Chapter 2 Science 2

Question Paper 1 (30 Marks)

Q1. Fill in the blanks (4 marks, 1 mark each)

a. After complete oxidation of a glucose molecule, ____ number of ATP molecules are formed.

b. At the end of glycolysis, ____ molecules are obtained.

c. For formation of plasma membrane, ____ molecules are necessary.

d. Our muscle cells perform ____ type of respiration during exercise.

Q2. Write definitions (4 marks, 1 mark each)

a. Nutrients

b. Cellular respiration

c. Aerobic respiration

d. Krebs cycle

Q3. Distinguish between (Answer any 2, 2 marks each, 4 marks total)

a. Glycolysis and TCA cycle

b. Aerobic and anaerobic respiration

c. Mitosis and meiosis

Q4. Answer the following questions (Answer any 3, 4 marks each, 12 marks total)

a. With the help of suitable diagrams, explain the mitosis in detail.

b. Explain the glycolysis in detail.

c. How all the life processes contribute to the growth and development of the body?

d. How energy is formed from oxidation of carbohydrates, fats, and proteins? Correct the diagram given below.

Q5. Draw the following (6 marks)

Draw the process of energy production through aerobic respiration of carbohydrates, proteins, and fats.

Chapter 2 Science 2

Question Paper 2 (30 Marks)

Q1. Fill in the blanks (4 marks, 1 mark each)

a. Genetic recombination occurs in ____ phase of prophase of meiosis-I.

b. All the life processes contribute to the ____ and development of the body.

c. With the help of five stages of prophase-I, ____ is explained.

d. Krebs cycle is also known as ____ acid cycle.

Q2. Write definitions (4 marks, 1 mark each)

a. Proteins

b. Mitosis

c. Anaerobic respiration

d. Cellular respiration

Q3. Distinguish between (Answer any 2, 2 marks each, 4 marks total)

a. Aerobic and anaerobic respiration

b. Mitosis and meiosis

c. Glycolysis and TCA cycle

Q4. Answer the following questions (Answer any 3, 4 marks each, 12 marks total)

a. Explain the Krebs cycle with reaction.

b. With the help of suitable diagrams, explain the mitosis in detail.

c. Explain the glycolysis in detail.

d. How all the life processes contribute to the growth and development of the body?

Q5. Draw the following (6 marks)

Draw the process of anaerobic respiration in living organisms/cells.