

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.

**OR**

a) Basic structure of epidermis.

07

b) Mucous and serous types of glands.

07

**OR**

b) Spur in male birds.

08

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.

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**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.

**OR**

a) Oncogenes.

b) 72 hours chick embryo.

**OR**

b) Germplasm theory.

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

a) Epidermal derivative – teeth.

**OR**

a) Whale bone.

b) Disorders of thyroid gland.

**OR**

b) Classification of hormones

c) Physical properties of bone

**OR**

c) Hind limbs

d) 24 hours chick embryo

**OR**

d) Signaling pathways – Induction

**07**

**07**

**08**

**08**

**04**

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