

NAT II Biological Science Analytical

Sr	Questions	Answers Choice
1	<p>Two or more tealeaves out of five varieties – Livana, Mathia, Novajana, Oxia, and Piask are used in making all branded by a marketer following the rues given below.</p> <p>A brand containing Livana, should also contain Novajana twice that of Livana.</p> <p>A brancd containing Mathia, must also have equal quantity of Oxia.</p> <p>A single brand never contains Novajana as well as Oxia.</p> <p>Oxia and Piask should not be used together.</p> <p>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</p> <p>Q: Among the following, which combination cannot be used together in an agreeable brand containing two or more types of tealeaves?</p>	<p>A. Livana and Mathia B. Livana and Novajana C. Livana and Piask D. Mathia and Oxia E. Piask and Novajana</p>
2	<p>A chemist is preparing a nutriment using eight different vitamins and mineralsA, B, C, D, E, H, F(Ferric), and Z(Zinc). According to the recipes, the following requirements apply to the use of ingredients:</p> <p>(i) If B is used, both C and Z must also be used</p> <p>(ii) E and H must always be used together</p> <p>(iii) If C is used, at least two of A, B and F must also be used</p> <p>(iv) C and H cannot be used together</p> <p>(v) E, F and Z cannot all be used in a same nutrient</p> <p>(vi) A, D, and Z cannot all be used in the same nutriment</p> <p>Q: Which of the following cannot be included in a nutriment that contains E?</p>	<p>A. B B. D C. H D. F E. Z</p>
3	<p>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:</p> <p>(i) Frm P to Q</p> <p>(ii) From Q to P and from Q to R</p> <p>(iii) From R to X</p> <p>(iv) From X to Q and from X to Y</p> <p>(v) From Z to P, from Z to Y and from Z to R</p> <p>(vi) From Y to X</p> <p>(vii) It is possible to transfer a station for another train.</p> <p>Q. The complete and accurate listing of the stations from which it is possible to reach R with exactly one transfer is :</p>	<p>A. P and Q B. P and X C. X and Y D. X and Z E. X, P and Z</p>
	<p>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:</p> <p>(i) Frm P to Q</p> <p>(ii) From Q to P and from Q to R</p> <p>(iii) From P to Y</p>	

- (iii) From P to X and from X to Y
- 4 (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.
- Q. The greatest number of stations that can be visited without visiting any station more than once, is:

A. 4
B. 5
C. 6
D. 3
E. 2

- 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:
- 5 A must be shown earlier than C.
- B must be shown earlier than D.
- E should be the fifth film shown.
- Q: In case B, D and E are to be shown one after the other in the given order, the position from first to fifth in which A could possibly be shown is

A. Second.
B. First
C. Third
D. Fifth
E. Fourth

- 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:
- 6 A must be shown earlier than C.
- B must be shown earlier than D.
- E should be the fifth film shown.
- Q: Which among the following is the pair of films that CANNOT be shown right before E?

A. A and B
B. A and D
C. B and C
D. B and D
E. C and D

- 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:
- In case only switch A is ON in the default setting, then turn switch B ON.
- 7 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.
- Q: In case only switches B is ON in the default setting, what must be the second setting?

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,

- 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 -----.
- 8 Q: 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 of NWFP
D. One's own subconscious
E. The great sprawling cities of the upper Pakistan

- 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.
- 9 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.

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, -----

A. We are always trying to undermine other endeavors.
B. People always deceive one another.

10	<p>----- . However, these are only short-term occurrences, which ultimately serve our long-term goal of personal gain.</p> <p>Q: To fill the blank in the above passage, select one of the options from the below mentioned options:</p>	<p>C. Even close friends are not trustworthy. D. People want power to control others E. There are many occasions when we graciously offer our assistance.</p>
11	<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>
12	<p>A chemist is preparing a nutriment using eight different vitamins and minerals ...A, B, C, D, E, H, F(Ferric), and Z(Zinc). According to the recipes, the following requirements apply to the use of ingredients:</p> <p>(i) If B is used, both C and Z must also be used</p> <p>(ii) E and H must always be used together</p> <p>(iii) If C is used, at least two of A, B and F must also be used</p> <p>(iv) C and H cannot be used together</p> <p>(v) E, F and Z cannot all be used in a same nutrient</p> <p>(vi) A, D, and Z cannot all be used in the same nutriment</p> <p>Q: By the addition of exactly one more mineral, which of the following could make an acceptable combination of vitamins and minerals?</p>	<p>A. A, D, Z B. B, H, E C. C, D, H D. C, E, Z E. E, H, F</p>
13	<p>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.</p> <p>Q: Many people especially the experts in the field of forestry are against all forest fires. They demand that all 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?</p>	<p>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.</p>
14	<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: Which of the following order of delivering report is not conformable with the conditions?</p>	<p>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</p>
15	<p>A chemist is preparing a nutriment using eight different vitamins and minerals ...A, B, C, D, E, H, F(Ferric), and Z(Zinc). According to the recipes, the following requirements apply to the use of ingredients:</p> <p>(i) If B is used, both C and Z must also be used</p> <p>(ii) E and H must always be used together</p> <p>(iii) If C is used, at least two of A, B and F must also be used</p>	<p>A. A, B, C, F B. D, E, H, Z C. A, D, E, Z</p>

(iv) C and H cannot be used together

D. C, D, E, F
E. E, H, F, Z

(v) E, F and Z cannot all be used in a same nutrient

(vi) A, D, and Z cannot all be used in the same nutriment

Q: Which of the following is a suitable combination of vitamins and minerals for a nutriment?

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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.

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

A. The general public has an interest in the free exchange of different political views.

B. Every person who uses wall 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.

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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: People should be held accountable for their own behavior, and if holding people accountable for their own behavior entails capital punishment, then so be it. However, no person should be held accountable for behavior over which he or she had no control. Which of the following is the most logical conclusion of the argument above?

A. People should not be held accountable for the behavior of other people.

B. People have control over their own behavior.

C. People cannot control the behavior of other people.

D. Behavior that cannot be controlled should not be punished.

E. People have control over behavior that is subject to capital punishment.

18

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:

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 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.

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

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.

19

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: In case L speaks after A, and A is the third of the first mates to speak, then among the following statements which would be urtrue?

A. O spoke immediately after G

B. The order of the first four speakers was M, G, N, D

C. O's first mate was present

D. A was the fourth speaker after M

E. The captains spoke in the order M, N, O, L

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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 paper in the morning session before the lunch break whereas the other three will present in the afternoon session. The lectures have to be scheduled in such a way that they comply with the following restrictions:

B should present his paper immediately 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.

Q: In case F and E are the fifth and sixth presenters respectively then which of the

A. A is first in the order of presenters.

B. A is third in the order of presenter.

C. A is fourth in the order of presenters.

D. B is first in the order of presenters.

E. C is fourth in the order of presenters.

following must be true?
