

VERBAL COMPREHENSION

Directions: Read the given passage carefully and answer the questions that follow.

Passage

During the day, the sky appears blue due to the scattering of sunlight by the atmosphere. This phenomenon, known as Rayleigh scattering, causes shorter wavelengths of light — particularly blue and violet — to scatter more than longer wavelengths like red and orange. Although violet light scatters even more than blue, our eyes are more sensitive to blue, which is why the sky appears blue rather than violet. At sunrise and sunset, sunlight passes through a greater thickness of atmosphere, scattering away most of the blue light and leaving warm red and orange hues visible on the horizon.

1. According to the passage, Rayleigh scattering primarily affects _____
 - a. Longer wavelengths such as red and orange
 - b. Shorter wavelengths such as blue and violet
 - c. All wavelengths equally
 - d. Only ultraviolet wavelengths
2. The sky appears blue rather than violet because _____
 - a. Violet light does not scatter
 - b. Blue light scatters less than violet
 - c. Human eyes are more sensitive to blue than violet
 - d. Violet wavelengths are absorbed by the ozone layer

Directions: Choose the best word from the given options to complete the sentence.

1. Filtering water through a _____ removes impurities.
 - a. Funnel
 - b. Beaker
 - c. Filter
 - d. Flask
2. The scientist's ground-breaking discovery earned her worldwide _____.
 - a. Ridicule
 - b. Hostility
 - c. Anonymity
 - d. Acclaim
3. The opening chapter of the biography gave a _____ of the subject's early life.
 - a. Glossary
 - b. Preface
 - c. Chronology
 - d. Sketch
4. Water is a _____ resource that must be conserved carefully.
 - a. Surplus
 - b. Trivial
 - c. Precious
 - d. Obsolete

NUMERICAL COMPREHENSION

Directions: Each question below is followed by two statements labeled (1) and (2). Decide whether the data in the statements is sufficient to answer the question. Choose:

- A. If statement (1) ALONE is sufficient but statement (2) alone is not sufficient.
- B. If statement (2) ALONE is sufficient but statement (1) alone is not sufficient.
- C. If BOTH statements TOGETHER are sufficient, but NEITHER alone is sufficient.
- D. If EACH statement is sufficient by itself.
- E. If statements (1) and (2) TOGETHER are NOT sufficient and additional data are needed.

1. What was Priya's salary before her promotion?
 1. Her current salary is Rs 45,000 per month.
 2. Her salary increased by Rs 8,000 after promotion.
2. If p and q are positive integers, is $p \times q$ greater than 100?
 1. $p = 4q$
 2. $q > 5$
3. Does the library have more than 5,000 books?
 1. A new batch of 300 books was added last month.
 2. The library has at least one book in each of its 600 shelves.

Directions: Read the problem statements below and choose the answer that best fits.

- 1) P and Q invested Rs 3,000 and Rs 7,000 respectively. If the total profit is Rs 50,000, what is P's share if profits are divided in the ratio 3:7?
 - a) Rs 12,000
 - b) Rs 15,000
 - c) Rs 18,000
 - d) Rs 20,000
- 2) Mangoes are purchased at 12 for Rs 10 and sold at 10 for Rs 12. What is the gain percentage?
 - a) 44%
 - b) 40%
 - c) 36%
 - d) 32%
- 3) Meena can complete a task in 12 days and Reena in 18 days. Working together, how long will it take?
 - a) 6 days
 - b) 7 days
 - c) 7.2 days
 - d) 8 days

Directions: Refer to the data given in the table below and answer the questions.

	Score Category			Total
	Below Average	Average	Above Average	
Urban	18	26	16	60

Rural	22	14	4	40
Total	40	40	20	100

1. What proportion of Above Average students are from Urban areas?

- a. 60%
- b. 70%
- c. 75%
- d. 80%

2. Among Below Average students, what is the ratio of Urban to Rural?

- a. 7:9
- b. 9:11
- c. 9:7
- d. 11:9

3. Among which group (Urban/Rural) is the number of Above Average students exactly one-fourth of the number of Below Average students?

- a. Urban
- b. Rural
- c. Neither
- d. Both

LOGICAL REASONING

Directions: A series of symbols represent certain actions on figures. Work down each column starting from the top figure and applying the actions shown. Choose from the five options the column that results from carrying out the actions.

→	Turn the figure from left to right (mirror)
↓	Turn the figure upside down
■	Delete the figure in the box
⊕	Exchange this figure with the immediately previous figure
●	Fill colour in the figure

Note: For questions 1–3, refer to the diagrammatic reasoning question set as appearing in the actual examination. Choose the answer column (a–e) that correctly results from applying the given actions to the starting figure.

1. [Diagrammatic figure — select the correct answer from options a, b, c, d, e]
2. [Diagrammatic figure — select the correct answer from options a, b, c, d, e]
3. [Diagrammatic figure — select the correct answer from options a, b, c, d, e]

Directions: Choose from the five diagrams (a, b, c, d, e) the one that best illustrates the relationship among the three given classes. Each class is shown as a circle.

(a) Three concentric circles (b) Three separate circles (c) One circle inside a larger, third separate (d) Two overlapping circles, one separate (e) Two circles inside a third

1. Mango, Banana, Fruit
2. Rose, Trees, River
3. Engineers, Scientists, Lawyers
4. Cardiologists, Surgeons, Doctors

Directions: Consider the information given and answer the questions that follow.

Ramesh earns more than Dinesh, but less than Mahesh. Dinesh earns more than Ganesh. Lokesh earns more than Ramesh but less than Mahesh.

Who among them earns the most?

- a. Ramesh
- b. Lokesh
- c. Dinesh
- d. Mahesh
- e. Ganesh

Who among them earns the least?

- a. Ramesh
- b. Lokesh

- c. Dinesh
 - d. Mahesh
 - e. Ganesh
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Answer Key

Reading Comprehension

- 1. b
- 2. c

Sentence Completion

- 1. c
- 2. d
- 3. d
- 4. c

Numerical: Sufficiency

- 1. c
- 2. e
- 3. b

Numerical: Arithmetic

- 1. b
- 2. a
- 3. c

Numerical: Data Interpretation

- 1. d
- 2. b
- 3. b

Logical: Diagrammatic

- 1. b
- 2. c
- 3. d

Logical: Venn Diagrams

- 1. c
- 2. b
- 3. d
- 4. e

Logical: Working with Data

- 1. d
- 2. e