MBC – MRIDUL BHAIYA CLASSES

TEST PAPER – 01

MAXIMUM MARKS : 20 Marks
MAXIMUM TIME : 40 MINUTES

1. What do you mean by heredity ? Who is its founder ? (1)
2. What is a Gene? (1)
3. Give the respective scientific terms used for studying: (2)
   i.)   The mechanism by which variation are created and inherited
   ii.)   The development of new type of organisms form from the existing ones
4. Name the plant Mendel used for his experiment. What type of progeny was obtained by Mendel in F_1 and F_2 generations when he crossed the tall and short plants? Write the ratio he obtained in F_2 generation plants. (3)
5. (a) What is variation? How is variation created in a population? How does the creation of variation in a species promote survival?
   (b) Explain how, offspring and parents of organisms reproducing sexually have the same number of chromosomes. (3)
6. (a) What are dominant and recessive traits?
   (b) "Is it possible that a trait is inherited but may not be expressed in the next generation?" Give a suitable example to justify this statement. (5)
7. (a) Why did Mendel choose garden pea for his experiments? Write two reasons.
   (b) List two contrasting visible characters of garden pea Mendel used for his experiment.
   (c) Explain in brief how Mendel interpreted his results to show that the traits may be dominant or recessive. (5)

Maximum time- 30 minutes
Maximum marks-25

1. What are decomposers? Write their importance with respect to our environment. (2)
2. Write the causes of depletion of ozone layer. How can we prevent it? (3)
3. Explain the formation of ozone layer. (2)
4. Mention three information obtained from the energy flow diagram. (3)
5. What are food chains and food webs? Why are smaller food chains better? (4)
6. Energy flow in a food chain is unidirectional. Explain (3)
7. Give any three methods to reduce the problem of waste disposal. (3)
8. Differentiate between natural and artificial ecosystem. (2)
9. What are the two main component of our environment? (1)
10. Write the names of any two decomposers. (2)