

## NAT II Management Science Analytical

Sr	Questions	Answers Choice
1	<p>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:</p> <p>(i) At least one interview will take place each day</p> <p>(ii) No more than two interviews will take place on any day</p> <p>(iii) No more than three interviews will take place on any two consecutive days</p> <p>(iv) Ali's interview must take place on Saturday.</p> <p>(v) Amin's interview must place on the same with another interview.</p> <p>(vi) Saleem's interview must take place on the day before Osama's interview</p> <p>(vii) Omer's interview must take place on a day after Hamza's interview.</p> <p>Q: If only one interview takes place on Thursday which candidate could have that interview?</p>	<p>A. Ali            B. Amin            C. Omer  <b>D. Saleem</b>            E. Osama</p>
2	<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>
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: Which among the following is the pair of films that CANNOT be shown right before E?</p>	<p>A. A and B            B. A and D            C. B and C            D. B and D  <b>E. C and D</b></p>
4	<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 brand 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><b>A. Livana and Mathia</b>            B. Livana and Novajana            C. Livana and Piask            D. Mathia and Oxia            E. Piask and Novajana</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.

5

Q: Many people do not read the books they purchase. For example, seventeen percent of college students in Pakistan have text books, but only forty-five percent of them read more than once a year, and only seventeen percent read more than once a week. Which of the following, if true, casts doubt on the claim that most people read the books they purchase?

- A. Regular book readers are most susceptible to eye diseases.
- B. Readers often exaggerate about their book reading.
- C. Many people buy books to pretend to be a scholar.
- D. The sale of novels is more than that of other types.
- E. Reading speed is increased by frequent reading.

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 an acceptable order for showing the educational films?

- 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

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.

7

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:

- A. Z and Y
- B. Z and W
- C. Y and V
- D. Y and U
- E. X and V

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.

8

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?

- 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.

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 -----.

9

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

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.

10

- 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 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

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

of Piask present should be greater than the total amount of the other tealeaves

Q: Adding more amount of Novajana will make which of the following brands conformable with the conditions?

- 11 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: 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?
- 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 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.
- 12 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.
- Q: Which of the above statements can be said to have been derived from two other statements?
- A. Statement 1  
B. Statement 2  
C. Statement 3  
D. Statement 5  
E. Statement 6
- 13 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: Among the following combinations which could constitute the membership of committee C?
- A. Y and T  
B. X and U  
C. Y, X and W  
D. W, V and U  
E. Z, X, U and R
- 14 Two or more tealeaves out of five varieties – Livana, Mathia, Novajana, Oxia, and Piask are used in making all brands 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.
- 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
- 15 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
- A. First  
B. Second  
C. Third  
D. Fourth

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

E. Fifth

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.

16

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.

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

Q: In case N is the fourth stop, which among the following must be the stop immediately before 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.

17

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.

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.

18

Q: Classical songs occupy a unique and peculiar position in every culture. They are imperishable as cultural landmarks, but the emotions expressed in some of the folks are often superseded by newer tunes. However, the classics survive just as heritage, as imposing features of the society, yet unsuited for habitation unless remodeled. The principle point put forth in the above passage is that classical works

- A. Are ignored by young generation
- B. Are an obstacle in the development in new tunes
- C. Should be stored in museums.
- D. Lose their distinctive features as time passes.
- E. Need our respect and admiration even if their tunes and ideas they express are no longer current.

Rizwan was born in 1956, and so in 7965 he was nine years old. If we per use this example, it is clear that the last two digits of a person's birth will be the same as the last two digits of the year of that person's ninth birthday, except that the position of the digits will be reversed. Identify, which is the best criticism of the assertions made above.

19

- A. The generalization is valid only for those, in which last digit of their birth years is greater than four.
- B. The generalization is applicable only for those birth years that do not end in two zeroes.
- C. This example is not best

illustration of the fact  
D. The generalization is valid only for those birth years in which the difference of the last two digits is one  
E. The generalization is valid only for those birth years that ends with 6

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.

20

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, all three switches are ON in the second setting, which among the following could have been the default setting?