



Sambit 212126

Avinashilingam Institute for Home Science and Higher Education for Women
Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India
Continuous Internal Assessment Test I – February 2026

23BBCC06 Clinical Biochemistry

Class: III UG
Major: Biochemistry and Biotechnology

Time: 2 hours
Max. Marks: 60

Course Outcomes:

At the end of the course, students will:

1. Analyse the abnormalities of urine and blood constituents
2. Evaluate the disorders and diagnostic tests for kidney and liver
3. Relate the abnormalities of carbohydrate, lipid and protein metabolism
4. Interpret the variations clinical enzymes and electrolyte imbalance
5. Comprehend the disturbances in blood clotting and Inborn Errors of metabolism

Part - A

6 x 1 = 6

Choose the Correct Answer

1. The normal specific gravity of the urine is CO1 K3
a. 1.000 b. 1.002–1.005 c. 1.015–1.025 d. 1.040
2. Decreased albumin globulin ratio is seen in CO2 K3
a. dehydration b. liver disease c. diabetes d. hypertension
3. Ketone bodies appear in urine in CO1 K2
a. renal failure b. liver Disease c. diabetes mellitus d. hypertension
4. Cirrhosis of liver is characterized by: CO2 K3
a. acute inflammation c. fibrosis with nodular regeneration b. fat accumulation only d. viral infection alone
5. The enzyme most elevated in viral hepatitis is CO2 K1
a. ALP b. ALT c. CK-MB d. LDH
6. The renal thrshold level of glucose is CO3 K2
a. 180 mg/dl b. 200 mg/dl c. 260 mg/dl d. 320 mg/dl

Part - B

3 x 6 = 18

Answer ALL Questions

Each answer should not exceed 400 words or two pages

7. a. Write about albuminuria and its causes CO1 K2
(or)
7. b. State the range of normal blood glucose and its variation in pathological conditions CO1 K3
8. a. Explain cirrhosis of liver and its biochemical changes. CO2 K3
(or)
8. b. Differentiate the types of Jaundice CO2 K4
9. a. Discuss the types of renal failure with causes. CO2 K3
(or)
9. b. Write a Short note on porphyria. CO2 K3

Part - C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

10. a. Describe the normal composition of urine and explain the clinical significance of abnormal urinary constituents. CO1 K3
(or)
10. b. Elaborate the normal constituents of blood and explain their variation in pathological conditions. CO1 K3
11. a. Discuss abnormalities of nitrogen metabolism – uremia, hyperuricemia CO2 K4
(or)
11. b. Explain liver function test based on bile pigment metabolism, excretory and detoxification function CO2 K3
12. Analyse the glomerular filtration tests – urea, creatinine and inulin clearance. CO2 K3
(or)
12. b. Discuss the analysis of urinary calculi and their clinical significance CO2 K3
