

First Year B. Physiotherapy Examination

Human Physiology and Biochemistry

Date : 18-06-2024, Tuesday]

Time : 3 Hours]

[Max. Marks : 80]

Instructions : (1) Figure to the right indicate marks.
 (2) Write legibly.
 (3) Draw diagrams wherever necessary.
 (4) Use separate answer books for each section.

Section: 1 (56 Marks)

Q1 Describe structure, connections, and functions of cerebellum (16)

OR

Q. 1 Name the hormones secreted by anterior pituitary gland. Describe the actions of thyroid hormone and write signs and symptoms of hypothyroidism and hyperthyroidism

Q2 Define Blood pressure. Describe various short term regulation mechanisms that regulate blood pressure. Add a note on hazards of hypertension. (16)

OR

Q2 Describe transport of Oxygen from lungs to tissues. Describe O₂ dissociation curve and causes of right and left shift of the curve.

Q 3 Write short Notes on (Any Three) (12)

- a) Composition and function of Pancreatic juice
- b) Physiology of blood groups
- c) Uterine changes during menstrual cycle with their physiological basis
- d) Reflex properties

Q. 4 Write short Notes on (Any Three) (12)

- a. Excitation contraction coupling
- b. Juxtaglomerular apparatus
- c. Acromegaly
- d. Physiological and pathological errors of refraction

SECTION - II (24 Marks)

Q. - 5. Give an account on transamination, oxidative deamination and urea cycle. Write a note on disorders of urea cycle. (16 Marks)

OR

Q. - 5. Define and classify enzymes with suitable examples. Write a note on enzymes of diagnostic significance. (16 Marks)

Q. - 6. Write short notes (Any two) (08 Marks)

- A) Diagrammatic representation of electron transport chain and its inhibitors.
- B) Write RDA, biochemical functions deficiency manifestations of Vitamin - D.
- C) Diagrammatic representation of Beta oxidation of Palmitic acid & its energetic.