

Analytical Test for HEC HAT 4 Biological, Medical Sciences

Sr	Questions	Answers Choice
1	Choose the answer you think is most appropriate among the given options. Four captains and the first mates of three of them were called to attend the annual meeting at head quarters. The captains were Luqman, Manzoor, Nauman and Osaf: the first mates were Ayesha, Durya and Gia. Each person in turn delivered a report to the chairperson as follows: Each of the first mates delivered their report exactly after her captain. The first captain to speak was Manzoor, and captain Nauman spoke after him. (Represent the person with first letter of his name) 19. In case A is the third of the first mates to speak, and L is the captain whose first mate is not present, which among the following statements must be true?	<p>A. A spoke sometime before L B. D spoke sometime Before O. C. L spoke sometime Before O. D. O spoke sometime Before L. E. O spoke sometime Before N.</p>
2	Choose the answer you think is most appropriate among the given options. On a factory control room. there are three ON-OFF switches on central control panel, labeled A, B, and C. They are changed from setting to a required setting based on the following rules: In case only switch A is ON in the default setting, then turn switch B ON. In case switches A and B are the only switches On in the default setting, then turn the switch C ON. In case all the three switches are ON in default setting then turn the switch C OFF. For any other default setting, turn ON all switches that are OFF all switches, if any that are ON. 30. In case only switch B is ON in the default setting. what must be the second setting?	<p>A. A ON, B ON, C ON. B. A ON, B ON, C OFF. C. A ON, B OFF, C ON. D. A OFF, B OFF, C ON. E. A OFF, B OFF, C OFF.</p>
3	Choose the answer you think is most appropriate among the given options. Nine individuals - Z, Y, X, W, V, U, T, S and R - are the only candidates who can serve on three committees labeled A, B and C. Each candidate should serve on exactly one of the committees. Committees A should consist of exactly one member more than that of committees B. It is possible that there are no members of committees C. Among Z, Y and X none can serve on committee A. Among W, V and U none can serve on committee C. Among T, S and R none can serve on committee C. 17. Among the following combinations which could constitute the membership of committee C?	<p>A. Y and T B. X and U C. Y, X and W D. W, V and U E. Z, X, U and R</p>
4	Choose the answer you think is most appropriate among the given options. On a factory control room. there are three ON-OFF switches on central control panel, labeled A, B, and C. They are changed from setting to a required setting based on the following rules: In case only switch A is ON in the default setting, then turn switch B ON. In case switches A and B are the only switches On in the default setting, then turn the switch C ON. In case all the three switches are ON in default setting then turn the switch C OFF. For any other default setting, turn ON all switches that are OFF all switches, if any that are ON. 31. In case all the three switches are ON in the second setting, which among the following could have been the default setting?	<p>A. A ON, B ON, C ON. B. A ON, B ON, C OFF. C. A ON, B OFF, C ON. D. A ON, B OFF, C OFF. E. A OFF, B ON, C OFF.</p>
5	Choose the answer you think is most appropriate among the given options. Four captains and the first mates of three of them were called to attend the annual meeting at head quarters. The captains were Luqman, Manzoor, Nauman and Osaf: the first mates were Ayesha, Durya and Gia. Each person in turn delivered a report to the chairperson as follows: Each of the first mates delivered their report exactly after her captain. The first captain to speak was Manzoor, and captain Nauman spoke after him. (Represent the person with first letter of his name) 20. Among the following statements which statement must be true?	<p>A. In case the second speaker was a captain, the seventh speaker was a first mate. B. In case the second speaker was a first mate, the seventh speaker was captain. C. In case the third speaker was a first mate, the seventh speaker was captain. D. In case the third speaker was a captain, the seventh speaker was a first mate. E. In case the seventh speaker was a first mate, the first and third speakers were captains.</p>
6	Choose the answer you think is most appropriate among the given options. Three girls Joan, Rita, and Kim and two boys Tim and Steve are the only dancers in a dance program, which consists of six numbers in this order: One a duet; three a solo; four a duet; five a solo; and six a duet. None of the dancers is in two consecutive numbers or in more than two numbers, The first number in which Tim appears is the one that comes before the first number in which Kim appears. The second number in which Tim appears is one that comes after second number in which Kim appears. 49. Rita must perform only in duets if	<p>A. Kim is in number two B. Kim is in number five C. Tim is in number one D. Tim is in number two E. Tim is in number six</p>
7	Choose the answer you think is most appropriate among the given options. A bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five, and six respectively. After the bus leaves stop six, the bus turns and returns to stop one and repeats the cycle. The stops are at six buildings that are in alphabetical order L, M, N, O, P, and Q. P is the third stop. M is the sixth stop. The stop O is the stop immediately before Q. N is the stop immediately before L. 42. In case N is the fourth stop, which among the following must be the stop immediately before P?	<p>A. O B. Q C. N D. L E. M</p>
8	Choose the answer you think is most appropriate among the given options. Six scientists A, B, C, D, E, and F are to present a paper each at a one-day conference. Three of them will present their papers in the morning session before the lunch break whereas the other three will be presented in the afternoon session. The lectures have to be scheduled in such a way that they comply with the following restrictions: B's should present his paper immediately	<p>A. A is first in the order of presenters. B. A is third in the order of presenters. C. A is fourth in the order of presenters. D. A is fifth in the order of presenters.</p>

before C's presentation; their presentations cannot be separated by the lunch break. D must be either the first or the last scientist to present his paper. 48. In case F and E are the fifth and sixth presenters respectively then which of the following must be true?

- D. B is first in the order of presenters.
- E. C is fourth in the order of presenters.

9

Choose the best answer; that is the response that most accurately and completely answers the question. A greater number of computers are sold in Sahiwal than in Burewala. therefore the people of Sahiwal are better informed about world events than are the people of Burewala. Each of the following if true weakens the conclusion above EXCEPT:

- A. Sahiwal has a larger population than Burewala.
- B. Most people of Burewala work on Sahiwal.
- C. Each person of Sahiwal spends less time in surfing internet than does a person in Burewala.
- D. The internet bandwidth is 128 kbps in both towns,
- E. Bandwidth usage of Burewala is more than that is Sahiwal.

10

Choose the answer you think is most appropriate among the given options. Nine individuals - Z, Y, X, W, V, U, T, S and R - are the only candidates who can serve on three committees labeled A, B and C. Each candidate should serve on exactly one of the committees. Committees A should consist of exactly one member more than that of committees B. It is possible that there are no members of committees C. Among Z, Y and X none can serve on committee A. Among W, V and U none can serve on committee C. Among T, S and R none can serve on committee C. 13. Of the nine individuals, the largest number that can serve together on committee C is

- A. 9
- B. 8
- C. 7
- D. 6
- E. 5

11

Choose the best answer; that is the response that most accurately and completely answers the question. Follow is to the real Pakistan leaving behind the disturbances of civilization. Real Pakistan is still inhabited by the eagle, the cow, the black deer, and tigers; it is still spacious, sprawling, and majestic. Experience the freedom and serenity still to be found in _____, 7. Choose the best option to complete the above statement:

- A. The natural beauty of our land.
- B. The fascinating urban centers
- C. The wild terrain NWFP
- D. One's own subconscious
- E. The great sprawling cities of the upper Pakistan

12

Choose the answer you think is most appropriate among the given options. A bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five, and six respectively. After the bus leaves stop six, the bus turns and returns to stop one and repeats the cycle. The stops are at six buildings that are in alphabetical order L, M, N, O, P, and Q. P is the third stop. M is the sixth stop. The stop O is the stop immediately before Q. N is the stop immediately before L. 43. In case L is the second stop, which among the following must be the stop immediately before M?

- A. N
- B. L
- C. P
- D. O
- E. Q

13

Choose the answer you think is most appropriate among the given options. A bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five, and six respectively. After the bus leaves stop six, the bus turns and returns to stop one and repeats the cycle. The stops are at six buildings that are in alphabetical order L, M, N, O, P, and Q. P is the third stop. M is the sixth stop. The stop O is the stop immediately before Q. N is the stop immediately before L. 44. In case a passenger gets on the bus at O, rides past one of the stops, and gets off at P, which of the following must be true?

- A. O is stop one.
- B. Q is stop three.
- C. P is stop four.
- D. N is stop five.
- E. L is stop six.

14

Choose the answer you think is most appropriate among the given options. New specie of bacteria A, causes the infectious disease A. The first symptoms appear after two days since the bacteria A enters the body of the victim. The carrier of the bacteria is some flies, mosquitoes, and bees. A mosquito bit Javed on Monday, February 6. Farooq worked with javed the next day, Tuesday, February 7. There were no other possibilities of exposure to disease A. 25. In case Farooq displayed symptoms of disease A, which among the following would be true? g. javed contracted the Disease A from Farooq. h. javed first noticed symptoms of Disease A on February 8. i. The fly that javed was bitten by was not a carrier of the bacteria A.

- A. I only
- B. II only
- C. III only
- D. II and III only
- E. I, II and III

15

Choose the best answer; that is the response that most accurately and completely answers the question. Many people especially the experts in the field of forestry are against all forest fires. They demand that all forest fires should be extinguished and let the forest die out by their own. The study of forest fires show that in the long run forest fires may in fact be beneficial to the ecology as a whole. Among the following which statement would logically follow from one of the observations referred to in the passage above?

- A. The reason of almost all forest fires is natural.
- B. Human beings try to extinguish the fire for gaining heat.
- C. Studies indicate that forest fires regularly occurred in the times prior to human occupation of forest areas.
- D. The animal and plant life destroyed by forest fires seldom represents endangered species.
- E. Occasionally the small fire prevents a large scale fire by the accumulation of flammable materials.

16

Choose the answer you think is most appropriate among the given options. Two or more tealeaves out of five varieties-- Livana, Mathia, Novajana, Oxia, and Piask are used in making all branded blends by a marketer following the rules given below. A brand containing Livana should also contain Novajana twice that of Livana. A brand containing Mathia must also have equal quantity of Oxia. A single brand never contains Novajana as well as Oxia. Oxia and Piask should not be used together. A blend containing Piask should contain it in such a proportion that the total amount of Piask present should be greater than the total amount of the other tealeaves. 8. Adding more amount of Novajana will make which of the following brands conformable with the conditions?

- A. One part Livana, one part Novajana, five parts Piask
- B. Two parts Mathia, two parts Novajana, two parts Piask
- C. One part Mathia, one part Novajana, one part Piask
- D. Two parts Mathia, one part Novajana, four parts Piask
- E. Two parts Novajana, one part Oxia, three parts Piask

17

Choose the best answer; that is the response that most accurately and completely answers the question. In 1970, Shaheen Inn earned Rs. 10 million in hotel business. By 1990, revenue had increased to 2000. It reached the sum of Rs. 40 million. Each of the following if true must

- A. The number of total hotel rooms has increased.
- B. Average expenditure per room has increased.
- C. The number of customers has increased from 1000 to 4000.

doubled and in 2000, it reached the sum of Rs. 40 millions Each of the following if true may explain the trend in hotel business except.

increased from 1970 to 1990.
D. Average stay per customer has increased.
E. The average price of customer services has increased.

18

Choose the best answer; that is the response that most accurately and completely answers the question. If I am elected, I will fight for changes effecting the growth and prosperity of the poor. We will work together to do away with the bureaucratic bogs which have existed ever since my opponent took office. Every one of you knows what I stand for; I invite my opponent to.....

A. Extend his support to me
B. Make his mind clear
C. Stop lying to the public
D. Hand in his resignation graciously
E. Get our city more federal aid

19

Choose the best answer; that is the response that most accurately and completely answers the question. Professor Taimoor told his class that teacher's evaluation by students is not a valid measure of teaching quality. For this evaluation students should fill out questionnaires at the end of the course. Which of the following is true supports professor Taimoor's suggestion?

A. Students evaluation of teachers is a wrong method.
B. Students opinions against teachers are filtered during course.
C. Professor Taimoor had received low rating from his students.
D. Teachers are not interested in any survey.
E. Students show interest in teacher evaluation.

20

Choose the answer you think is most appropriate among the given options. On a factory control room, there are three ON-OFF switches on central control panel, labeled A, B, and C. They are changed from setting to a required setting based on the following rules: In case only switch A is ON in the default setting, then turn switch B ON. In case switches A and B are the only switches ON in the default setting, then turn the switch C ON. In case all the three switches are ON in default setting then turn the switch C OFF. For any other default setting, turn ON all switches that are OFF all switches, if any that are ON. In case switch A is OFF in the second setting. Which of the following could have been the default setting?

A. A ON, B ON, C ON.
B. A ON, B ON, C OFF.
C. A ON, B OFF, C ON.
D. A ON, B OFF, C OFF.
E. A OFF, B ON, C OFF.