

FIRST PROFESSIONAL B.H.M.S. EXAMINATION  
HUMAN PHYSIOLOGY AND BIOCHEMISTRY PAPER - II  
SUBJECT CODE: HOM UG-PB

TIME: 3 HOURS

TOTAL MARKS: 100

- INSTRUCTIONS: 1. ATTEMPT ALL THE QUESTIONS.  
2. DRAW DIAGRAMS WHEREVER NECESSARY.  
3. FIGURES IN RIGHT INDICATES FULL MARKS

**Q - 1 Multiple Choice Questions.**

(10)

- (1) Growth hormone is secreted by \_\_\_\_\_  
[A] Pineal gland [B] Pituitary gland  
[C] Hypothalamus [D] Adrenal gland
- (2) Afferent neurons carry nerve impulses from.....  
[A] CNS to muscles [B] CNS to receptors  
[C] Receptors to CNS [D] Effector organs to CNS
- (3) The functions of saliva include following except...  
[A] Cleaning the mouth [B] Digestion of protein  
[C] Killing bacteria [D] Digestion of lipids
- (4) In which of the following organ in human body does the fertilization occur?  
[A] Uterus [B] Fallopian tube  
[C] Ovary [D] Vagina
- (5) Which cells of the testes secrete testosterone?  
[A] Sertoli cells [B] Cells of germinal epithelium  
[C] Leydig cells [D] Secondary spermatocyte
- (6) The \_\_\_\_\_ regulates the amount of light entering the eyeball through pupil.  
[A] Cornea [B] Lens  
[C] Retina [D] Iris
- (7) Dynamic equilibrium is maintained by \_\_\_\_\_  
[A] Utricle and saccule [B] Vestibule  
[C] Semicircular canal [D] Spiral organ
- (8) Deficiency of which vitamin lowers the rate of calcium absorption from the food?  
[A] Vitamin D [B] Vitamin C  
[C] Vitamin B [D] Vitamin K
- (9) The nature of enzyme is \_\_\_\_\_  
[A] Carbohydrate [B] Lipid  
[C] Vitamin [D] Protein
- (10) Which of the following is known as "body building food"?  
[A] Fats [B] Carbohydrates  
[C] Proteins [D] Vitamins

(40)

**Q - 2 Write Short Answers.**

- (1) Regulation of pituitary hormones by hypothalamus
- (2) Action of parathormone
- (3) Reflex arc
- (4) Electrical events occurring at synapse
- (5) Composition and functions of bile
- (6) Menopause
- (7) Physiology of taste
- (8) Different types of carbohydrates

(50)

**Q - 3 Write Long Answers**

1. Describe the functions and regulation of Insulin.
  2. Define tracts. Describe origin, course, termination and functions of corticospinal tracts.
  3. Describe the composition and functions of gastric juice.
  4. Define menstrual cycle. Describe the uterine changes occurring during menstrual cycle.
  5. Describe the olfactory receptors. Describe the olfactory pathway.
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