

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch – BIOCHEMISTRY

CLINICAL BIOCHEMISTRY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

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

1. Which of the following is NOT a common symptom of hyperglycemia?
(i) Polyuria (ii) Polydipsia
(iii) Weight gain (iv) Blurred vision
2. Which of the following enzymes is deficient in Type I hyperlipoproteinemia?
(i) Lipoprotein lipase (ii) Lecithin-cholesterol acyltransferase
(iii) HMG-CoA reductase (iv) Cholesteryl ester transfer protein
3. Hartnup disease is a disorder of the metabolism of which amino acid?
(i) Phenylalanine (ii) Tyrosine
(iii) Tryptophan (iv) Methionine
4. Which of the following is NOT a type of jaundice?
(i) Pre-hepatic jaundice (ii) Hepatic jaundice
(iii) Post-hepatic jaundice (iv) Neurogenic jaundice
5. Which test is commonly used to diagnose Graves' disease?
(i) Thyroid ultrasound
(ii) TSH receptor antibody test
(iii) Dexamethasone suppression test
(iv) ACTH stimulation test

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Explain the HbA1C test.
OR
b Outline on the clinical disorder Fructosuria.
- 7 a Describe Betalipoproteinemia.
OR
b Discuss on the term fatty liver.
- 8 a Brief on Hartnup Disease.
OR
b Summarise on liver marker enzymes.
- 9 a Explain the Lesch-Nyhan syndrome.
OR
b. Outline the Dubin Johnson disease.
- 10 a. Comment on Addison's disease.
OR
b. Outline the factors affecting the catecholamine levels.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Discuss on the diagnosis, treatment and types of diabetes.
OR
b. Summarize the Glycogen storage diseases.
- 12 a. Brief on the biochemical manifestation, diagnosis and treatment of hyperlipoproteinemias.
OR
b. Elucidate the term atherosclerosis.
- 13 a. Describe the inborn errors of metabolism.
OR
b. Elaborate on the cardiac enzymology.
- 14 a. State the clinical manifestation, diagnosis and treatment of Orotic aciduria.
OR
b. Elaborate the disorders of bilirubin metabolism.
- 15 a. Paraphrase on the measurement and clinical manifestation of thyroid hormone level.
OR
b. Summarize on the hyper and hypo pituitarism.

Z-Z-Z

END