

## CLASS 9 SCIENCE ASSIGNMENT

### THE FUNDAMENTAL UNIT OF LIFE

Answer the following questions

- 1) Who discovered cell? Why cell is called the structural and functional unit of life? Draw cells of an onion peel.
- 2) Why is plasma membrane called a selectively permeable membrane.
- 3) Why are lysosomes known as suicide bags? Where are protein synthesized inside the cell?
- 4) Write down the differences of plant cell and animal cells. Draw the diagrams of plant cell and animal cell.
- 5) How a prokaryotic cell is different from an eukaryotic cell?
- 6) Which organelle is known as the powerhouse of the cell? Why?
- 7) How does Amoeba obtain its food?
- 8) What is osmosis.
- 9) Name two organelles that contain their own genetic material.
- 10) How does  $\text{CO}_2$  move in and out of the cell?

MATTER IN OUR SURROUNDINGS

- 1) What are the characteristics of the particles of matter?
- 2) Give reasons:-
  - a) A gas exerts pressure on the walls of the container.
  - b) A wooden table should be called a solid.
  - c) We get perfume smell sitting several metres away.
- 3) Suggest a method to liquify atmospheric gases.
- 4) Why does a desert cooler work better on a hot dry day?
- 5) What type of clothes should we wear in summer?
- 6) Convert to Celsius scale :-  $300\text{K}$ .
- 7) Convert to Kelvin scale :-  $373^{\circ}\text{C}$ .
- 8) What is the physical state of water at a)  $25^{\circ}\text{C}$  (b)  $0^{\circ}\text{C}$  (c)  $100^{\circ}\text{C}$ .
- 9) Why ice at  $273\text{K}$  is more effective in cooling?
- 10) Explain by schematic diagram the inter conversion of three states of matter.