium nucleus has 4 nucleons and a charge of +2. Choice D is wrong because a neutron has a charge of 0.

[MCAT-TEST PDF Dumps](#)

[MCAT-TEST Study Guide](#)

[MCAT-TEST Braindumps](#)