

Duration : 2 & ½ hours

Maximum Marks : 75

- Note before:** 1] All questions are compulsory  
2] Draw neat labelled diagrams wherever necessary  
3] Figures to the right indicate full marks  
4] Attempt the questions in their order given

**Q. 1 Explain the following...**

- a) Scales in fish. 07  
**OR**  
a) Basic structure of epidermis. 07  
b) Mucous and serous types of glands. 08  
**OR**  
b) Spur in male birds. 08

**Q. 2 Describe the following...**

- a) Mode of action of hormones. 07  
**OR**  
a) Histology of pituitary gland. 07  
b) Properties of hormones. 08  
**OR**  
b) Histology of ovary. 08

**Q. 3 Explain the following...**

- a) General skeleton of ribs. 07  
**OR**  
a) Sexual dimorphism of human skeleton – Sternum. 07  
b) Structure of cervical vertebra. 08  
**OR**  
b) Structure of pectoral girdle. 08

**Q. 4 Describe the following...**

a) Principles of experimental embryology.

07

**OR**

a) Oncogenes.

07

b) 72 hours chick embryo.

08

**OR**

b) Germplasm theory.

08

**Q. 5 Write short notes on....**

a) Epidermal derivative – teeth.

04

**OR**

a) Whale bone.

04

b) Disorders of thyroid gland.

04

**OR**

b) Classification of hormones

04

c) Physical properties of bone

04

**OR**

c) Hind limbs

04

d) 24 hours chick embryo

03

**OR**

d) Signaling pathways – Induction

03

