

**(2012 - Scheme)**

**HUMAN ANATOMY AND PHYSIOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw equations wherever necessary.

**Essay**

**(3x10=30)**

1. Draw a neat, labeled diagram of animal cell and describe all the organelles present in the cell
2. Explain the synthesis, storage and secretion of thyroid hormones
3. Explain the formation, circulation and functions of cerebrospinal fluid.

**Short notes**

**(14x5=70)**

4. Disorders of joints.
5. Anatomy of heart with a neat labeled diagram
6. Second messenger system.
7. Structure of an nervous tissue
8. Enumerate various functions of lymphatic system.
9. Structure and function of liver
10. Anatomy of respiratory tract and mention the functions of trachea.
11. Structure of kidney with a neat diagram
12. Process of spermatogenesis
13. Explain the synthesis, secretion, regulation and functions of posterior pituitary hormone.
14. Vital centers of medulla oblongata.
15. Synthesis, storage and secretion of acetylcholine from parasympathetic nerve terminals.
16. Draw a neat labeled diagram of eye. Mention the functions of aqueous humor.
17. List various types of leucocytes and add a note on its functions.