

IMPORTANT INSTRUCTIONS: -

1. All questions are compulsory
2. Marks of each question given next to it

SECTION – A (PHYSICS)

Q1. Define gravitational potential energy

OR

Define Electric power, write its unit 1

Q 2. Find the energy possessed by an object of mass 10 kg when it is at a height of 6 m above the ground. Given $g=9.8 \text{ m/s}^2$ 2

Q 3. State law of conservation of energy and prove that sum of potential & kinetic energy remain constant at each point of free falling body 3

OR

An electric bulb of 60w is used 6 hrs. per day. Calculate the units of energy consumed in one day by the bulb

SECTION – B (CHEMISTRY)

Q.1 The chemical symbol for sodium is: 1/2

(a) S (b) So (c) Na (d) N

Q.2 What is atomicity? 1/2

Q.3 Calculate the molar mass of the following substances: 1

(a) Sodium Chloride (b) carbon di oxide

Q.4 What is the mass of : 1

(a) 0.2 mole of oxygen atoms (b) 0.5 mole of water molecules

Q.5 Which postulate of Dalton's atomic theory is a result of the law of conservation of Mass? 1

Q. 6 What is the law of conservation of mass? 2

Or

Q.7 What is the law of constant proportions?

SECTION – C (BIOLOGY)

Q 1- Which one of the following is not a viral disease? 1
(a) Dengue
(b) AIDS
(c) Typhoid
(d) Influenza

2-Which one of the following diseases is caused by protozoans? 1
(a) Malaria
(b) Influenza
(c) AIDS
(d) Cholera

Fill the blanks- 1x2=2

Q 3- Living organisms carrying the infecting agents from one person to another are called _____.

Q 4- _____ disease continues for a few days and causes short term effect on the body.

SA-

Q 5- What are the different means by which infectious diseases are spread? 1

Q 6- Write the difference between vaccination and immunisation. 1

Q 7-Write about cause, symptom and prevention of the following diseases – 2

- a- Malaria
- b- TB
- c- Rabies
- d- Peptic Ulcer