

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – FOODS AND NUTRITION

NUTRITIONAL BIOCHEMISTRY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Find the organ that plays a key role in monitoring and stabilizing blood glucose levels.
(i) Lungs (ii) Lymphnode (iii) Liver (iv) Spleen
- 2 Identify the major constituent of Plasma protein.
(i) Albumin (ii) Globulin (iii) Globin (iv) Glutelin
- 3 Creatinine is an excretory product derived from creatine phosphate, largely present in -----.
(i) brain (ii) Muscle (iii) kidney (iv) stomach
- 4 Measurement of serum ----- is used in the diagnosis of pancreatitis.
(i) protease (ii) amylase (iii) lipase (iv) amyloglusidase
- 5 Cushing's syndrome is characterized by hyperglycaemia due to increased
(i) Gluconeogenesis (ii) Glycogenesis
(iii) Lipogenesis (iv) Glycerides

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. Advanced glycation end products are harmful- Justify it.
OR
b. Determine the status of lipid profile in Atherosclerosis.
- 7 a. Evaluate the role of C-reactive protein in inflammation which is caused by infection.
OR
b. Explain the types of enzyme inhibition.
- 8 a. Discuss on Bilirubin metabolism.
OR
b. State the causes of high plasma urea.
- 9 a. Discuss on gastrin measurements.
OR
b. State the regulation of thyroid hormone secretion.
- 10 a. Prepare the clinical value of androgens.
OR
b. How do you assess pituitary function?

Cont...

SECTION -C (30 MARKS)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a. Elucidate on physiological effects of insulin.
OR
b. Classify Lipoproteins and how these are metabolized.
- 12 a. Appraise the functions of plasma proteins.
OR
b. Criticize the difference between hypo and hypergamma globulinemia.
- 13 a. Elucidate the causes of Jaundice.
OR
b. State the Renal blood flow and filtration fraction.
- 14 a. Assess the clinical features and causes for malabsorption.
OR
b. Analyze the factors affecting thyroid concentration.
- 15 a. Elucidate the functions of Glucocorticoids.
OR
b. Enumerate on concentration of hormones secreted by pituitary gland.

Z-Z-Z

END