

PC-506

(554) M.Sc. ZOOLOGY (FOURTH SEMESTER)

Examination JUNE 2020

Compulsory/Optional

Group - compulsory

Paper - II

BIOCHEMISTRY AND METABOLIC REGULATION AND FUCTION

Time:- Three Hours]

Maximum Marks : 80

Minimum Passing Marks: 29

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

1. Answer the following questions: - **1X10 = 10**

- (a) Which of the following enzyme is not involved in galactose metabolism?
- (b) Write the name of most active organs in the animal body which has the ability to synthesize treacly glycerol?
- (c) Minerals are absorbed in which form?
- (d) What is peptide bond?
- (e) Which amino acids is considered as both ketogenic and glycogenic?
- (f) Semi conservative DNA replication was first demonstrated in _____?
- (g) Name the disease caused by the deficiency of Niacin?
- (h) Where does oxidative phosphorylation take place?
- (i) Name the coenzyme of riboflavin (B₂) ?
- (j) Fructose and glucose can be distinguished by _____?

2. Answer the following questions:- **2x5 = 10**

- (a) What is the role of carbohydrate in metabolism?
- (b) What are the two types of nutrition (with examples)?
- (c) How are proteins broken down?
- (d) What is the structure and function of wailed acid
- (e) How many ATP Ps produced in oxidative phosphorylation.

Section -B

Answer the following questions.

12x5 = 60

3. Describe about metabolism of lipid.

Or

Describe the general structure, classification, and formation of monosaccharide.

4. Explain the Biological function and metabolism of protein.

Or

Describe the structure and biosynthesis of amino acid.

5. Describe the malefic acid with biological parportance.

Or

Explain Vitamin.

6. Describe the classification, properties and mechanism of enzyme.

Or

Write short notes:

- (a) Oxidative phosphorylation
- (b) Utilization of krebscycle.