

NAT II Physical Science Analytical

| Sr | Questions | Answers Choice |
|----|--|---|
| 1 | <p>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:</p> <p>A must be shown earlier than C.</p> <p>B must be shown earlier than D.</p> <p>E should be the fifth film shown.</p> <p>Q: Which among the following is an acceptable order for showing the educational films?</p> | <p>A. A, C, B, D, E B. A, C, D, E, B C. B, D, C, A, E D. B, D, E, A, C E. E, B, C, A, D</p> |
| 2 | <p>Follow us 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 -----.</p> <p>Q: Choose the best option to complete the above statement:</p> | <p>A. The natural beauty of our land B. The fascinating urban centers C. The wild terrain of NWFP D. One's own subconscious E. The great sprawling cities of the upper Pakistan</p> |
| 3 | <p>Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. 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:</p> <p>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.</p> <p>(Represent the person with first letter of his name)</p> <p>Q: Among the following statements, which statement must be true?</p> | <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 a captain. C. In case the third speaker was a first mate, the seventh speaker was a 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 & third speakers were captains.</p> |
| 4 | <p>In an in vitro study, 160 white cats were injected with Salt X. 160 other white cats injected with placebo. In two weeks, 39% of the white cats, who were injected with Salt X showed symptoms of Kay fever. Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in Salt X.</p> <p>Q: Which of the following statements would most seriously weaken the above discussion?</p> | <p>A. People suffering from Kay fever are the victims of the golden viper of Sindh. B. One among the 160 white cats had already showed symptoms of Kay fever prior to the experiment. C. The natural habitats of white cats does not contain any of the elements found in Salt X. D. The 160 white cats used in the experiment were kept isolated from each other. E. The scientists administered the injections being ignorant of the contents of the salt used.</p> |
| 5 | <p>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> <p>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.</p> <p>Q: In case N is the fourth stop, which among the following must be the stop immediately before P?</p> | <p>A. O B. Q C. N D. L E. M</p> |
| | <p>In a factory control room, there are three ON-OFF switches on the central control panel, labeled A, B and C. They are changed from default setting to a required setting based on the following rules:</p> | |

setting based on the following rules.

In case only switch A is ON in the default setting, then turn switch B ON.

- 6 In case switches A and B are the only switches ON in the default setting, then turn 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 and turn OFF all switches, if any, that are ON.

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

Q: Which of the following default settings leads to a second setting, where only one switch is OFF?

Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. 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:

- 7 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.

- A. A spoke sometime before L.
B. D spoke sometime before O.
C. L spoke sometime before O.
D. O spoke sometimes before L.
E. O spoke sometime before N.

(Represent the person with first letter of his name)

Q: 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?

Six candidates Ali, Amin, Omer, Hamza, Saleem and Osama are being interviewed for a job. The interview will take place over four consecutive days, starting on Thursday. Each candidate will have only one interview. The day on which the different candidates will interview must confirm to the following conditions:

- 8 (i) At least one interview will take place each day
(ii) No more than two interviews will take place on any day
(iii) No more than three interviews will take place on any two consecutive days
(iv) Ali's interview must take place on Saturday.
(v) Amin's interview must place on the same with another interview.
(vi) Saleem's interview must take place on the day before Osama's interview
(vii) Omer's interview must take place on a day after Hamza's interview.

- A. 1
B. 2
C. 3
D. 4
E. 5

Q: If the director decides to take two interviews on Thursday and two on Sunday, how many candidates would be eligible to interview on Friday?

A railway track from Lahore to Islamabad consists of six main stations, P, Q, R, X, Y, and Z. Trains run only according to the following condition:

- 9 (i) From P to Q
(ii) From Q to P and from Q to R
(iii) From R to X
(iv) From X to Q and from X to Y
(v) From Z to P, from Z to Y and from Z to R
(vi) From Y to X
(vii) It is possible to transfer a station for another train.

- A. P and Q
B. P and X
C. X and Y
D. X and Z
E. X, P and Z

Q. The complete and accurate listing of the stations from which it is possible to reach R with exactly one transfer is :

10 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.

Q: In an examination, Rizwana has more marks than Fauzia. Shugufta has fewer marks than Zahid. Fauzia and Abid have more marks than Shugufta. If the above is true, which of the following must also be true?

- A. Fauzia has fewer marks than Shugufta.
B. Rizwana has more marks than Shugufta
C. Fauzia has fewer marks than Zahid.
D. Zahid has more marks than Rizwana.
E. Zahid has more marks than Abid.

In an in vitro study, 160 white cats were injected with Salt X. 160 other white cats injected with placebo. In two weeks, 39% of the white cats, who were injected with

- A. The general public has an interest in the free exchange of different political views.
B. Every person who uses wall

11. ingested with pleasure. In the weeks, 60% of the white cases, who were ingested with Salt X showed symptoms of Kay fever. Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in Salt X.
- Q: Wall chalking on public property should be outlawed. Radicals and fanatics have no right to use public property when promoting their unsavory views. The argument above is based on the idea
12. 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.
- Q: 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?
13. Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. 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)
- Q: Among the following statements, which would make M, D, N, G, L, O, A the only possible sequence of speakers?
14. 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.
- Committee A should consist of exactly one member more than that of committee.
- It is possible that there are no members of committee 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.
- Q: In case T, S and X are the only individuals serving on committee B, the total membership of committee C should be:
15. Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. 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)
- Q: Which of the following order of delivering report is not conformable with the conditions?
16. 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; two a duet; three a solo; four a duet; five a solo; and six a duet.
- None of the dances 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 the second number in which Kim appears.
- chalking for the promotion of ideas is a radical or fanatic.
C. Radicals and fanatics prefer the use of public property while propagating their viewpoint.
D. Legal constraints should be equal for all.
E. Any promotional activity, which is against public interest, should be protected by law.
- 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.
- A. D is M's first mate; G is N's first mate; A is O's first mate.
B. D is M's first mate; G is N's first mate; A was the second to speak after L.
C. The order of the first four speakers was M, D, N G.
D. The order of the last three speakers was L, O, A.
E. The order in which the captains spoke was M, N, L, O.
- A. Z and Y
B. Z and W
C. Y and V
D. Y and U
E. X and V
- A. M, A, N, G, O, L, D
B. M, D, N, G, L, O, A
C. M, N, A, L, D, O, G
D. M, N, A, O, D, L, G
E. M, N, G, D, O, L, A
- 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

Q: Rita must perform only in duets if

Three men (Tahir, Pervaiz and Javed) and three women (Elena, Ayesha and Kiran) are spending a few months at Abbottabad. They are to stay in a row of nine cottages, each on living in his or her own cottage. There are no others staying in the same row of cottages.

1. Ayesha, Tahir and Javed do not want to stay in any cottage, which is at the end of the row.
2. Elena and Ayesha are unwilling to stay besides my occupied cottage.
3. Kiran is next to Pervaiz and Javed.
4. Between Ayesha and Javed's cottage there is just one vacant house.
5. None of the girls occupies adjacent cottages.
6. The house occupied by Tahir is next to an end cottage.

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Q: Which among these statement(s) are true?

- a. Ayesha is between Elena and Javed.
- b. At the most four persons can have occupied cottages on either side of them.
- c. Tahir stays besides Pervaiz

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

An observatory is setting up a schedule for school children to view a returning comet. Five school classes K, L, N, O, and P-will each view the comet exactly once during the four nights. Monday through Thursday, of its maximum brightness. Excellent viewing conditions 'are predicated for all four nights. The scheduling is subject to the following constraints:

At most two classes can view the comet on any given night.

Class K cannot view the comet on the same night that Class N does.

Class L must view the comet on a night prior to the night when Class P views the comet.

Class O must view the comet on the same night that Class P does.

Q: If Class N Views the comet on Thursday, which of the following could be true?

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- A. Class P views the comet on Tuesday.
- B. Class O views the comet on Thursday.
- C. Class L views the comet on Tuesday.
- D. Class L views the comet on Wednesday.
- E. Class K views the comet on Thursday.

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.

Committee A should consist of exactly one member more than that of committee.

It is possible that there are no members of committee 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.

Q: In case T and Z are the individuals serving on committee B, how many of the nine individuals should serve on committee C?

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- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

One's ability to adjust in an environment successfully leads to happiness. War at a universal level destroys the weaker people, who are the most unable to adjust to their environment. Thus, war at the universal level puts weakling out of their misery and allows more space for their predators to enjoy life in a better manner. As those actions have to be performed, which maximize the level of happiness of the greatest number, war at a universal level should take place.

Q: If Rubina was born in KPK, then she is a citizen of Pakistan, The statement above can be deduced from which of the following statement?

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- A. Every citizen of the Pakistan is resident either of one of the province or of one of the tribal area.
- B. Rubina was born either in KPK or in Sindh.
- C. Some people born in KPK are citizens of Pakistan.
- D. Everyone born in Pakistan is a citizen of Pakistan.
- E. Rubina is citizen either of Pakistan or of any other country.