



SAMPLE PAPER STATISTICAL OFFICERS-SOTS

VERBAL

Complete the sentences by choosing the most appropriate option, from the given lettered choices (A to D) below each.

1. Sara _____ the smell of gas in the kitchen.
 - A. developed
 - B. saw
 - C. determined
 - D. detected

2. Sunspots are known to cause _____ enormous increase in the intensity of the sun's electromagnetic radiation.
 - A. an
 - B. a
 - C. some
 - D. one

3. The consumer price index lists _____.
 - A. how a much cost every scooter
 - B. how much does every car cost
 - C. how much every car costs
 - D. how much are every car cost

Five lettered pairs (A to D) follow a related pair of words given in capitals. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair in capitals.

4. REFURBISH: WORN::
 - A. revive: exhausted
 - B. reward: outstanding
 - C. resume: interrupted
 - D. replace: stolen

5. PURIFY: IMPERFECTION::
 - A. align: adjustment
 - B. weary: boredom
 - C. disagree: controversy
 - D. verify: doubtfulness

Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

6. ABOLISH:

- A. exterminate
- B. cancel
- C. continue
- D. hide

7. FINISH:

- A. initiate
- B. close
- C. shape
- D. perfect

Questions 8-10 are based on the following passage.

The supervisor would have to change his attitude towards people first. The staff under him must be perceived as human beings with feelings and needs. They are not autonomous within a complex work machinery. One of the greatest needs of today's worker is to have a feeling that he is in control of his workplace and not vice versa. The best way is to satisfy this need as far as possible. He must feel firstly, that his work is meaningful. To do this the supervisor must delegate responsibility and give limited authority for the man to execute his job well. The subordinate must be properly trained to assume responsibility and authority. Once he is ready to assume these he can be made accountable for his job. Very often supervisors assume all responsibility and accountability for fear of losing control of the workplace. This makes workers under him pawns in a vast chess-board. Delegating accountability gives the worker a purpose in life and the need to do a job well. Most important is to sit with each worker and chalk out common objectives and agreed norms to achieve them. This gives workers a security as to what is expected of them. When he has met his objectives he certainly has a feeling of achievement. This feeling of achievement is the greatest motivator.

8. Responsibility and accountability make a worker

- A. tense and frightened
- B. shirk his duties
- C. vulnerable before his supervisor
- D. do his job properly

9. Supervisors do not delegate responsibility and authority to their subordinates because

- A. final responsibility is theirs
- B. subordinates are not capable enough
- C. they can't trust their subordinates
- D. they are apprehensive of losing their hold on the work place

10. Orientation of subordinates with common objectives and how to achieve them is

- A. a must**
- B. not very important**
- C. not necessary at all**
- D. optional**

ANALYTICAL REASONING

Now Sony Electronics brings tomorrow's technology to today's home stereo. The same space-age circuitry used by the Wanderer spacecraft to send images of the most distant planets back to earth has been incorporated in the new Sony X-2700 stereo system. If your home entertainment is important to you, why settle for an old-fashioned stereo system when the Sony X-2700 is priced at only a few rupees more?

11. The most serious logical weakness of this argument is its failure to
- A. provide technical data on the manufacturing specifications of the Sony X-2700
 - B. show the relevance of space-age circuitry to the requirements of home stereo
 - C. specify the exact price difference between the Sony X-2700 and old-fashioned stereo systems
 - D. acknowledge the contributions of scientists in the space program to the development of the advanced circuitry mentioned

According to Albert Einstein's famous theory of relativity, time travel is theoretically possible. Assuming that time travel were to be made possible through some technological breakthrough, it would be advantageous to send someone back in time to prevent the assassination of Archduke Franz Ferdinand in 1914 and thus keep World War I from ever occurring.

12. The argument above makes which of the following assumptions?
- A. It is not possible to alter a significant current in world history merely by changing a single event
 - B. The technology necessary for time travel is likely to be developed in the near future
 - C. If Franz Ferdinand had not been assassinated, some other catalytic event would have led to the start of World War I
 - D. The assassination of Franz Ferdinand was the crucial event that triggered the start of World War I

PTCL, Wateen and Instaphone are the Telecommunication sales companies of Pakistan. And Qadeer, Rafi, Saliq and Turaab are sales executives that work for these companies. Each sales executive works for at least one of the Telecommunication sales companies.

Qadeer always works for PTCL and at least one of the other companies. Some of the time Wateen employs only one of these sales executives; the rest of the time it employs exactly two of them.

PTCL and Instaphone each employ exactly two of these sales executives all the time.

13. If Rafi works for Instaphone only and if Saliq works for Wateen and Instaphone only, Turaab works for:

- A. PTCL only
- B. Wateen only
- C. Instaphone only
- D. both PTCL and Wateen

14.If Qadeer and Rafi both work for the same two Telecommunication sales companies, Turaab must work for:

- A. both PTCL and Wateen
- B. both PTCL and Instaphone
- C. either PTCL or Wateen but not both
- D. Wateen only

SUBJECT

- 15. What is the purpose of a box plot in statistics?**
- A. To display the distribution of a dataset**
 - B. To identify outliers in a dataset**
 - C. To compare the means of two datasets**
 - D. To calculate the standard deviation of a dataset**
- 16. In hypothesis testing, what does a p-value represent?**
- A. The probability of making a Type I error**
 - B. The probability of rejecting the null hypothesis when it is true**
 - C. The probability of obtaining the observed results or more extreme results if the null hypothesis is true**
 - D. The probability of obtaining a sample mean equal to the population mean**
- 17. Which of the following is a measure of central tendency that is highly influenced by extreme values?**
- A. Mean**
 - B. Median**
 - C. Mode**
 - D. Standard deviation**
- 18. In a statistical experiment, what does the term "random sampling" refer to?**
- A. Selecting individuals who are representative of the entire population.**
 - B. Choosing a sample in such a way that every member of the population has an equal chance of being selected.**
 - C. Collecting data from a small subset of the population.**
 - D. Selecting data points based on convenience.**
- 19. What does the term "statistical power" refer to in hypothesis testing?**
- A. The probability of making a Type I error.**
 - B. The probability of correctly rejecting the null hypothesis when it is false.**
 - C. The probability of obtaining a significant result when the null hypothesis is true.**
 - D. The probability of obtaining a non-significant result when the null hypothesis is false.**
- 20. Which statistical distribution is commonly used to model the number of successes in a fixed number of independent Bernoulli trials?**
- A. Normal distribution**
 - B. Poisson distribution**
 - C. Exponential distribution**
 - D. Binomial distribution**

ANSWER KEY

Q #.	Right Choice
1	D
2	A
3	C
4	A
5	D
6	C
7	A
8	D
9	D
10	A
11	B
12	D
13	A
14	D
15	A
16	C
17	A
18	B
19	B
20	D