

KUSOM Management Admission Test (KUMAT)

Part One: Verbal Comprehension

Time: 45 minutes

In the following passages, there are three answer choices per blank. There is a single correct answer, consisting of one choice for each blank. For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

It is refreshing to read a book about our planet by an author who does not allow facts to be (1)_____ by politics: well aware of the political disputes about the effects of human activities on climate and biodiversity, this author does not permit them to (2)_____ his comprehensive description of what we know about our biosphere. He emphasizes the enormous gaps in our knowledge, the sparseness of our observations, and the (3)_____, calling attention to the many aspects of planetary evolution that must be better understood before we can accurately diagnose the condition of our planet.

1.

- A. overshadowed
- B. invalidated
- C. illuminated

2.

- A. enhance
- B. obscure
- C. underscore

3.

- A. plausibility of our hypotheses
- B. certainty of our entitlement
- C. superficiality of our theories

Vain and prone to violence, Caravaggio could not handle success: the more his (4)_____ as an artist increased, the more (5)_____ his life became.

4.

- A. temperance
- B. notoriety
- C. eminence

5.

- A. tumultuous
- B. providential

C. dispassionate

The author's (6)_____ style renders a fascinating subject, the role played by luck in everyday life, extraordinarily (7)_____.

6.

- A. soporific
- B. lucid
- C. colloquial

7.

- A. pedantic
- B. tedious
- C. opaque

In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is the best of these answer choices, choose answer A; otherwise choose one of the others. Select the best version and fill in the corresponding oval on your answer sheet.

8. Of all the vast tides of migration that have swept through history, maybe none is more concentrated as the wave that bough 12 million immigrants onto American shores in little more than three decades.

- (A) maybe none is more concentrated as
- (B) it may be that none is more concentrated as
- (C) perhaps it is none that is more concentrated than
- (D) maybe it is none that was more concentrated than
- (E) perhaps none was more concentrated than

9. Although a surge in retail sales have raised hopes that there is a recovery finally under way, many economists say that without a large amount of spending the recovery might not last.

- (A) have raised hopes that there is a recovery finally
- (B) raised hopes for there being a recovery finally
- (C) had raised hopes for a recovery finally being
- (D) has raised hopes that a recovery is finally
- (E) raised hopes for a recovery finally

10. As its sales of computer products have surpassed those of measuring instruments, the company has become increasingly willing to compete for the mass market sales they would in the past have conceded to rivals.

- (A) they would in the past have conceded to rivals
- (B) they would have conceded previously to their rivals
- (C) that in the past would have been conceded previously to rivals
- (D) it previously would have conceded to rivals in the past
- (E) it would in the past have conceded to rivals

Questions 11 to 13 below are based on the following passage:

Policymakers must confront the dilemma that fossil fuels continue to be an indispensable source of energy even though burning them produces atmospheric accumulations of carbon dioxide that increase the likelihood of potentially disastrous global climate change. Currently, technology that would capture carbon dioxide emitted by power plants and sequester it harmlessly underground or undersea instead of releasing it into the atmosphere might double the cost of generating electricity. But because sequestration does not affect the cost of electricity transmission and distribution, delivered prices will rise less, by no more than 50 percent. Research into better technologies for capturing carbon dioxide will undoubtedly lead to lowered costs.

Select one correct answer:

11. The passage implies which of the following about the current cost of generating electricity?

- A. It is higher than it would be if better technologies for capturing carbon dioxide were available.
- B. It is somewhat less than the cost of electricity transmission and distribution.
- C. It constitutes at most half of the delivered price of electricity.
- D. It is dwelt on by policymakers to the exclusion of other costs associated with electricity delivery.
- E. It is not fully recovered by the prices charged directly to electricity consumers.

12. The passage suggests that extensive use of sequestration would, over time, have which of the following consequences?

- A. The burning of fossil fuels would eventually cease to produce atmospheric accumulations of carbon dioxide.
- B. The proportion of the delivered price of electricity due to generation would rise and then decline.
- C. Power plants would consume progressively lower quantities of fossil fuels.

13. Select the sentence that explains why an outcome of sequestration that might have been expected would not occur.

- A. Currently, technology that would capture carbon dioxide emitted by power plants and sequester it harmlessly underground or undersea instead of releasing it into the atmosphere might double the cost of generating electricity.
- B. But because sequestration does not affect the cost of electricity transmission and distribution, delivered prices will rise less, by no more than 50 percent.
- C. Research into better technologies for capturing carbon dioxide will undoubtedly lead to lowered costs.

14. In an attempt to explain the cause of malaria, a deadly infectious disease, early European settlers in Hong Kong attributed the malady to poisonous gases supposedly emanating from low-lying swampland. In the 1880s, however, doctors determined that *Anopheles* mosquitoes were responsible for transmitting the disease to humans after observing that the female of the species can carry a parasitic protozoan that is passed on to unsuspecting humans when a mosquito feasts on a person's blood.

What function does the underlined statement fulfill with respect to the argument presented above?

- A. It provides support for the explanation of a particular phenomenon.
- B. It presents evidence that contradicts an established fact.
- C. It offers confirmation of a contested assumption.

- D. It identifies the cause of an erroneous conclusion.
- E. It proposes a new conclusion in place of an earlier conjecture

15. Country N's oil production is not sufficient to meet its domestic demand. In order to sharply reduce its dependence on foreign sources of oil, Country N recently embarked on a program requiring all of its automobiles to run on ethanol in addition to gasoline. Combined with its oil production, Country N produces enough ethanol from agricultural by-products to meet its current demand for energy.

Which of the following must be assumed in order to conclude that Country N will succeed in its plan to reduce its dependence on foreign oil?

- A. Electric power is not a superior alternative to ethanol in supplementing automobile gasoline consumption.
- B. In Country N, domestic production of ethanol is increasing more quickly than domestic oil production.
- C. Ethanol is suitable for the heating of homes and other applications aside from automobiles.
- D. In Country N, gasoline consumption is not increasing at a substantially higher rate than domestic oil and ethanol production.
- E. Ethanol is as efficient as gasoline in terms of mileage per gallon when used as fuel for automobiles.

16. The redemption rate for e-mailed coupons is far lower than that for traditionally distributed paper coupons. One factor is the "digital divide"—those who might benefit the most from using coupons, such as homemakers, the elderly, and those in low-income households, are less likely to have the knowledge or equipment necessary to go online and receive coupons.

Which of the following, if true, does the most to support the claim that the digital divide is responsible for lower electronic coupon redemption rates?

- A. Computers are available for free in libraries, schools, and community centers.
- B. The redemption rate of ordinary coupons is particularly high among elderly and low-income people who do not know how to use computers.
- C. Many homes, including those of elderly and low-income people, do not have high-speed internet connections.
- D. More homemakers than elderly people would use computers if they had access to them.
- E. The redemption rate for coupons found on the internet has risen in the last five years.

17. In 2010, China comprised about 10% of the world's gross domestic product (GDP), and its voting share in the World Bank was increased from less than 3% to 4.4%. During the same timeframe, France comprised about 4% of the world's GDP and saw its voting share in the World bank drop from 4.3% to 3.8%.

Which of the following can be logically concluded from the passage above?

- A. World Bank voting shares are allocated based upon each country's share of the world's GDP.
- B. The new ratio of voting share to percentage of world GDP is lower for China than it is for France.
- C. Gross domestic product is the most important factor in determining voting share at the World Bank.
- D. China should be upset that its voting share does not match its proportion of the world's GDP.
- E. France lost some of its voting share to China because China comprised a larger portion of the world's GDP.

Questions 18 to 20 below are based on the following passage:

Reviving the practice of using elements of popular music in classical composition, an approach that had been in hibernation in the United States during the 1960s, composer Philip Glass (born 1937) embraced the ethos of popular music in his compositions. Glass based two symphonies on music by rock musicians David Bowie and Brian Eno, but the symphonies' sound is distinctively his. Popular elements do not appear out of place in Glass's classical music, which from its early days has shared certain harmonies and rhythms with rock music. Yet this use of popular elements has not made Glass a composer of popular music. His music is not a version of popular music packaged to attract classical listeners; it is high art for listeners steeped in rock rather than the classics.

Select one correct answer:

18. The passage addresses which of the following issues related to Glass's use of popular elements in his classical compositions?

- A. How it is regarded by listeners who prefer rock to the classics
- B. How it has affected the commercial success of Glass's music
- C. Whether it has contributed to a revival of interest among other composers in using popular elements in their compositions
- D. Whether it has had a detrimental effect on Glass's reputation as a composer of classical music
- E. Whether it has caused certain of Glass's works to be derivative in quality

19. The passage suggests that Glass's work displays which of the following qualities? (Select One or More Answer Choices)

- A. A return to the use of popular music in classical compositions
- B. An attempt to elevate rock music to an artistic status more closely approximating that of classical music
- C. A long-standing tendency to incorporate elements from two apparently disparate musical styles

20. Select the sentence that distinguishes two ways of integrating rock and classical music.

- A. Glass based two symphonies on music by rock musicians David Bowie and Brian Eno, but the symphonies' sound is distinctively his.
- B. Yet this use of popular elements has not made Glass a composer of popular music.
- C. His music is not a version of popular music packaged to attract classical listeners; it is high art for listeners steeped in rock rather than the classics.

SECTION I

QUANTITATIVE ASSESSMENT

Questions: 25 /Marks: 25

Time: 45 minutes

1. Two dice, each with six sides numbered 1 through 6, are tossed. What is the probability that both dice will come up with either a 1 or 2?

- a) $1/36$
- b) $1/18$
- c) $1/9$
- d) $1/3$
- e) $2/3$

2. If Rakesh can travel 200 kms. in 4 hours, how many hours will it take Rakesh, traveling at the same constant rate, to travel 350 kms?

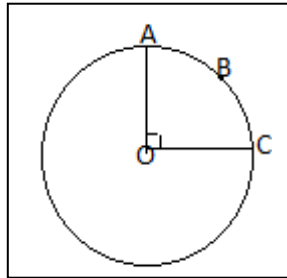
- a) 5
- b) 6
- c) 7
- d) 8
- e) 10

3. A cylinder of wax is 20 inches tall with a radius of 1 inch. If this cylinder is melted and poured into a new cylindrical mold with a radius of 2 inches, what will be the height of the new cylinder in inches?

- a) 5
- b) 10
- c) 15
- d) 20
- e) 40

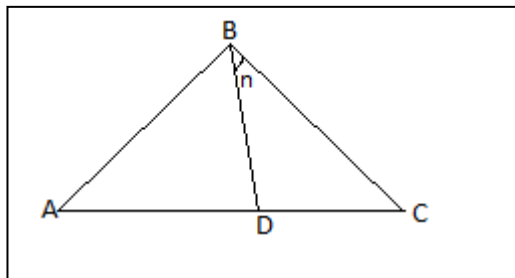
4. If the circle below has center O and an area of 36π , what is the perimeter of sector ABCO?

- a) 6π
- b) 9π
- c) $6+3\pi$
- d) $9+3\pi$
- e) $12+3\pi$



5. In the figure below, if $AB=BC$, then $n=$

- a) 30°
 - b) 40°
 - c) 50°
 - d) 60°
 - e) 70°
- give other degrees



6. Rabindra is twice as old as Janak is now. In 10 years, Rabindra will be 20 years older than Janak is at that time. How old is Janak now?

- a) 10
- b) 20
- c) 30
- d) 40
- e) 50

7. If x is an integer, which of the following must be odd?

- a) $3x$
- b) $2x$
- c) $3x+1$
- d) $4x$
- e) $4x+1$

8. If $x^2 - 5x - 6 = 0$, which of the following could be x ?

- a) -2
- b) -1
- c) 1
- d) 2
- e) 3

9. If $5 - 3x > 3$, which of the following expresses the possible values of x ?

- a) $x < -2/3$
- b) $x > -2/3$
- c) $x < 2/3$
- d) $x > 2/3$
- e) $x > 3/2$

10. $\frac{5x+10}{x+2} = ?$

- a) 2
- b) 3
- c) 4
- d) 5
- e) 6

11. Gyan deposits \$200 into a bank account that earns interest at the rate of 8%. He makes no further transactions other than a \$100 withdrawal after 3 years. Approximately how much money is in Gyan's account after he makes the withdrawal?

- a) 124
- b) 127
- c) 148
- d) 154
- e) 224

12. If $x + 2y = 13$ and $5x - y = 21$, what is $x + y$?

- a) 1
- b) 4
- c) 5
- d) 8
- e) 9

13. A company serves muffin and coffee at a breakfast meeting. Of the 120 employees at the meeting, 50 ate muffins and 95 drank coffee. If 35 employees had both muffin and coffee, how many employees at the meeting had neither coffee nor muffins?

- a) 10
- b) 15
- c) 25
- d) 30
- e) 45

14. The average of 4 numbers is 5.5. When an additional number is included, the average of all 5 numbers is 6. What is the additional number?

- a) 5.75
- b) 6.5
- c) 8
- d) 22
- e) 30.0

15. The ratio of apples, bananas, pears and oranges at a fruit stand is 5:3:2:6 respectively. The total number of these fruits is 64. If 4 pears are added to the fruit stand, what is the new ratio of banana to pears?

- a) 1:2
- b) 2:3
- c) 1:1
- d) 3:2
- e) 2:1

16. Which of the following is greater than $\frac{3}{5}$?

- a) $\frac{1}{2}$
- b) $\frac{2}{7}$
- c) $\frac{6}{11}$
- d) $\frac{5}{9}$
- e) $\frac{2}{3}$

17. $\frac{(0.15)-(0.03)}{(0.2)(0.3)} = ?$

- a) 0.02
- b) 0.12
- c) 0.2
- d) 2
- e) 1.2

18. Om has 15 marbles. If he gives $\frac{1}{3}$ of his marbles to Surendra and $\frac{1}{5}$ of the rest to Madan, how many marbles does Om have left?

- a) 1
- b) 3
- c) 5
- d) 7
- e) 8

19. Which of the following numbers has the greatest value?

- a) -8.3
- b) $|-7.7|$
- c) 2
- d) $|4.5|$
- e) 6.8

20. When 12 is divided by a positive integer k , the remainder is $k-3$. Which of the following could be the value of k ?

- a) 3
- b) 4
- c) 6
- d) 9
- e) 10

21. How many of the factors of 42 are divisible by 3?

- a) 2
- b) 3
- c) 4
- d) 6
- e) 8

22. If “ a ” and “ b ” are distinct prime numbers, which of the following could be the product of “ a ” and “ b ”?

- a) 4
- b) 5
- c) 10
- d) 11
- e) 25

23. $(1 + 5) - 3^2 + \frac{8}{3} * 2 = ?$

a) -5

b) -1

c) 1

d) 5

e) 15

24. If $(a - 3)^2 = 5 - 10a$, then which of the following is the value of “a”?

a) -3

b) -2

c) 0

d) 2

e) 3

25. If $4^{2X+2} = 16^{3X-1}$; what is the value of X ?

a) 0

b) 1

c) 2

d) 3

e) 4