

Total page: 1

PG CBCS
M.Sc. Semester-I Examination 2020
MLT
PAPER: MLT 101
(HUMAN ANATOMY AND PHYSIOLOGY)

Full Marks: 40

Time: 2 Hours

Answer any four questions of the following:

10X4=40

1. Describe about the innervations of gastrointestinal tract with a suitable diagram? What do you mean by Lamina propria? (8+2)
2. Define action potential? What is the rate of rhythmic impulse for SA and AV node? Define absolute refractory period and explain the significance of long refractory period in cardiac muscle? What is the value of resting membrane potential for cardiac and nerve muscle fibres? (2+2+4+2)
3. Describe about the histological structure of skin and its importance in body temperature regulation? (5+5)
4. What is Bursa equivalent? Describe about the structural characteristics of lymph nodes with a suitable diagram? Mention the name of two Mucosa-associated lymphoid tissues? (3+5+2)
5. Describe the microscopic structure of renal corpuscle with a suitable diagram? What is the function of macula densa cells? What do you mean by tubular reabsorption and secretion? (4+2+4)
6. Describe about the microscopic structure of alveolus with a suitable diagram? Define residual volume and expiratory capacity? What is the function of pulmonary surfactant? (4+3+3)
7. What do you mean by miniature end plate potential? Make a suitable flow diagram of sequence of events during skeletal muscle contraction and relaxation when stimulated by a nerve? (2+8)
8. Describe about organification of thyroglobulin and coupling reaction of thyroid hormone biosynthesis? Describe the role of thyroid hormones in fat metabolism? Mention about any four signs and symptoms of hyperthyroidism? (3+3+4)
9. What is Broca's area and mention its function? How hypothalamus regulates water balance of human body? Describe about four functions of thalamus? (2+4+4)
10. What do you mean by endolymph and perilymph? Describe about the components of visual pathways with a suitable diagram? Define protanopia? (3+6+1)
