

CLASS 9TH

SHORT TEST - 02

GENERAL INSTRUCTION

Maximum Marks = 30 Marks

Maximum Time = 60 minutes

Syllabus Covered: Atoms and Molecules, Gravitation, Work Power Energy, Cell: The unit of life, Structure of atom, Tissues

Q.(1) to (3) ,1 marks each $-3 \times 1 = 3M$

Q.(4) to (7), 3 marks each $-4 \times 3 = 12M$

Q. (8) to (10), 5 marks each $-3 \times 5 = 15$ M

Section - A

- **1.** Gravitational force acts on all objects in proportion to their masses. Why, then a heavy object does not fall faster than a light object?
- 2. An element 'X' has mass number of 4 and atomic number 2. Find the valency of 'X'.
- **3.** Define weight of a body.

Section - B

- **4.** What is the difference between 'g' and 'G'.
- 5. What is the number of valence electrons in Sodium ion and Oxide ion?
- **6.** (a) Why are railway tracks laid on large sized concrete sleeper? Explain.
 - (b) Explain, why a truck or a motor bus has much wider tyres.
 - (c) Find the ratio of the pressure exerted by a block of 200N when placed on a table top along its two different sides with dimensions $20cm \times 15 cm$ and $30cm \times 15 cm$.
- 7. What is a tissue? What is the utility of tissues in multicellular organism?

Section - C

- **8.** What is Osmosis. What would happen to life of a cell if there was no Golgi apparatus?. Write the functions of Nervous tissue.
- **9.** State the law of conservation of energy. Show that the energy of freely falling body is conserved.
- **10.** What are Isotopes and Isobars. State difference between them. Mention two uses of isotopes.