### SCIENCE IX

#### TIME : 3 hrs.

#### M.M. 60

- Questions 1 ,2,9,10.17,18 carries 1 marks.
- Questions 3,4,11,12,19,20 to 10 carries 2 marks.
- Questions 5 to7,13 to 15, 21 to 23 carries 3 marks.
- Questions 8,16,24 carries 5 marks.

## SECTION-A CHEMISTRY

- 1. What is numerical value of one mole?
- 2. What is the name and valency of the element whose Z=5?
- 3. A solution contains 50 g of common salt and 400 g of water. Calculate the concentration in terms of mass percentage of the solution?
- 4. What will be the effect of change of pressure on the state of a matter?
- 5. write chemical formula of following
  - a) Copper nitrate
  - b) Calcium carbonate
  - c) Magnesium chloride
- 6. Compare the properties of electrons, protons and neutrons?
- 7. Explain the various laws of chemical combination?
- 8. a) What is evaporation? What are the various factors which affect it?b) Why should we wear cotton clothes in summer?

# **SECTION-B PHYSICS**

- 9. What is the nature of distance time graph for uniform motion of an object?
- 10. What is the unit of power?
- 11. An electric bulb of 100 W is used 20 hours per day. Calculate the units if energy consumed in a one week?
- 12. An object of mass 20 kgs is moving with uniform velocity of 6 m/s. what is kinetic energy possessed by the object?
- 13. What is relative density of a substance? Relative density of silver is 10. 8 g. the density of water is 1000kg/m<sup>3</sup>. What is the density of silver in SI unit?
- 14. State various laws of motion?
- 15. State the universal law of gravitation? What I sits importance?
- 16.a) What are waves and how are they classified. Give an example of each type.
  - b) Give 3 characteristics of wave motion

# SECTION-C BIOLOGY

- 17. Where is apical meristem found?
- 18. What is cause of fog?
- 19. What do you mean by depletion of ozone layer? Is it harmful?
- 20. What is pasturage? How it is related to honey production?
- 21. What are fertilizers and manures? What is difference between them

- 22. Name three infectious diseases and how theses are caused?
- 23. Draw a labeled diagram of neuron?
- 24. Explain the various divisions of vertebrae?