#### KENDRIYA VIDYALAYA KHAMMAM

# FORMATIVE ASSESSMENT -I (2015-2016)

CLASS-X TIME: 90 Min

SUBJECT SCIENCE Max Marks: 40

### Instructions:

The question paper has 17 questions in all.

Questions 1-5 are 1 mark questions; 6-10 are 2 mark questions;

11-15 are 3 mark questions; 16 & 17 are 5 mark questions.

Marks are indicated at the end of each question

Draw diagrams wherever necessary.

- 1. Define the unit of current. 1M
- 2. Write the magnitude of charge of one electron. 1M
- 3. Identify the substance oxidized and reduced in the following equation. 1M

$$ZnO + C \longrightarrow Zn + CO$$

- 4. What is blood? 1M
- 5. Name the stored food in our body? 1M
- 6. Define Resistivity of a conductor. 2M
- 7. What do you mean by exothermic reaction? Give an example. 2M
- 8. Write the balanced chemical equation and identify the type of the reaction. 2M
  - a) Iron reacts with Copper Sulphate to form Ferrous Sulphate and Copper.
- 9. Draw the neat labelled diagram of open stomata and closed stomata. 2M
- 10. What are the main differences between Aerobic respiration and anaerobic respiration? 2M
- 11. State and Explain Ohm's law. 3M
- 12. Write any three factors on which the resistance of conductor depends? 3M
- 13. Consider the circuit diagram given below 3M

If  $R_1=R_2=R_3=R_4=3$  Find the net resistance (equivalent resistance) of the circuit.

- 14. Explain the following terms. 3M
  - i) Corrosion
- ii) Rancidity
- 15. What are the three events that occur during Photosynthesis? 3M
- 16. a) When copper powder is added in a china dish, its surface becomes coated with black colored substance.
  - i) Why this black colored substance formed? 1M
  - ii) Identify the black substance. 1M

- iii) Write the balanced chemical equation that takes place during the reaction. 1M
- b) What is meant by photochemical decomposition reaction? Give an example. 2M
- 17. a) Draw a neat labelled diagram of human digestive system. 3M
  - b) Point out differences between an artery and vein. 2M

#### KENDRIYA VIDYALAYA KHAMMAM

# **FORMATIVE ASSESSMENT -I (2015-2016)**

CLASS-IX TIME: 90 Min

SUBJECT SCIENCE Max Marks: 40

# **Instructions:**

The question paper has 17 questions in all.

Questions 1-5 are 1 mark questions; 6-10 are 2 mark questions;

11-15 are 3 mark questions; 16 & 17 are 5 mark questions.

Marks are indicated at the end of each question

Draw diagrams wherever necessary.

- 1. Write S.I unit for acceleration. 1M
- 2. Give one example for vector quantity. 1M
- 3. Convert 300K into Celsius scale and 100°C into Kelvin scale. 1M
- 4. What is meant by 'Osmosis'? 1M
- 5. Which is the power house of the cell? 1M
- 6. What is the nature of distance- time graph of uniform motion and non-uniform motion of an object? 2M
- 7. Mention the physical quantities and the manner in which these need to be altered for liquefying gases. 2M
- 8. Define the term sublimation. Write the names of any two substances which sublime. 2M
- 9. How is prokaryotic cell different from the eukaryotic cell? 2M
- 10. How many types of plastids are there in a plant cell? Name them and explain them. 2M
- 11. Define velocity and write its S.I units. 3M
- 12. Derive the equation  $S = ut + \frac{1}{2} at^2$  by graphical method. 3M
- 13. An athlete completes one round of a circular track of diameter 200m in 40s. What will be the distance covered and the displacement at the end of 2 min.20 sec? 3M
- 14. Explain the following:
  - a) Gases exert pressure on the walls of the container.
  - b) Water is a liquid at room temperature.
  - c) Evaporation causes cooling. 3M
- 15. Why Plasma membrane called a selectively permeable membrane. 3M
- 16. a) Tabulate the differences between solids, liquids and gases on the basis of
  - i)Volume ii) shape 1M
  - b) Define latent heat of fusion. 1M
  - c) Name the process in which gas changes to liquid. 1M
  - d) What is the physical state of water at 100°C and 25°C 1M
  - e) List two factors on which rate of evaporation depends. 1M

- 17. a) Draw Neat labelled diagram of a plant cell. 3M
  - b) Why are lysosomes are called called 'SUICIDE BAGS' of the cell. 2M