



**SOF NATIONAL
SCIENCE OLYMPIAD**

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

SYLLABUS

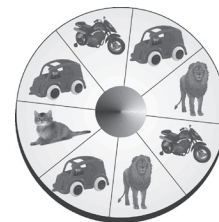
Section – 1 : Patterns, Analogy and Classification, Coding-Decoding, Mirror Images, Embedded Figures, Alphabet Test, Ranking Test, Grouping of Figures, Figure Matrix, Geometrical Shapes, Days and Dates & Possible Combinations.

Section – 2 : Plants and Animals, Birds, Food, Housing, Clothing and Occupation, Transport, Communication and Safety Rules, Human Body, Earth and Universe, Matter and Materials, Light, Sound and Force, Our Environment.

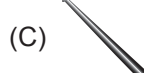
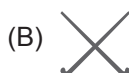
Section – 3 : Higher Order Thinking Questions - Syllabus as per Section – 2.

LOGICAL REASONING

1. If Anshuman spins the wheel once, the spinner will least likely come on ____.

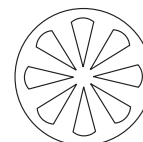


2. If is related to , then in the same way is related to _____.



3. The figure has ____ straight lines and ____ curves.

- (A) 9, 10
(B) 14, 12
(C) 16, 9
(D) 15, 10



SCIENCE

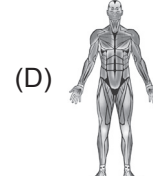
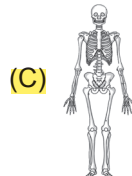
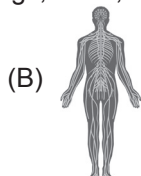
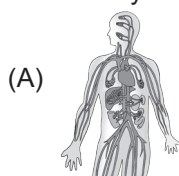
4. What can be the reason that a taxi driver has to be more careful when driving on a rainy day than driving on a hot summer day?

- (A) Gravitational force between taxi and road is higher on a hot summer day.
(B) Frictional force between taxi and road is lower on a rainy day.
(C) Gravitational force between taxi and road is lower on a rainy day.
(D) Frictional force between taxi and road is lower on a hot summer day.

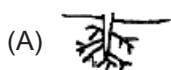
5. Water droplets that are too heavy to float make

- (A) Fog (B) Clouds (C) Rain (D) Smoke.

6. Which of these organ systems gives shape and support to our body and protects the important organs of the body such as lungs, brain, heart, etc.?



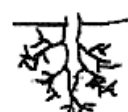
7. The figures below show the roots of some plants. Which of the following will hold the plant most firmly to the soil ?



(C)



(D)



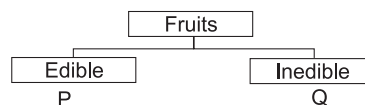
8. Ducks have
(A) Short and broad beaks
(C) Slender beaks

(B) Broad and flat beaks
(D) Pointed beaks.

9. Look at the classification table shown.
'P' and 'Q' are correctly represented by _____.

- P
(A) Tomato
(B) Mimosa
(C) Pineapple
(D) Apple

- Q
Chilli
Dragon fruit
Rubber
Coconut



10. Renu's grandmother got seriously ill in afternoon and needs to be taken to hospital immediately. In such a situation, which of the following modes should she most preferably use in order to communicate to her father who was in his office?

- (A) E-mail (B) Letter (C) Radio broadcast (D) Phone call

11. The bird that lays its eggs in the nest of a crow is

- (A) Cuckoo (B) Parrot (C) Woodpecker (D) Pigeon.

12. Which of the following will not dissolve in water?

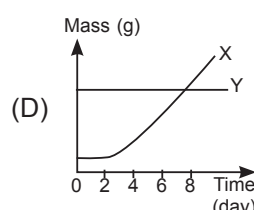
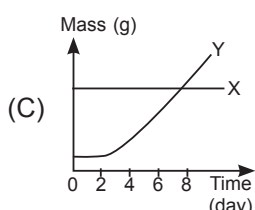
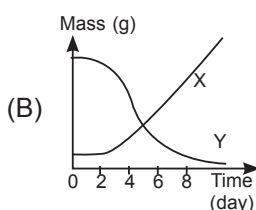
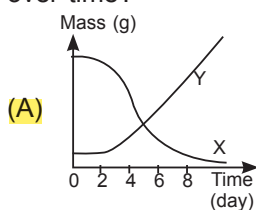
- (A) Salt (B) Sugar (C) Sand (D) Baking soda

13. Soil helps trees because soil

- (A) Makes food for the trees (B) Moves the tree seeds to new places
(C) Gives nutrients to the trees (D) Turns the roots into new trees.

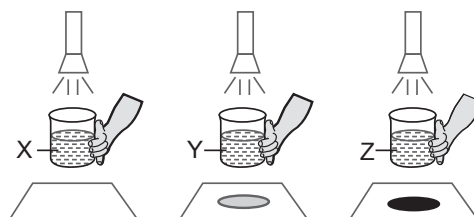
ACHIEVERS SECTION

14. When a seedling grows, it depends on the seed leaves for nutrition until the first leaves are formed. Which of the following graph correctly identifies the changes in mass of seed leaf (X) and shoot (Y) over time?



15. Observe the given pictures carefully and select the correct conclusion regarding liquids X, Y and Z.

- (A) Liquid X is transparent and liquid Z is translucent.
(B) Liquid Y is opaque and liquid Z is translucent.
(C) Liquid X is transparent and liquid Z is opaque.
(D) Liquid Y is transparent and liquid Z is opaque.



SPACE FOR ROUGH WORK