

[Time: 2½ Hours]

[ Marks:60]

Please check whether you have got the right question paper.

- N.B:**
1. All questions are compulsory.
  2. Draw labeled diagrams wherever.
  3. Figures to the right indicate full marks.

- Q.1 a) Explain the Human Blood groups. 06  
 b) Discuss the digestive system in Human. 06  
 OR  
 What is haemostasis. Add a note on thermoregulation and adaptation to stress. 12
- Q.2 a) Give the History of Developmental Biology in brief. 06  
 b) Explain the state of the *Drosophila* embryo, as the body axes is set up. 06  
 OR  
 Citing an example, discuss the process of blastulation and gastrulation and the formation of the germ layers in embryo and their functions. 12
- Q.3 a) Explain the neuromuscular junction and the neurotransmitter involved in skeletal muscle contraction. 06  
 b) Write note on Neuroglial cells. 06  
 OR  
 Give a detailed account of the organization of the central nervous system in human. 12
- Q.4 a) Briefly give the structure of thyroid gland in Human. 06  
 b) Explain the structure of the endocrine glands that secrete steroidal hormones. 06  
 OR  
 Enlist the different endocrine glands and discuss the hormones secreted with their and give the structure for any one gland. 12
- Q.5 Write short notes (any 03) 12
- a) Upper Respiratory tract in Human.
  - b) Cardiac cycle.
  - c) Differentiation of neurons is morphogenesis.
  - d) Conduction of a nerve Impulse.
  - e) Somatosensory system.
  - f) Parathyroid Gland.