

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(DEEMED TO BE UNIVERSITY), SALEM**

**B.H.M.S. DEGREE EXAMINATION – November 2020  
First Year**

**PHYSIOLOGY INCLUDING BIOCHEMISTRY– PAPER - II**

Time: Three hours

Maximum: 100 marks

I. Write long essays on any **TWO** of the following: (2 x 15 = 30)

- 1) Name the hormones secreted by the thyroid gland. Explain the functions of thyroid hormone
- 2) Write the composition of pancreatic juice. Explain the digestion and absorption of proteins in the GI Tract.
- 3) Define receptor. Classify receptors. Describe the properties of receptors.

II. Write short essays on any **TEN** of the following: (10 x 5 = 50)

- 4) Describe the nerve supply of the salivary gland.
- 5) Name the hormones secreted by the posterior pituitary. Explain the action of oxytocin.
- 6) Classify amino acids.
- 7) Describe the Krebs's cycle.
- 8) Explain the structure and functions of oestrogen.
- 9) Write the causes and clinical manifestations of Cushing's syndrome.
- 10) Explain Wald's visual cycle.
- 11) Mention the content of middle ear. Explain the function of middle ear.
- 12) Explain vitamin D in terms of sources, requirement and functions.
- 13) Enumerate the various functions of hypothalamus. Explain its role in GIT.
- 14) Describe the pain pathway.
- 15) Describe the formations, circulation, drainage and functions of CSF.

III. Write short notes of the following: (**Answer ALL**): (10 x 2 = 20)

- 16) Outline the HCl formation.
- 17) Define and classify neuroglia. Enumerate their functions.
- 18) Write the significance of dietary fibres.
- 19) Hypermetropia- define, write the cause and treatment.
- 20) Trace taste pathway.
- 21) Classify polysaccharides.
- 22) Classify colour blindness.
- 23) Sketch Cori's cycle.
- 24) Scurvy- cause and clinical manifestations.
- 25) Classify enzymes.