

## Analytical Test for HEC HAT 4 Biological, Medical Sciences

Sr	Questions	Answers Choice
1	Choose the best answer; that is the response that most accurately and completely answers the question. Selfishness is a principal evil in our society. Every person is concerned with only himself, Personal advancement is the only motivating force in the world today. This does not mean that individuals are not willing to help one another, on the contrary, _____, However these are only short-term occurrences, which ultimately serve our long-term goal of personal gain. 19. Which among the following options would most strongly contradict the author's attitude towards society?	<p>A. The greatest strength of society is altruism.</p> <p>B. We must all learn the art of love.</p> <p>C. Our short-term actions may contradict our long-term goals</p> <p>D. Morality is the bedrock of a growing community.</p> <p>E. The forces of good will ultimately triumph over evil.</p>
2	Choose the answer you think is most appropriate among the given options. Multan Institute of Higher Studies plans to show five educational films A, B, C, D, and E to a group of students. The film shows are planned in an order, which conforms to the following conditions: A must be shown earlier than C. B must be shown earlier than D. E should be the fifth film shown. 36. In case D is to be shown earlier than A Then for which of the following is exactly the one position from first through fifth in which it can be scheduled to be shown?	<p>A. A</p> <p>B. B</p> <p>C. C</p> <p>D. D</p> <p>E. E</p>
3	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.</p> <p>B. In case the second speaker was a first mate, the seventh speaker was captain.</p> <p>C. In case the third speaker was a first mate, the seventh speaker was captain.</p> <p>D. In case the third speaker was a captain, the seventh speaker was a first mate.</p> <p>E. In case the seventh speaker was a first mate, the first and third speakers were captains.</p>
4	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. 14. In case R is the only individual serving on committee B, which among the following should serve on committee A?	<p>A. W and S</p> <p>B. V and U</p> <p>C. V and T</p> <p>D. U and S</p> <p>E. T and S</p>
5	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.</p> <p>B. A ON, B ON, C OFF.</p> <p>C. A ON, B OFF, C ON.</p> <p>D. A OFF, B OFF, C ON.</p> <p>E. A OFF, B OFF, C OFF.</p>
6	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:	<p>A. Sahiwal has a larger population than Burewala.</p> <p>B. Most people of Burewala work on Sahiwal.</p> <p>C. Each person of Sahiwal spends less time in surfing internet than does a person in Burewala.</p> <p>D. The internet bandwidth is 128 kbps in both towns,</p> <p>E. Bandwidth usage of Burewala is more than that is Sahiwal.</p>
7	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. 32. In case switch A is OFF in the second setting. Which of the following could have been the default setting?	<p>A. A ON, B ON, C ON.</p> <p>B. A ON, B ON, C OFF.</p> <p>C. A ON, B OFF, C ON.</p> <p>D. A ON, B OFF, C OFF.</p> <p>E. A OFF, B ON, C OFF.</p>
8	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	<p>A. N</p> <p>B. L</p> <p>C. D</p>

8	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?	C. P D. O E. Q
9	Choose the answer you think is most appropriate among the given options.Multan Institute of Higher Studies planes to show five educational films A, B, C, D. and E to a group of students. The film shows are planned in an order. which conforms to the following conditions:A must shown earlier than C.B must shown earlier than D.E should be the fifth film shown.38. Which among the following is a pair of films that CANNOT both be shown earlier than E?	A. A and B B. A and D C. B and C D. B and D E. C and D
10	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 tealeaves8.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
11	Choose the answer you think is most appropriate among the given options. Multan Institute of Higher Studies planes to show five educational films A, B, C, D. and E to a group of students. The film shows are planned in an order. which conforms to the following conditions:A must shown earlier than C.B must shown earlier than D.E should be the fifth film shown.41. In case exactly one film is shown between A and C. and exactly one film is shown between B and D. which among the following will hold true?	A. B is the film shown between A and C. B. C is the film shown between B and D. C. E is the film shown between A and C. D. D is the last film shown. E. E is the first film shown.
12	Choose the best answer; that is the response that most accurately and completely answers the question.Everything that the king knows necessarily is because even what we ourselves know necessarily is; and of course our knowledge is not as certain as Kings knowledge is However no future contingent thing necessarily is Among the following statements which naturally follows from the above:	A. There are no future contingent things. B. It is not true that the king has knowledge of only necessary things. C. The king has knowledge of no contingent future things. D. It is not possible for us to know the king. E. The king has knowledge of everything.
13	Choose the answer you think is most appropriate among the given options.Multan Institute of Higher Studies planes to show five educational films A, B, C, D. and E to a group of students. The film shows are planned in an order. which conforms to the following conditions:A must shown earlier than C.B must shown earlier than D.E should be the fifth film shown.40. In case B, D and E are to be shown one after the order in the given order. the two positions from first to fifth in which A could possibly be shown are	A. First and second. B. First and fourth. C. Second and third. D. Third and fifth. E. Fourth and fifth.
14	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.16. In case T, S and X are the only individuals serving on committee B, the total membership of committee C should be:	A. Z and Y B. Z and W C. Y and V D. Y and U E. X and V
15	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.15. In case any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?	A. R B. Y C. W D. T E. S
16	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 for 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.26. In case javed displayed symptoms of disease A. which would be true?j. javed was also bitten by a fly on February 5.k. javed was bitten by a mosquito,which carried the bacteria A.l. Farooq contracted Disease A from Javed.	A. I only B. II only C. III only D. I and II only E. II and III only
17	Choose the answer you think is most appropriate among the given options. Multan Institute of Higher Studies planes to show five educational films A, B, C, D. and E to a group of students. The film shows are planned in an order. which conforms to the following conditions:A must shown earlier than C.B must shown earlier than D.E should be the fifth film shown.39. In case D and E are shown as far apart from each other as possible which among the following would be true?	A. A is shown earlier than B B. B is shown earlier than C C. C is shown earlier than E D. D is shown earlier than A E. E is shown earlier than B
18	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	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.

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?

19

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.

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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