

NAT II Physical 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>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) From 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.</p> <p>Q. The greatest number of stations that can be visited without visiting any station more than once, is:</p>	<p>A. 4 B. 5 C. 6 D. 3 E. 2</p>
3	<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: 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?</p>	<p>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</p>
4	<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) From 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</p>	<p>A. P to R B. Q to Y C. Z to Q D. Z to R E. Z to Y</p>

(vii) It is possible to transfer a station for another train.

Q. The trip which requires greatest number of transfer, is:

- 5 A group of dog lovers declare that the principal virtue of the dog is its general friendliness towards all people. But, another group of cat lovers declare that the principal virtue of the cat is its peculiar friendliness towards its provider. Which of the following is true of the claims of both dogs and cats lovers?
- A. Animal have not a sense to understand human behaviour
 - B. Groups of animal lovers are friendly
 - C. Friendliness is a virtue
 - D. They apply the same standard
 - E. Uncommon virtue of friendliness

- 6 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 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

- 7 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.

- 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: In case, only switch B is ON in the second setting. Which of the following could have been the default setting?
- A. A ON, B ON, C ON.
 - B. A ON, B OFF, C ON.
 - C. A OFF, B ON, C OFF.
 - D. A OFF, B OFF, C ON.
 - E. A OFF, B OFF, C OFF.

- 9 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.
- 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

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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.

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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.

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Q: As any economist knows, healthy people pose less of an economic burden to society than unhealthy people. Not surprisingly, then, every rupee our government spends on prenatal care for undocumented immigrants will save taxpayers of this country three rupees. Which of the following, if true, would best explain why the statistics cited above are not surprising?

- A. The taxpayers pay for prenatal care of all immigrants.
- B. Pregnant women who do not receive prenatal care are more likely to experience health problems than other pregnant women.
- C. Benefits for prenatal care serve to promote undocumented immigration.
- D. Babies whose mothers did not receive prenatal care are just as healthy as other babies.
- E. Babies born in this state to undocumented immigrant parents are entitled to infant care benefits from government.

13 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

14 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: 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 last 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.

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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.
- 16 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.

- A. I only
B. II only
C. I and III only
D. II and III only
E. I, II and III

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

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:

- 17 A must be shown earlier than C.
- B must be shown earlier than D.

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

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

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.

- 18 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.

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

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

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.

- 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?

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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.