

3rd Internal Assessment (Sent up) Examination

BDS 1st year (2023 Batch)

Subject: General human Physiology and Biochemistry

2023

Time: 3 hrs

(MM: 70)

- Attempt all questions in sequence
- Use separate sheet for Part A and Part B

PART - A (PHYSIOLOGY)

(35 marks)

Q.1. Discuss functions of Glucocorticoid (Cortisol) . Write a note on Cushing's syndrome

(10 marks)

Q.2. Write short note on:

(5 X 3 = 15)

- a. Physiology of pain
- b. stretch reflex
- c. Chemical regulation of respiration

Q.3. Write short note on:

(2 X 5 = 10)

- a. Stages of erythropoiesis
- b. baro-reflex
- c. JG apparatus
- d. Differentiate between simple and facilitated diffusion
- e. spermatogenesis

PART - B (Biochemistry)

(35 marks)

Q.4. Write the functions of calcium in our body. Give the normal range of serum calcium and explain how calcium level is regulated.

(10 marks)

Q.5. Write short notes

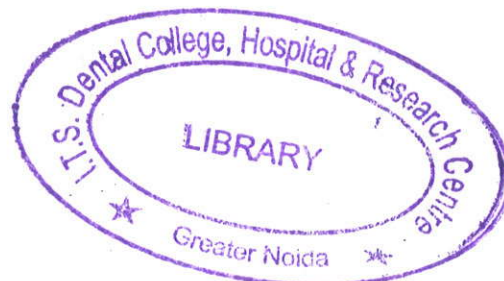
(5 X 3 = 15)

- a) Urea cycle
- b) Post translational modification
- c) Characteristics of Genetic Code

Q.6. write short notes

(2 X 5 = 10)

- a) Un-couplers
- b) Phenylketonurea
- c) Renin Angiotensin system
- d) Significance of HMP shunt
- e) Test to assess GFR



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(MM: 70)

- Attempt all questions in sequence
- Use separate sheet for Part A and Part B
- Draw a neat labelled diagram wherever necessary

PART - A (PHYSIOLOGY)

(35 marks)

Q.1. Attempt any one

(1 X 10 = 10)

- Discuss Neuro-muscular junction and its applied importance
- Discuss various waves in ECG and their significance

Q.2. Write short note on:

(5 X 3 = 15)

- Erythropoiesis
- Action potential in cardiac muscle
- Length tension relationship

Q.3. Write short note on:

(2 X 5 = 10)

- Pernicious anaemia
- Cell mediated immunity
- structure of sarcomere
- Differentiate between primary and secondary active transport
- Classification of nerve fibers

PART - B (Biochemistry)

(35 marks)

Q.4. Attempt any one

(1 X 10 = 10)

- Write normal fasting and PP Blood sugar levels. Discuss hormonal regulation of blood sugar level.
- Why ammonia is toxic? Describe the synthesis of urea and add a note on metabolic disorders associated with urea cycle.

Q.5. Write short notes

(5 X 3 = 15)

- Atherosclerosis and LDL
- Diabetes Mellitus
- Factors affecting enzyme activity

Q.6. write short notes

(2 X 5 = 10)

- Classify amino acids based on nutritional importance
- Essential fatty acids and its dietary sources
- Mucopolysaccharides
- Isoenzymes
- Collagen

