

Total Questions : 50

Time : 1 hr.

**PATTERN & MARKING SCHEME**

Section	(1) Logical Reasoning	(2) Science	(3) Achievers Section
No. of Questions	10	35	5
Marks per Ques.	1	1	3

**SYLLABUS**

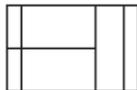
**Section – 1 :** Verbal and Non-Verbal Reasoning.

**Section – 2 :** The Wonderful World of Science, Food and Its Components, Materials Around Us, A Journey through States of Water, Methods of Separation, The Living World and Its Diversity, Exploring Magnets, Measurement of Length and Motion, Temperature and Its Measurement, Beyond Earth, Natural Resources.

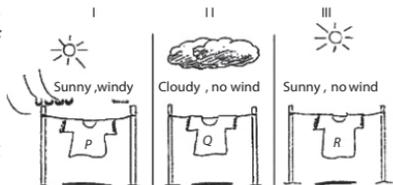
**Section – 3 :** Higher Order Thinking Questions - Syllabus as per Section – 2.

**LOGICAL REASONING**

- Find the total duration of time from 8:45 a.m. to 3:07 p.m. on the same day.  
(A) 5 hours 20 minutes (B) 6 hours 22 minutes  
(C) 7 hours 22 minutes (D) 6 hours 18 minutes
- In a certain code language, if SIXTH is written as 80, then how will CLASS be written in the same code language?  
(A) 54 (B) 48 (C) 60 (D) 42
- Find the number of rectangles formed in the given figure.  
(A) 12 (B) 13  
(C) 14 (D) More than 14

**SCIENCE**

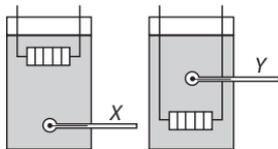
- Three similar T-shirts made up of the same fabric were soaked in the same amount of water. The T-shirts were then left to dry in the open under different conditions (I, II and III) as shown in the diagrams. Starting with the T-shirt that will take shortest time to dry, arrange the three T-shirts in order of their rate of drying.  
(A)  $Q > R > P$  (B)  $R > P > Q$  (C)  $P > R > Q$  (D)  $Q > P > R$
- Which of the following statements is/are correct?  
(i) To measure distances correctly, reference point must be selected first.  
(ii) For a particle to be in state of motion, its position must be constant at different instances of time.



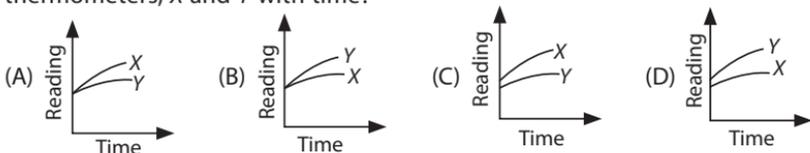
- (iii) The appropriate unit for measuring the thickness of a ten rupees coin is meter.  
 (iv) An object in motion with respect to one person will certainly be in motion with respect to another person.

- (A) (i) and (ii) only (B) (iii) and (iv) only (C) (i) only (D) (i), (ii) and (iv) only

6. The diagram shows two setups each consisting of a container filled with water, a heater and a thermometer. The positions of the heater and the thermometer, and initial thermometer readings differ in both the setups.



Which of the following graphs represents the approximate variations of the readings of the thermometers, X and Y with time?



7. Read the given statements and select the correct option.

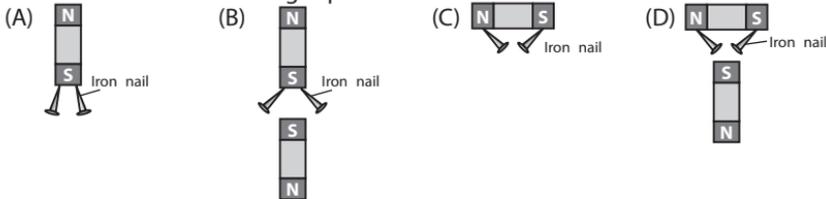
**Statement I :** It is advised to eat sources of vitamin C raw.

**Statement II :** Vitamin C may get destroyed if heated.

- (A) Both statements I and II are true and statement II is the correct explanation of statement I.  
 (B) Both statements I and II are true but statement II is not the correct explanation of statement I.  
 (C) Statement I is true but statement II is false.  
 (D) Both statements I and II are false.
8. Which among the given diseases is/are transmitted by female mosquitoes?  
 (A) Malaria (B) Dengue (C) Chikungunya (D) All of these

### ACHIEVERS SECTION

9. Which one of the following representations is incorrect?



10. Read the given statements and select the option that correctly identifies them as true (T) or false (F) ones.

- (i) Mustard plant is a herb which completes its life cycle in two years.  
 (ii) Stilt roots grow downwards and provide extra support to the plant.  
 (iii) Plants having fibrous roots are usually easily pulled out from the ground.  
 (iv) Leaf tendrils are found in *Gloriosa* plant.  
 (v) *Hibiscus* plant has simple leaves with reticulate venation.

- (i) (ii) (iii) (iv) (v) (i) (ii) (iii) (iv) (v)  
 (A) T T F T F (B) F T T T T  
 (C) F T F T F (D) T F F F T

### ANSWER KEY

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