

**SOF NATIONAL
SCIENCE OLYMPIAD**

SYLLABUS

Section – 1 : Patterns, Alphabet Test, Coding-Decoding, Ranking Test, Mirror Images, Geometrical Shapes and Solids, Embedded Figures, Direction Sense Test, Days and Dates & Possible Combinations, Analogy and Classification.

Section – 2 : Plants, Animals, Food and Digestion, Human Needs, Matter and Materials, Force, Work and Energy, Our Environment, Earth and Universe.

Section – 3 : Higher Order Thinking Questions - Syllabus as per Section – 2.

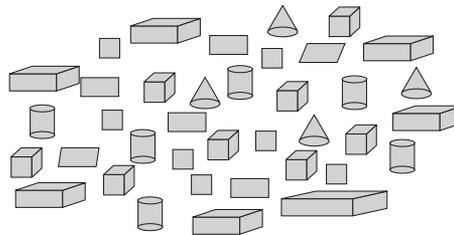
Total Questions : 35

Time : 1 hr.

PATTERN & MARKING SCHEME			
Section	(1) Logical Reasoning	(2) Science	(3) Achievers Section
No. of Questions	5	25	5
Marks per Ques.	1	1	2

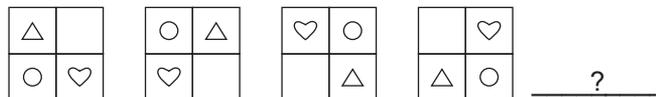
LOGICAL REASONING

1. There are _____ number of cubes in the given figure.



- (A) 8 (B) 10 (C) 12 (D) 15

2. Find the next figure in the given figure pattern.



- (A)  (B)  (C)  (D) 

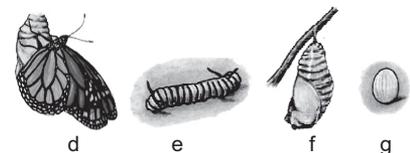
3. In a certain code language, if BOARD is written as \$3%#6 and ROPE is written as #35@, then PEAR will be written as _____.

- (A) 5%6# (B) 5^%# (C) #6%5 (D) 5@%#

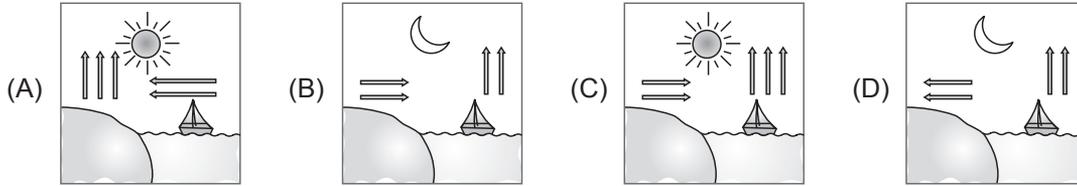
SCIENCE

4. The given pictures show the developmental stages of a butterfly arranged randomly. Select the stage of its life cycle during which it is (a) most active eater, and (b) least active.

- (a) (b)
(A) d g
(B) e f
(C) d e
(D) f g



5. Which of these illustrates sea breeze?



6. _____ is an imaginary line that runs from North Pole to the South Pole. It is tilted at an angle of 23.5 degrees.

- (A) Equator (B) Axis (C) Orbit (D) None of these

7. The food prepared by the leaves is used by the plants for their daily activities. The excess food gets stored as starch in _____.

- (A) Roots (B) Stems (C) Fruits (D) All of these

8. Refer to the given conversation.

Meetu : Mummy, please stitch a cotton frock for my doll.

Mother : Sure Meetu ! She must be feeling _____ wearing woollens in _____ .

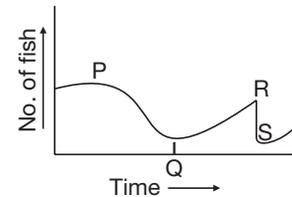
Select the correct option to fill the blanks in the above conversation.

- (A) Hot, summer (B) Cold, summer (C) Wet, winter (D) Cold, winter

ACHIEVERS SECTION

9. The given graph shows the amount of changes in the number of fish in a water body in a year. Select the INCORRECT option regarding this.

- (A) At time P, some factory was established near the water body that discharged its used water in it.
 (B) At time Q, the factory was relocated to some other part, away from the water body.
 (C) At time R, large amount of oil was accidentally spilled into the water body.
 (D) At time S, a new factory was established near the water body.



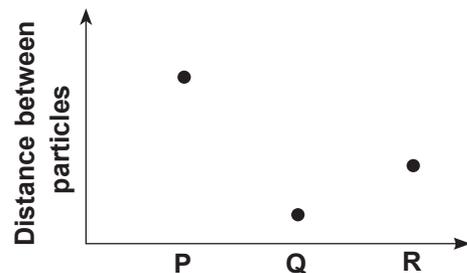
10. The given graph shows the distance between the particles in three samples (P, Q and R) having water in different states of matter.

Which of the following will NOT have

X – Fixed shape only

Y – Fixed shape and volume?

- | | |
|----------|----------|
| X | Y |
| (A) R | Q |
| (B) R | P |
| (C) P | Q |
| (D) P | R |



SPACE FOR ROUGH WORK

ANSWERS

1. (A) 2. (C) 3. (D) 4. (B) 5. (A) 6. (B) 7. (D) 8. (A) 9. (D) 10. (B)