Time: 2 hours.   Full Marks: 50

*Attempt any **five** questions*

1. a. What are the postulations of Hardy-Weinberg principle of population of   5+5=10
    genetics?

    b. How attached X method helps in detection of visible X-linked mutations in
    Drosophila.

2. Write short notes on (any two):   5×2=10

3. What is extra embryonic membrane? Name the extra embryonic membrane   2+2+6=10
    found in chick with suitable diagram. Describe the process of formation of yolk
    sac in chick.

4. Write short notes on a). RIA, b). ELISA   4+6=10

5. State the role of sex hormones on accessory sex organs in male and female   5+5=10
    vertebrates.

6. a. Discuss the role of hormones in metamorphosis of Holometabolous insects.   6+4=10.

    b. Describe with labeled diagram the histological features of mammalian liver.