



# **SAMPLE PAPER**

# **SOTS 2026**

## ENGLISH

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

1. Raza always seeks \_\_\_\_\_ wealth.

- A. from
- B. with
- C. to
- D. for

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

2. Moral:

- A. ethical
- B. honest
- C. vicious
- D. upright

Read the passage to answer question 3-5

Exercise and vitamin D increase the amount of calcium in your bones. You can get all the vitamin D you need from simply being outdoors for thirty minutes. Milk is fortified with vitamin D, and drinking nonfat milk gives you calcium, vitamins, and energy. However, if you decide to take supplemental vitamin D, 400 to 800 IU per day will safely prevent any deficiencies.

3. The word “fortified” is closest in meaning to:

- A. blended
- B. flavored
- C. irradiated
- D. enhanced

4. The word “supplemental” is closest in meaning to:

- A. additional
- B. special
- C. natural
- D. concentrated

5. The word “deficiencies” is closest in meaning to:

- A. abnormalities
- B. insufficiencies
- C. illnesses
- D. excesses

## IQ

**6. Identify the pair which is dissimilar to the others in the following?**

- A. Glass and Milk
- B. Bottle and Drink
- C. Radio and Transistor
- D. Pen and Ink

**7. Which letter precedes the letter which is 13<sup>th</sup> from D?**

- A. P
- B. R
- C. Q
- D. S

## SUBJECT

8. A random selection of 1200 adults agreed to participate in a study of the possible effects of drug X. They are followed prospectively for a period of five years to see if there is an association between the incidence of cataract and the use of drug X. This type of study is a:

- A. case-control study
- B. randomized controlled clinical trial
- C. cross-sectional study
- D. cohort study

9. 2 mangoes are taken from a box of 10 mangoes of which 4 are rotten. If one of them is found to be rotten, what is the probability that other one is also rotten?

- A.  $1/3$
- B.  $8/15$
- C.  $5/18$
- D.  $2/3$

10. The mean of a data set is 20 and the standard deviation is 4. Which of the following statements is correct?

- A. Most values lie between 16 and 24
- B. Most values lie between 12 and 28
- C. The range of the data is 4
- D. The variance of the data is 4

11. An index number is mainly used to measure:

- A. Changes in population
- B. Changes in price level over time
- C. Changes in weather conditions
- D. Changes in literacy rate

12. In hypothesis testing, the hypothesis that is assumed to be true and tested for possible rejection is called the:

- A. Alternative hypothesis
- B. Research hypothesis
- C. Null hypothesis
- D. Statistical hypothesis

13. Analysis of Variance (ANOVA) is mainly used to:

- A. Compare the variances of two populations
- B. Compare the means of two populations
- C. Compare the means of three or more populations
- D. Find the correlation between variables

**14. Which of the following best describes supervised learning in machine learning?**

- A. Learning patterns from unlabeled data
- B. Learning by trial and error using rewards and penalties
- C. Learning from data that includes both input features and known output labels
- D. Learning without any training data

**15. Which of the following is the main purpose of a sample survey?**

- A. To study the entire population in detail
- B. To collect data from a subset of the population to make inferences about the whole population
- C. To avoid any form of statistical analysis
- D. To ensure every individual in the population is included

**16. Which of the following regarding correlation ( $r$ ) is incorrect?**

- A.  $r = 0.7$
- B.  $r = -0.98$
- C.  $r = 0.107$
- D.  $r = 1.07$

**17. Autocorrelation can be tested by:**

- A. Jarque-Bera test
- B. Goldfeld-Quandt test
- C. White test
- D. Durbin-Watson test

## Answer Keys

<b>Q #.</b>	<b>Right Choice</b>
<b>1</b>	<b>D</b>
<b>2</b>	<b>C</b>
<b>3</b>	<b>D</b>
<b>4</b>	<b>A</b>
<b>5</b>	<b>B</b>
<b>6</b>	<b>C</b>
<b>7</b>	<b>A</b>
<b>8</b>	<b>D</b>
<b>9</b>	<b>A</b>
<b>10</b>	<b>B</b>
<b>11</b>	<b>B</b>
<b>12</b>	<b>C</b>
<b>13</b>	<b>C</b>
<b>14</b>	<b>C</b>
<b>15</b>	<b>B</b>
<b>16</b>	<b>D</b>
<b>17</b>	<b>D</b>