

## NAT II Management Science Analytical

Sr	Questions	Answers Choice
1	<p>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.</p> <p>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.</p> <p>Unless specifically stated all the employees maintain an atmosphere of silence during office hours.</p> <p>Q: The three employees who are smokers should be seated in the offices.</p>	<p>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</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 ----- 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 does 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:</p>	<p>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 not 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.</p>
3	<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>
4	<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: The above paragraph is most likely to appear in which of the following?</p>	<p>A. A Guide to Pakistan's intrinsic beauty B. Exploring the Great Outdoors C. The Quiet Beauty of Harappa D. how the Eagle Became Extinct E. Returning to Pakistan</p>
5	<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. 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.</p>	<p>A. I only B. II only C. I and III only D. II and III only E. I, II and III</p>

6. The house occupied by Tahir is next to an end cottage.

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

6

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: Which among the following options would most strongly contradict the author;s attitude towards society?

- A. The greatest of society is altruism.
- 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.

7

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

8

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?

- 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.

9

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: Which of the following would most strengthen the argument above?

- A. Some of the elements in Salt X are extracted from the root of a certain poisonous herb of Hunza.
- B. The blood test of the victims of Kay fever revealed the presence of a toxic element in their blood, normally found in salt X.
- C. Almost all the white cats died within two days after the first symptom appeared.
- D. Normally the rate of Kay fever among white cats is less than 0.01%.
- E. Within two weeks, about 40% of the white cats, who were injected with placebo, also contracted Kay fever.

10

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:

- (i) Frm 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.

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

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

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.

- 11 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?

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:

(i) From P to Q

(ii) From Q to P and from Q to R

(iii) From R to X

- 12 (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. 4  
B. 5  
C. 6  
D. 3  
E. 2

Q. The greatest number of stations that can be visited without visiting any station more than once, is:

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.

- 13 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

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.

14

A. B  
B. F  
C. A  
D. C  
E. D

Unless specifically stated all the employees maintain an atmosphere of silence during office hours.

Q: The ideal office for Mr. Mujahid would be.

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.

A. The fatality rate for other age groups has remained steady over the past five years.  
B. Air pollution has been increased over the period of past five years.  
C. Government has implemented a

Q: There is clear evidence that the mandated vaccination of children under age four has resulted in fewer child fatalities over the past five years. Compared to the five-year period prior to the passage of laws requiring the vaccination, fatalities of children under age four have decreased by 30 percent. Which one of the following, if true, most substantially strengthens the argument above?

- C. Government has implemented a malaria control campaign last year
- D. Health conditions in the country are better than has been previously.
- E. Death rate of pregnant women has decreased.

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:

16

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

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.

17

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 O can view the comet neither on Wednesday nor on Thursday, which of the following must be true?

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

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18

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

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.

19

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 N is the fourth stop, which among the following must be the stop immediately before P?

- A. O
- B. Q
- C. N
- D. L
- E. M

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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.

- 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

20

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?

D. Class L views the comet on Wednesday.  
E. Class K views the comet on Thursday.