

## PRE SUMMATIVE ASSESSMENT-I-2016-17

CLASS - IX SCIENCE

'PT'

### SECTION - A

1. State the full form of ATP.      2. Define acceleration, and give its S.I. unit.      3. Define 1 Newton.
- 4 Give reason for following: (i) Why does ice float on Water? (ii) Why does gas fill completely the vessel in which it is kept?
5. Write two differences between Xylem and Phloem.
6. Is it possible that an object is moving in a certain direction with an acceleration in the perpendicular direction ? Give example. State the direction of acceleration in such motion.
7. List three characteristics of particles of matter.
8. List two properties of solutions. To make a saturated solution, 36 g of sodium chloride is dissolved in 100g of water at 293K. Find the concentration at this temperature.
9. Define a compound with the help of an example. List its any two characteristics.
10. How are plasma membrane and cell wall different from each other ? State three differences.
11. What will happen if: (a) Ribosomes are removed from the cell. (b) Golgi apparatus is removed from the cell and (c) Plasma membrane ruptures
12. Manoj while driving to school completes the average speed of his trip to be 20 km/h. On his return trip along the same rout, there is less traffic and the average speed is 30 km/h. What is the average speed for Manoj's trip?
13. A hammer of mass 500g, moving at 50 m/s strikes a nail. The nail stops the hammer in a very short time equal, to 0.01S. Find the force exerted by the nail on the hammer.
14. List three characteristics of unbalanced force.
15. What happens to the gravitational force between two bodies if : (a) the mass of one body is doubled ? (b) the distance between the bodies is doubled and tripled ? (c) The masses of both the bodies are doubled?
16. List three advantages of the large gravitational force of the Earth
17. State three differences between mixed cropping and intercropping with example.
18. What is animal husbandry ? How is it beneficial to farmers ?
19. Based on the following characteristics, distinguish in tabular form, the behavior of true solution, suspension and colloidal solution. (a) Appearance (b) Visibility (c) Filterability (d) Tyndall effect (e) Particle size
20. Draw a labelled diagram to explain how water is purified in the waterworks systems in towns ?
21. (a) What causes movement in muscles ? (b) What are involuntary muscles ? How do they help in our body function ?
22. The driver of a moving car suddenly sees ahead a very old man on the middle of the road. To save the old man he applied the brake, which produces an acceleration of  $4\text{m/S}^2$  in opposite direction to the motion. After 3 seconds car comes to rest.
  - (i) Calculate the initial velocity and the distance travelled by the car before stopping.
  - (ii) If the old man is 20m away from the car, would the driver succeed to save the old man ?
  - (iii) What value does the car driver shows ?
23. (a) Which of the following have more inertia?
  - (i) a rubber ball or a stone.    (ii) a Acycle or a train.
  - (iii) a five rupee coin or a one rupee coin. Give justification in each case.

(b) Name the unbalanced force which :

- (i) allows a body to fall from a height                      (ii) stops a moving car when its engine is ,hut off.

24. (a) A farmer found that xanthium and parthenium are also growing along with paddy in the field ? What are such plants called? How do the presence of these plants affect the crop yield ?

(b) List any four methods to control and prevent the growth of such plants.

## SECTION-B

25. The four operations for testing the presence of starch in rice are given below

- (i) Put a few grains of rice in a test tube.                      (ii) Add a few drops of iodine solution.  
(iii) Add water to the test tube containing rice                      (iv) Boil the rice and filter the contents.

The correct sequence of operation is

- (a) i, iii, iv, ii                      (b) i, ii, iii, iv                      (c) i, iii, ii, iv                      (d) i, ii, iv, iii

26. Pravesh washed a few grains of arhar dal in water. The water become yellow. He then added .a few drops of HCL to the same test tube, the water turned pink in colour. From the above test Pravesh concluded that arhar dal contains :

- (a) proteins                      (b) metanil yellow                      (c) turmeric                      (d) starch

27. A student was asked to mix the white of an egg with water and stir well. The student observed that :

- (a) a transparent solution is formed                      (b) a translucent mixture is formed  
(c) egg white settles down at the bottom                      (d) egg white floats on the surface

28. The reaction of iron and sulphur to form iron sulphide takes place at :

- (a) at very high temperature                      (b) in the presence of a catalyst  
(c) at moderate temperature                      (d) In the presence of an acid

29. Student 'X' puts iron nails in  $\text{CuSO}_4$  solution, while the other student 'Y' puts copper pieces in  $\text{FeSO}_4$  solution.

After sometime the observation that file solution turns pale green from blue will be reported by :

- (a) Student 'y'    (b) Student 'X'    (c) Both student 'X' and 'y'                      (d) None of them

30. A student prepared the temporary mount of onion peel In this preparation he used glycerine. The purpose of using glycerine was :

- (a) to increase the beauty                      (b) to avoid drying of the material  
(c) to avoid the bubble formation                      (d) to increase the clarity

31. While observing a slide of tissue under a microscope, a student observed light and dark bands. The slide can be of :

- (a) voluntary muscles    (b) involuntary muscles                      (c) cardiac muscles                      (d) unstrained muscles

32. A mixture of sand, camphor and common salt is heated in a china dish. Which component or components will be deposited as sublimate on the upper surface of the funnel?

- (a) common salt only    (b) common salt and camphor both                      (c) camphor only                      (d) salt only

33. A book is lying on a table, when we apply force on it to just slide it on the table, then the friction between the two surface is :

- (a) rolling    (b). static                      (c) sliding                      (d) dynamic

34. Suppose you have prepared a solution of sodium chloride in water. how would you decide whether it is true solution or not List two tests/observations.

35. To determine the boiling point of the given sample of a liquid state two precautions that should be observed to get better result.

36. A student dissolved 1 g of sugar in 10ml of distilled water in a beaker 'A'. He dissolved 10 g of sugar in 100ml of distilled water in beaker B. Then he dropped a few raisins in each. What will happen to the raisins after two hours?

Name and define the process involved in this case