

PE - 506
(554) M.Sc. ZOOLOGY (FOURTH SEMESTER)
Examination JUNE - 2022
Compulsory/Optional
Group
Paper-II

Name/Title of Paper- BIOCHEMISTRY AND METABOLIC REGULATION AND FUNCTION

Time: 3:00 Hrs.]

[Maximum Marks: 080

[Minimum passing marks:

नोट: दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer from Both the Section as Directed. The Figures in the right-hand margin indicate marks.

Section - A

- Q1. Answer the following question. 1x10=10
- a) Name a carbohydrate that acts as anticoagulant.
 - b) What is full form of EMP and TCA?
 - c) What is DOPA?
 - d) What is biochemical name of serotonin?
 - e) What is vitamin H commonly called.
 - f) Name the precursor of Uric acid.
 - g) What is the daily requirement of sodium and potassium?
 - h) What is essential element of protein
 - i) What is coenzyme Q?
 - j) What kind of enzymes are present in Liposome's.
- Q2. Answer the following question. 2x5=10
- a) What are the trioses and pentose's.
 - b) Define trace elements.
 - c) What are Eicosanoids?
 - d) What is Michaelis-menten Equation.
 - e) What is the significance of biological oxidation?

Section - B

- Answer the Following questions:- 15x4=60
- Q3. Describe the biological significance of polysaccharide in our body.
OR
Describe the mechanism of regulation of water balance in our body.
- Q4. Write about various configuration of protein with biological significance.
OR
Write about the importance of Macro and micronutrients.
- Q5. Write about Nucleic acids and their biological significance.
OR
Write about the sources, chemistry and deficiency diseases, the mechanism of action.
- Q6. Discuss about the mechanism of action of enzymes with various models.
OR
Describe about glucose metabolism.