RNLKWC/B.Sc./CBCS/IVS/H/C8T/22

2022

PHYSIOLOGY

[HONOURS]

(B.Sc. Fourth Semester End Examination-2022) PAPER-C8T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as

far as practicable

Illustrate the answers wherever necessary

A. Answer any FIVE questions of the following: 5x2= 10

- 1. Write the specific role of trypsin and chymotrypsin in protein digestion.
- 2. What are the components of the mitochondrial electron transport chain?
- 3. What is micelle?
- 4. Why is gluconeogenesis important in Cori cycle?
- 5. What is the composition of lecithin with suitable structure?
- 6. What is the key step in the biosynthesis of cholesterol?
- 7. What does nitric oxide synthase do in the body?
- 8. How is melatonin synthesized?

B. Answer any FOUR questions of the following: 4x5 = 20

- 1. Write a short note on mitochondrial redox carriers.
- 2. Give a schematic diagram for deamination.
- 3. What is glycogen primer?
- 4. What is the most common food toxin? What are the 4 types of food poisoning?
- 5. Give the biochemical pathway of melatonin synthesis.
- 6. Write the oxidative phase of pentose phosphate path way.

C. Answer any ONE question of the following: $1 \times 10 = 10$

- Describe the process of beta-oxidation of fatty acids mentioning the formation of ATP at its different steps.
- Write the name and role of glycosidase in digestion of carbohydrate products in intestinal mucosa. Why is mitochondrial uncoupling important? What are the inhibitors of oxidative phosphorylation?
 4+3+3=10