

Bs/ZOO/C10(T)

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(FYUGP)

(5th Semester)

ZOOLOGY

(Major)

Paper Code : ZOO/C10(T)

(Biochemistry of Metabolic Processes)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Differentiate between catabolism and anabolism. Write a note on the different stages of catabolism. 10+5=15

Or

Explain the different types of shuttle system in detail. Write a note on the usage of reducing equivalents. 10+5=15

2. Explain the sequence of enzymatic reaction involved in Krebs cycle. Write a note on the regulation of citric acid cycle. 10+5=15

Or

Write notes on the following :

$7\frac{1}{2} \times 2 = 15$

(a) Glycogenolysis

(b) Glycogenesis

3. Explain the biosynthesis of palmitic acid in detail.

15

Or

Explain the sequence of reaction involved in β -oxidation of even number fatty acid. Write a note on ketogenesis.

$10 + 5 = 15$

4. Explain the key enzymes involved and the biochemical reactions or steps of urea cycle.

15

Or

Describe in detail the metabolic fate of C-skeleton of glucogenic and ketogenic amino acids.

15

5. Explain the mitochondrial respiratory chain in detail. Write a note on its functions.

$10 + 5 = 15$

Or

Discuss the effects of inhibitors and uncouplers on the electron transport system (ETS) in mitochondria.

15
