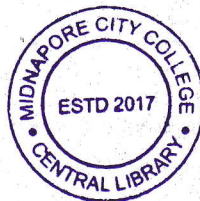


- p) Allosteric inhibitor of glutamate dehydrogenase is :
 i) ATP. ii) ADP. iii) AMP. iv) GMP.
- q) Regan isozyme is also known as :
 i) Alpha 1 ALP. ii) Alpha 2 heat liable ALP.
 iii) Alpha 2 heat stable ALP. iv) Pre beta ALP.
- r) Which of the following co factor(s) is/ are required for the activity of alkaline phosphatase?
 i) Ca⁺. ii) Mg⁺. iii) Zn⁺. iv) Both (ii) & (iii).
- s) Most useful test for assessing renal function is :
 i) Clearance test. ii) GFR. iii) Both i) & ii). iv) None of the above.
- t) Which of the following enzyme is not used to diagnose hepatobiliary disease?
 i) Alkaline phosphatase. ii) Alanine aminotransferase.
 iii) γ -glutamyl transferase. iv) 5'-nucleotidase.

2. Answer the following questions :

5 x 2

- Rate limiting steps of Glycolysis.
- Importance of Free T₄ over total T₄.
- Use of Dopamin antagonists.
- Difference between apoenzyme and proenzyme.
- Calculation of eGFR.



3. Write short notes on *any six* of the following :

6 x 5

- Inborn error of protein metabolism.
- Lipid Profile Test.
- AST.
- Hormonal regulation of blood glucose.
- Atherosclerosis.
- Regulation of electrolytes in human body.
- VLDL metabolism.
- Importance of GGT in liver function test.

4. Answer *any one* of the following :

- Describe the thyroid hormone biosynthesis process. Discuss about the functions of it.
- Explain the renal function test with clinical importance.

5+5

10

5. Answer *any two* of the following :

- Explain the pathway of glycogenesis. Discuss about glycogen storage diseases.
- Define transamination and transmethylation. Make a brief discussion regarding common metabolic disorder due to abnormal amino acid metabolism. Describe the urea cycle.
- What is the clinical importance of enzymes? Describe the role of acid phosphatase and alkaline phosphatase in our body with clinical significance.

7+8

2+2+6+5

3+6+6

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The West Bengal University of Health Sciences

BMLT 2nd Year November-December 2022, (Oral & Practical) Examination

Subject- Advanced Biochemistry

Full Marks – 100

Time - 6 hrs.

1. Estimate blood sugar in supplied sample by GOD-POD method. (Write down the principle, procedure and interpret the result of it) 3+5+2

2. What does A/G ratio indicate? What is Microalbuminuria? Estimate total protein in supplied sample by Biuret method. (Write down the principle, procedure and interpret the result of it) 2+3+3+5+2

3. Mention the differences between kinetic and end point reaction. Write down the principle, procedure and clinical significance of urea estimation in serum. 5+4+6+5

4. i) What is Beer-Lambert law? Write down the applications of colorimeter. 3+4
ii) Write down the principle, procedure and clinical significance of Bilirubin (Total and direct) estimation in serum. 3+6+4

5. Lab notebook 5

6. Viva-voce 30

