

## NAT II Physical Science Analytical

| Sr | Questions  | Answers Choice   |
|----|--|--|
| 1  | <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.</p> <p>Q: Which of the following would most strengthen the argument above?</p>   | <p>A. Some of the elements in Salt X are extracted from the root of a certain poisonous herb of Hunza.</p> <p>B. <i>The blood test of the victims of Kay fever revealed the presence of a toxic element in their blood, normally found in salt X.</i></p> <p>C. Almost all the white cats died within two days after the first symptom appeared.</p> <p>D. Normally the rate of Kay fever among white cats is less than 0.01%.</p> <p>E. Within two weeks, about 40% of the white cats, who were injected with placebo, also contracted Kay fever.</p> |
| 2  | <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 rules 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: Adding more amount of Novajana will make which of the following brands conformable with the conditions?</p>  | <p>A. One part Livana, one part Novajana, five parts Piask</p> <p>B. Two parts Mathia, two parts Novajana, two parts Piask</p> <p>C. One part Mathia, one part Novajana, one part Piask</p> <p>D. Two parts Mathia, one part Novajana, four parts Piask</p> <p>E. Two parts Novajana, one part Oxia, three parts Piask</p>   |
| 3  | <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 ideal candidate to occupy the office farthest from Mr. Zahid would be.</p>   | <p>A. Mrs. Fauzia</p> <p>B. Mr. Mujahid</p> <p>C. Mr. Shahid</p> <p>D. <i>Mr. Abid</i></p> <p>E. Mrs. Ruby</p>   |
| 4  | <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 conform 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 the director decides to take two interviews on Thursday and two on Sunday, how many candidates would be eligible to interview on Friday?</p> | <p>A. 1</p> <p>B. 2</p> <p>C. 3</p> <p>D. <i>4</i></p> <p>E. 5</p>   |

spacious, sprawling, and majestic. Experience the freedom and serenity still to be found in -----.

5 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.

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6 Q: Everything that the king knows necessarily is, because even what we ourselves know necessarily is; and, of course, our knowledge is not as certain as King's knowledge is. However, no future contingent thing necessarily is. Among the following statements, which naturally follows from the above:

A. There are no future contingent things.  
B. It is not true that the king has knowledge of only necessary things.  
C. **The king has knowledge of no contingent future things.**  
D. It is not possible for us to know the king.  
E. The king has knowledge of everything.

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.

7 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.

8 Q: Drama Producers earn their profits primarily from advertising revenue, and potential advertisers are more likely to advertise on a TV with a wide network, a large number of cable operators, and other viewers. However, the coverage of the channel that is currently the most popular one in this city has steadily increased. Any of the following, if true, would help explain the apparent discrepancy between the two statements above EXCEPT:

A. The most profitable producer in the city receives revenue from its subscribers as well from advertisers.  
B. Advertisers generally switch from the most popular channel to another one only when the other one becomes the most popular instead.  
C. **The number of channels competing viably with most profitable channel in the city has increased during the last two years.**  
D. The network of the most profitable TV channel in the city is still greater than of any of its competitors.  
E. Advertising rates charged by the most profitable TV channel in the city are significantly higher than those charged by its competitors.

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:

9 A must be shown earlier than C.  
B must be shown earlier than D.

A. A and B  
B. A and D  
C. B and C  
D. B and D  
E. **C and D**

E should be the fifth film shown.

Q: Which among the following is the pair of films that CANNOT be shown right before E?

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:

10 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.

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?

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:

11

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B must be shown earlier than D.

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

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

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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.

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Q: In 1970, Shaheen Inn earned Rs. 10 million in hotel business. By 1990, revenue doubled and in 2000, it reached the sum of Rs. 40 million. Each of the following, if true, may explain the trend in hotel business except:

- A. The number of total hotel rooms has increased.
- B. Average cost per room has increased.
- C. The number of customers has increased from 1970 to 1990.
- D. Average stay per customer has increased.
- E. The average price of customer services has increased.

14

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.

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.

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

- A. Kim is in number two
- B. Kim is in number five
- C. Tim is in number one
- D. Tim is in number two
- E. Tim is in number six

15

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 weaklings 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: What response would the author of the above discussion come up with, in the case of the objection that the weaklings far exceed strong people?

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

I- He would respond with statement that the person making the objection is a weakling.

II- He would respond by saying that weaklings will be miserable no matter what happens.

III- He would respond with statement that the strong would be frustrated if the weaklings are destroyed.

- A. A person is not a voluntary agent, if he acts by reason of ignorance and

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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:

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.

17

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 is the third of the first mates to speak, and L is the captain whose first mate is not present, which among the following statements must be true?

- A. A spoke sometime before L.
- B. D spoke sometime before O.
- C. L spoke sometime before O.
- D. O spoke sometimes before L.
- E. O spoke sometime before N.

18

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:

A must be shown earlier than C.

- A. A
- B. B
- C. C
- D. D
- E. E

B must be shown earlier than D.

E should be the fifth film shown.

Q: In case, D is to be shown earlier than A, then for which of the following these exactly one position from through fifth in which it can be scheduled to be shown?

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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.

- 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

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 rules given below.

A brand containing Livana, should also contain Novajana twice that of Livana.

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

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