

## NAT II Management 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>B. D, E, H, Z</b>            C. A, D, E, Z            D. C, D, E, F            E. E, H, F, Z</p>
2	<p>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.</p> <p>1. Ayesha, Tahir and Javed do not want to stay in any cottage, which is at the end of the row.</p> <p>2. Elena and Ayesha are unwilling to stay besides my occupied cottage.</p> <p>3. Kiran is next to Pervaiz and Javed.</p> <p>4. Between Ayesha and Javed's cottage there is just one vacant house.</p> <p>5. None of the girls occupies adjacent cottages.</p> <p>6. The house occupied by Tahir is next to an end cottage.</p> <p>Q: Which among these statement(s) are true?</p> <p>a. Ayesha is between Elena and Javed.</p> <p>b. At the most four persons can have occupied cottages on either side of them.</p> <p>c. Tahir stays besides Pervaiz</p>	<p>A. I only            B. II only  <b>C. I and III only</b>            D. II and III only            E. I, II and III</p>
3	<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: Which among the following options would most strongly contradict the author;s attitude towards society?</p>	<p><b>A. The greatest of society is altruism.</b>            B. We must all learn the art of love.            C. Our short-term actions may contradict our long-term goals.            D. Morality is the bedrock of a growing community.            E. The forces of good will ultimately triumph over evil.</p>
4	<p>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.</p> <p>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.</p>	<p>A. Kim is in number two            B. Kim is in number five            C. Tim is in number one  <b>D. Tim is in number two</b></p>

E. Tim is in number six

The second number in which Tim appears is one that comes after the second number in which Kim appears.

Q: Rita must perform only in duets if

- 5 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
- A. First  
B. Second  
C. Third  
D. Fourth  
E. Fifth

- 6 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 conform 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.
- Q: If only one interview takes place on Thursday which candidate could have that interview?
- A. Ali  
B. Amin  
C. Omer  
D. Saleem  
E. Osama

- 7 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 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

- 8 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.

- 9 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 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. One part Livana  
B. One part Mathia  
C. Two parts Novajana  
D. One part Oxia  
E. Two parts Piask

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, the addition of which combination would make a brand containing two parts Novajana and one part Piask conformable with the conditions?

- 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: 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, if true, supports professor Taimoor's suggestion?
- A. Students' evaluation of teachers is a wrong method.  
 B. Student's opinions against teachers are filtered during course.  
 C. Professor Taimoor had received low ratings from his students.  
 D. Teachers are not interested in any survey.  
 E. Students show interest in teacher evaluation.

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- 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, all three switches are ON in the second setting, which among 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.

- 12 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?
- A. 3  
 B. 4  
 C. 5  
 D. 6  
 E. 7

- 13 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 office for Mr. Mujahid would be.
- A. B  
 B. F  
 C. A  
 D. C  
 E. D

- 14 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.
- A. First  
 B. Second  
 C. Third  
 D. Fourth  
 E. Fifth

to present his paper.

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?

- 15 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 -----.
- Dieticians claim that those people who seek help to quit the habit of over eating, are unable to stop overeating. Therefore, doctors have concluded that success in breaking such habit is rare. A large-scale survey shows that thousands of people have quit the habit of over eating. If both of the statements above are correct, an explanation that resolves their apparent contradiction is.
- A. Dieticians do not work seriously so the people are not satisfied with their treatment  
B. The survey was conducted at only the posh areas of big cities, so it is based on wrong sample  
C. Will power play vital role in success to quit such habits  
D. People need more food.  
E. Those who succeeded in quitting the over eating did not go to dieticians for treatment and so are not included in the dieticians' data
- 16 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: 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, weakness the conclusion above EXCEPT?
- A. Sahiwal has larger population than Burewala.  
B. Most people of Burewala work in Sahiwal.  
C. Each people in Sahiwal spends less time surfing internet than does a person in Burewala.  
D. The internet bandwidth is 128 kbps in both towns.  
E. Bandwidth usage in Burewala is more than that in Sahiwal
- 17 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 -----.
- Q: 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
- 18 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 A spoke immediately after L and immediately before O, and O was not the last speaker, L spoke
- A. Second  
B. Third  
C. Fourth  
D. Fifth  
E. Sixth
- 19 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 ----- Q: Everything that a person does, which is dictated because of ignorance is not voluntary. Involuntary actions are those, which produce pain and repentance. In case a man has done something in his ignorance and he dose not feel vexed due to his action, he has not acted voluntarily as he was not aware of what he was doing, not yet involuntarily since he is not pained. After reading his passage we can arrive at the conclusion that:
- A. A person is not a voluntary agent, if he acts by reason of ignorance and repents.  
B. If an action is done by reason of ignorance and is bot voluntary, then it was repented.  
C. a man is an involuntary agent, if he acts by reason of ignorance.  
D. Some actions are either involuntary or not voluntary.  
E. If a man is not voluntary agent, he acted because of ignorance and repents.
- 20 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
- A. Y and T  
B. X and U  
C. Y, X and W  
D. W, V and U  
E. Z, X, U and R

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: Among the following combinations which could constitute the membership of committee C?

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