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.pass4itsure.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

When Gwendolyn Brooks published her first collection of poetry A Street In Bronzeville in 1945 most reviewers recognized Brooks\\' versatility and craft as a poet. Yet, while noting her stylistic successes few of her contemporaries discussed the critical question of Brooks\\' relationship to the Harlem Renaissance. How had she addressed herself, as a poet, to the literary movement\\'s assertion of the folk and African culture, and its promotion of the arts as the agent to define racial integrity? The New Negro poets of the Harlem Renaissance expressed a deep pride in being Black; they found reasons for this pride in ethnic identity and heritage; and they shared a common faith in the fine arts as a means of defining and reinforcing racial pride. But in the literal expression of this impulse, the poets were either romantics, or realists and, quite often within the same poem, both. The realistic impulse, as defined best in the poems of McKay\\'s Harlem Shadows (1922), was a sober reflection upon Blacks as second class citizens, segregated from the mainstream of American socio-economic life, and largely unable to realize the wealth and opportunity that America promised. The romantic impulse, on the other hand, as defined in the poems of Sterling Brown\\'s Southern Road (1932), often found these unrealized dreams in the collective strength and will of the folk masses. In comparing the poems in A Street in Bronzeville with various poems from the Renaissance, it becomes apparent that Brooks brings many unique contributions to bear on this tradition. The first clue that A Street In Bronzeville was, at its time of publication, unlike any other book of poems by a Black American is its insistent emphasis on demystifying romantic love between Black men and women. During the Renaissance, ethnic or racial pride was often focused with romantic idealization upon the Black woman. A casual streetwalker in Hughes\\' poem, "When Sue Wears Red," for example, is magically transformed into an Egyptian Queen. In A Street In Bronzeville, this romantic impulse runs headlong into the biting ironies of racial discrimination. There are poems in which Hughes, McKay and Brown recognize the realistic underside of urban life for Black women. But for Brooks, unlike the Renaissance poets, the victimization of poor Black women becomes not simply a minor chord but a predominant theme. ...Brooks\\' relationship with the Harlem Renaissance poets, as A Street in Bronzeville ably demonstrates, was hardly imitative. As one of the important links with the Black poetic tradition of the 1920s and 1930s, she enlarged the element of realism that was an important part of the Renaissance world-view. Although her poetry is often conditioned by the optimism that was also a legacy of the period, Brooks rejects outright their romantic prescriptions for the lives of Black women. And in this regard, she serves as a vital link with the Black Arts Movement of the 1960s that, while it witnessed the flowering of Black women as poets and social activists as well as the rise of Black feminist aesthetics in the 1970s, brought about a curious revival of romanticism in the Renaissance mode.

Which of the following best expresses the main idea of the passage?

A. The evolution of realism in Black women\\'s poetry can be traced from Gwendolyn Brooks to the present day.

B. Gwendolyn Brooks\\' first poems were unique in the context of early twentieth-century poetry.

C. Contemporary scholars misinterpreted the crucial issue of Gwendolyn Brooks\\' relationship to the Harlem Renaissance.

D. Gwendolyn Brooks\\' poetry brought a new emphasis on the realistic elements of the Harlem Renaissance tradition.

Correct Answer: D

This correctly cites the author\\'s purpose, mentioning both the 1920\\'s movement and Brooks, though properly emphasizing the latter. (A) and (B) fail to mention the Harlem Renaissance, which cannot be separated from the author\\'s discussion. Also, (A) goes in the wrong direction (forward in time rather than backward from Brooks), while (B) tends to deny Brooks\\' profound connection to the Black poets who preceded her.

(C) Scope error: Passage is not about scholars (author uses "contemporaries" differently in line 5). Also, the passage is trying to make an interpretation, not correct one. (E) is too strong a judgment for this passage, and cannot be correct

because it leaves out the topic of Gwendolyn Brooks.

Kaplan Strategy: The answer to "global" questions has to cover the same topic and scope, and reflect the same tone, as the overall passage itself.

QUESTION 2

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 3

The information coded on the mRNA is decoded into:

A. fats.

B. proteins.

C. amino acids.

D. carbohydrates.

Correct Answer: B

QUESTION 4

The chemical reaction "CaCO3 (g) CaO (g) + CO2 (g)" shows:

A. reduction.

B. oxidation.

C. no change in oxidation state.

D. both oxidation and reduction.

Correct Answer: C

QUESTION 5

Every atomic orbital contains plus and minus regions, defined by the value of the quantum mechanical function for electron density. When orbitals from different atoms overlap to form bonds, an equal number of new molecular orbitals results. These are of two types: or bonding orbitals, formed by overlap between orbital regions with the same sign, and antibonding * or * orbitals, formed by overlap between regions with opposite signs. Bonding orbitals have lower energy than their component atomic orbitals, and antibonding orbitals have higher energy. The electron pairs reside in the lower-

energy bonding orbitals; the higher-energy, less stable orbitals remain empty when the molecule is in its ground state. A benzene ring has six unhybridized pz orbitals (one from each carbon atom), which together from six molecular orbitals, each one delocalized over the entire ring. Of the possible orbital structures for benzene, the one with the lowest energy has the plus region of all six p orbital functions on one side of the ring. The six electrons occupying the orbitals fill the three most stable molecular orbitals, leaving the other three empty. Molecular orbitals are filled from the lowest to the highest energy level. The number of bonds between atoms is determined by the number of filled bonding orbitals minus the number of filled antibonding orbitals; each antibonding orbital cancels out a filled bonding orbital. For a diatomic molecule, orbitals in the n = 2 energy level are filled as follows:

σ_{2s}, σ^*_{2s}, $\sigma 2p_z$, π^2_{px} and π^2_{py}

$^*_{2px}$

p_z

(equal in energy), and * (equal in energy), *2 . (The designation of the three p orbitals as , , and are interchangeable.) Absorption of a photon can raise an electron to a higher-energy molecular orbital. The excited electron does not immediately change its spin, which is opposite to that of the electron with which it was previously paired. This singlet state is relatively unstable: the molecule may interact with another molecule, or fluoresce and return to its ground state. Alternatively, there may be a change in spin direction somewhere in the system; the molecule then enters the so-called triplet state, which generally has lower energy. The molecule now cannot return quickly to its ground state, since the excited electron no longer has a partner of opposite spin with which to pair. It also cannot return to the singlet state, because the singlet has greater energy. Consequently, the triplet state, which has two unpaired electrons in separate orbitals, is long-lived by atomic standards, with a lifetime that may be ten seconds or more. During this period, the molecule is highly reactive.

The quantum number that distinguishes the px orbital from the py orbital is called the:

A. azimuthal quantum number.

B. magnetic quantum number.

C. principal quantum number.

D. spin quantum number.

Correct Answer: B

This is straightforward question relying on your knowledge of quantum numbers. The first quantum number, n, is called the principal quantum number and determines which principal energy level the electron is in, n = 1, n = 2 etc. This does not help specify between the px and py orbital, thus it is not the answer we are looking for. The second quantum number is the azimuthal number designated by l. This determines the subshell s, p, d or f. The azimuthal quantum number can also be referred to as the angular momentum quantum number. Choice A is the azimuthal quantum number, and it does not help us distinguish the px orbital from the py orbital, so we can rule choice A out. The third quantum number, the magnetic quantum number specifies the particular orbitals within a subshell and is given by ml. Each of these orbitals can hold two electrons. There\\'s only one orbital in an s subshell, in a p subshell there are three, in a d subshell there are five, and in an f subshell there are seven. The three p orbitals are known as px, py, and pz. The magnetic quantum number allows you to differentiate between the px and the py orbital, so choice B is the correct answer. The fourth quantum number, known as ms, tells us whether the electron has a plus or minus spin. Each orbital when filled contains two electrons of opposite spins. Thus it is choice B, the magnetic quantum number, ml, that distinguishes the x, y, and z orbitals of the p subshell.

MCAT-TEST PDF Dumps MCAT-TEST Practice Test MCAT-TEST Exam Questions