

FIRST YEAR BHMS (NEW SYLLABUS)
EXAMINATION AUGUST - 2016
PHYSIOLOGY- PAPER - II
Code-10195

Time: 3 hours

Total Marks: 100

Instructions:

1. Attempt all questions from each section
2. Figures to the right indicate full.
3. Make suitable assumptions wherever necessary.
4. Write separate sections on separate answer sheets.

Section - I

- Q-1 Enumerate different descending tracts. Describe in detail origin, course and termination of different pyramidal tracts. 15
- OR**
- Q-1 Describe the digestion and absorption of carbohydrate. 15
- Q-2 Describe physiology of limbic system in detail. 15
- OR**
- Q-2 1. Nervous and hormonal regulation of secretion of gastric juice 08
2. Define receptors. Classify them. Describe their properties in detail. 07
- Q-3 Write Short Note (Any three) 15
- (a) enumerate neurotransmitter and write short note on acetylcholine (b) Cori cycle
- (c) define synapse. Describe properties of synapse (d) rods and cones
- (e) define ketosis. Write short note on ketone bodies.
- Q-4 M C Q 05
1. An area of brain that includes both grey and white matter in the;
 - a. Cerebral cortex
 - b. Basal ganglia
 - c. Limbic system
 - d. Corpus callosum
 2. Meissner's corpuscle;
 - a. Detects the degree of tension in the muscles
 - b. Detects the rate of change of muscle length
 - c. Detects very rapid changes in pressure.
 - d. Responds specifically to light touch
 3. A structure not present in the middle ear;
 - a. Tympanic membrane
 - b. Three ear ossicles; malleus, incus & stapes
 - c. Eustachian tube
 - d. Membranous labyrinth.
 4. Bile salts;
 - a. Are conjugated sodium and potassium salts of bile acids
 - b. Are derivatives of biliverdin and bilirubin
 - c. Concentration in liver bile is 140 – 810 mg/dl
 - d. Provide alkaline reaction to the bile
 5. A proteolytic enzyme present in saliva is;
 - a. Ptyalin
 - b. Lysozyme
 - c. Kalli krein
 - d. Lipase

Section - II

- Q-1 Define hormone. Classify them. Describe in detail mechanism of hormonal action. 15
- OR
- Q-1 Enumerate the gonadotropin hormones secreted by pituitary gland and describe each in detail. 15
- Q-2 Enumerate hormones secreted by adrenal cortex. Describe the action, and regulation of secretion of cortisol. 15
- OR
- Q-2 1. Define menstrual cycle. Describe ovarian changes occur during menstrual cycle 08
2. Describe dwarfism in detail 07
- Q-3 Write Short Note (Any three) 15
- (a) essential amino acids (b) sperm
(c) define and classify obesity (d) ADH
(e) enumerate water soluble vitamin and describe any one in detail.
- Q-4 MCQ 05
- By product of anaerobic glycolysis is;
 - Pyruvic acid
 - CO₂
 - Lactic acid
 - Water only
 - Amino acids are transported in the blood mainly in the form of
 - Plasma proteins
 - In combination with a carbohydrate carrier
 - In combination with a phospholipid carrier
 - Amino acids themselves
 - Most damaging free radicle to body components
 - Hydrogen atom
 - Oxygen molecule
 - Hydroxyl
 - Nitric oxide
 - Thyroid hormones belong to which class of hormone?
 - Steroid
 - Protein
 - Polypeptides
 - Amino acids derivatives
 - Cryptorchidism refers to;
 - Male hypogonadism
 - Removal of testes before puberty
 - Removal of testes after puberty
 - Undescended testes