

September - 2010, Class IX, Sub : Science
(April to August)

Time : 3 Hrs.

M.M.: 60

All questions are compulsory. Draw labelled diagrams wherever necessary.

(Section - A)

- Q.1 What do you mean by vibratory motion?
Q.2 What is Inertia?
Q.3 What are vector quantities?
Q.4 Write symbols of Copper and Potassium.
Q.5 Give distribution of electrons in different shells of Neon.
Q.6 What do you mean by Aqueous Solution?
Q.7 Name the largest cell.
Q.8 Name two types of complex permanent tissues.
Q.9 Write the importance of Ozone layer.
Q.10 What is balanced diet? (10×1=10)

(Section-B)

- Q.11 Match the following statements with the terms velocity & speed.
a) Rate of covering the distance b) Rate of covering the displacement.
Q.12 Why does an electric fan continue rotating for sometime after the current is switched off?
Q.13 Give the magnitude of net force acting on a car moving with constant velocity of 30 km/h on a rough road.
Q.14 Give two examples of elements and compound.
Q.15 Give two uses of the following:
i) X-rays
Q.16 List the application of radioisotopes in various fields of life.
Q.17 What will happen to a cell, if its nucleus is removed?
Q.18 Draw a well-labelled diagram of nerve-cell.
Q.19 What is binomial nomenclature? Illustrate with one example.
Q.20 Mention two ways by which we can control pollution. (10×2=20)

(Section-C)

- Q.21 When bullet is fired from a gun, the gun gives a kick in the backward direction. Explain why?
Q.22 What is the importance of Newton's second law of motion?
Q.23 Give an experiment to show that colloids show Tyndall effect.
Q.24 Write three characteristic features of plant kingdom.
Q.25 What is meant by food adulteration? Give some examples. (5×3=15)

(Section - D)

- Q.26 Comment on the statement "The force of action and reaction in Newton's third law of motion cannot act on the same body".
OR
A car driver, on seeing a child crossing the road, suddenly applies brakes, so as to stop the car in 4 seconds under a retardation of 10m/sec.^2 . Calculate the distance covered by the car in 4 seconds?
27. Give number of protons, electrons and neutrons in $^{235}_{92}\text{U}$ and $^{238}_{92}\text{U}$. What is the relationship?
OR
Compare characteristics of - particles, - particles and - rays.
28. Give five differences between mitosis and meiosis.
OR
Write short notes on :
i) Smooth muscles ii) Striated muscles iii) Cardiac muscles (5×3=15)