

NAT II Physical Science Analytical

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | <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: Which of the following is a suitable combination of vitamins and minerals for a nutriment?</p> | <p>A. A, B, C, F B. D, E, H, Z C. A, D, E, Z D. C, D, E, F E. E, H, F, Z</p> |
| 2 | <p>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 C is to be the fifth scientist to present his paper, then B must be</p> | <p>A. First B. Second C. Third D. Fourth E. Fifth</p> |
| 3 | <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: In case D and E are shown as far apart from each other as possible, which among the following would be true?</p> | <p>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</p> |
| 4 | <p>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:</p> <p>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.</p> <p>Q: In case F is to present his paper immediately after D presents his paper, C could be scheduled for which of the following places in the order of presenters?</p> | <p>A. First B. Second C. Third D. Fourth E. Fifth</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 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?</p> | <p>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.</p> |

at P, which of the following must be true?

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.

- 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 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.

Q: In case, switch A is OFF in the second setting. Which of the following could have been the default setting?

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 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.

- 7 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

Q: Among of following which is an acceptable brand in accordance with the rules?

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

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 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.

- 8 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

Q: Among the below mentioned brands, which can be made agreeable by eliminating some or all of one type of tealeaves?

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

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.

- 9 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 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,

Q: In case only switches B is ON in the default setting, what must be the second setting?

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.

- 10 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.

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

P, S and R none can serve on committee C.

Q: of the nine individuals, the largest number that can serve together on committee C is

- 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 -----.
- 11 Q: The Rawalpindi city council started a publicity campaign for convincing the people to use public transport rather than their own transport in the city. Two months later there was a decrease in private transport on the roads in the mid city area. The city council claimed that their publicity campaign was successful to convince people to leave their cars at home and ride the city bus service to work. Which of the following, if true create the most serious doubt on the conclusion drawn above?
- A. There was a subsequent increase in the use of CNG.
B. The busiest roads of the city have been damaged because of continual floods in Nala Layee for las t five months.
C. People are busy enough to bring their vehicles on the roads.
D. City council expended a lot of money to make the campaign successful.
E. The number of cars has increased due to Bank loaning in the city.

- 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 -----.
- 12 Q: Some critics are of the opinion that the intrinsic qualities of photography depend on criticism and hence it is a matter of opinion. It is rather odd, though, that in a legal connection, serious critics themselves quite often behave as if they believed criticism to be a matter of opinion. why be a critic and teach in universities - in case criticism involves nothing but uttering capricious and arbitrary opinion? In the above argument the author is trying to convince that
- A. The qualities of photography are not dependent on criticism.
B. Critics seem hypocritical.
C. People can not judge the art work
D. Photography is an art independent of your opinion
E. artists should teach at universities.

- An Internal Services Manager at a large corporation has been assigned the task of allotting offices to six of the staff members. The offices are titled A through F.
- Mrs. Ruby needs to use the telephone quite often throughout the day. Mr. Mujahid and Mr. Zahid need adjacent offices as they need to consult each other often while working. Mrs. Fauzia is a senior employee and has to be allotted the office marked E, having the biggest window. Mr. Abid requires silence in the offices next to his. Mr. Shahid, Mr. Mujahid and Mr. Abid are all smokers. Mrs. Fauzia requires non-smoker neighbors.
- 13 Unless specifically stated all the employees maintain an atmosphere of silence during office hours.
- Q: The three employees who are smokers should be seated in the offices.
- A. A, B and D
B. B, C and F
C. A, B and E
D. A, B and C
E. A, B and F

- 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:
- 14 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?
- 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

- At IOWA University, Students of Economics must complete a total to twelve courses selected from three different parts of the syllabus Comparative economics, environmental economics, and regional economics... in order to graduate, the students must meet the following course distribution requirements:
- 15 (i) At least six of the required twelve course must be from the environmental economics.
- (ii) At least five of the required twelve courses must be from comparative economics and regional economics, with at least one, but no more than three, selected from comparative economics.
- Q: The minimum number of regional economics courses required to fulfil the course
- A. 1
B. 3
C. 5
D. 2
E. 4

5. The minimum number of regional economics courses required to fulfil the course distribution requirements is

- 16 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:
- (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?

- 17 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: The author's discussion would be greatly weakened, if he agreed to which of the following?
- I- Technology could change the environment.
 - II- War at the universal level would be an integral part of the environment.
 - III- It is possible for the strong to survive without suppressing the weak.
- A. I only
B. II only
C. III only
D. I and III only
E. I, II and III only

- 18 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: Muzzaffar is terrible driver. He had ten traffic violations in the past year. Which of the following can be said about the above claim?
- A. Muzzaffar does not know how to drive
B. Muzzaffar is an addict of drugs
C. It is obvious that everyone has accidents in bad weather.
D. Some thing, in this argument is hidden.
E. The given statement is wrong.

- 19 An Internal Services Manager at a large corporation has been assigned the task of allotting offices to six of the staff members. The offices are titled A through F.
- Mrs. Ruby needs to use the telephone quite often throughout the day. Mr. Mujahid and Mr. Zahid need adjacent offices as they need to consult each other often while working. Mrs. Fauzia is a senior employee and has to be allotted the office marked E, having the biggest window. Mr. Abid requires silence in the offices next to his. Mr. Shahid, Mr. Mujahid and Mr. Abid are all smokers. Mrs. Fauzia requires non-smoker neighbors.
- Unless specifically stated all the employees maintain an atmosphere of silence during office hours.
- Q: The idea candidate to occupy the office farthest from Mr. Zahid would be.
- A. Mrs. Fauzia
B. Mr. Mujahid
C. Mr. Shahid
D. Mr. Abid
E. Mrs. Ruby

- 20 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.
- A brand containing Livana, should also contain Novajana twice that of Livana.
 - A brancd 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
- Q: Among the following, which combination cannot be used together in an agreeable brand containing two or more types of tealeaves?
- A. Livana and Mathia
B. Livana and Novajana
C. Livana and Piask
D. Mathia and Oxia
E. Piask and Novajana

brand containing two or more types of tealeaves:
