

HUMAN ANATOMY AND PHYSIOLOGY

(2012 - Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Draw diagrams wherever necessary.

Essay

(3x10=30)

1. Describe the events involved in the contraction and relaxation of skeletal muscle fibers with a neat diagram. Add a note on Structure of bones.
2. Explain the structure and functions of cerebellum with the help of a neat, labeled diagram.
3. Describe the extrinsic and intrinsic pathways of blood-clotting cascade. Explain the principles behind blood group identification and consequences of blood group mismatching during blood transfusion.

Short notes

(14x5=70)

4. Draw an ECG. Describe the significance of various ECG intervals.
5. Functions of various steroids secreted by adrenal gland.
6. Process of oogenesis.
7. What is facilitated diffusion. Explain the transport of glucose through this process.
8. Structure of nephron.
9. Respiratory disorders induced by smoking.
10. Structure of pancreas and functions of glucagon.
11. Functions of oxytocin and vasopressin.
12. Anatomy of eye.
13. Bones of upper limb.
14. Role of HCl and pepsin in digestive process.
15. Functions of spinal cord.
16. Anatomy of blood vessels.
17. Physiological functions of parasympathetic activation.