

Sub-(CHEMISTRY)
Class- 9th (2019-20)

One mark questions-

- 1- Why do we see water droplets on outer surface of a glass containing ice cold water?
- 2- Which gas is called dry ice? Why?
- 3- A diver is able to cut through water in a swimming pool. Which property of matter does this observation show?
- 4- Define the following terms
 - a) Melting point
 - b) Diffusion
- 5- Difference between evaporation and boiling.
- 6- Difference between homogenous and heterogeneous mixtures.
- 7- Identify the solutions among the following mixtures.
 - a) Soil
 - b) Sea water
 - c) Air
 - d) Coal
 - e) Soda water
- 8- A solution of urea in water contains 16 grams of it in 120 grams of solution. Find out the mass percentage of the solution.
- 9- Distinguish between compound and mixture.
- 10- How do sol and gel differ from each other? Give one example for each.

Sub-(BIOLOGY)
Class- 9th (2019-20)

One mark questions-

- 1- Why is it said that “a cell without nucleus is without any future”?
- 2- Draw a neat diagram of an Animal cell
- 3- Describe the structure of the plant cell.
- 4- What is cellulose & its function?
- 5- Describe the role played by the lysosomes in a cell. Why these are termed as suicidal bags?
How do they perform their function?
- 6- Why is epidermis present as a thick waxy coating of cutting in desert plants?
- 7-
 - a) Differentiate between epidermal and cork cells.
 - b) Why are they called protective tissues?(Parts)
- 8- Mention characteristic features & three function of xylem.
- 9- Explain how the bark of a tree is formed. How does it act as a protective tissue? 10-
Give reasons for the following :-
 - a) Bark of a tree is impervious to gases & water.
 - b) In desert plants, epidermis has a thick waxy coating.

Sub. - PHYSICS
Class - 9th (2019-20)

1. Which of the following is true for displacement?
 - a) It can be zero.
 - b) Its magnitude is greater than the distance travelled by the object.
2. Distinguish between speed and velocity
3. During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light, that is, $3 \times 10^8 \text{ ms}^{-1}$
4. A trolley, while going down an inclined plane, has an acceleration of 2 cms^{-2} What will be its velocity 3s after the start ?
5. When is the acceleration taken as negative?
6. What do you mean by average speed? What are its units?
7. Differentiate b/w distance and displacement.
8. With the help of a graph, derive the relation $V = u + at$.
9. Deduce the following equations of motion.
 - 1) $S = ut + \left[\frac{1}{2} \right] at^2$
 - 2) $V^2 = U^2 + 2as$
10. What do you understand by instantaneous velocity?
11. State law of conservation of momentum.
12. Derive the mathematical relation of Newton's second law of motion.
13. A bullet of mass 4 g when fired with a velocity of 50 ms^{-1} , can enter a wall up to a depth of 10cm. How much will be the average resistance offered by the wall.