

U.G. 3rd Semester Examination - 2021**ZOOLOGY****Course Code : BZOCCHC303****Course Title : Fundamentals of Biochemistry**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **ten** questions from the following:

1×10=10

- a) Give an example of positive allosterism.
- b) What is Eicosanoids?
- c) What is lecithin?
- d) What is SnRNA?
- e) Give an example of non-reducing sugar.
- f) Write down the end product of purine metabolism.
- g) Define iodine number.
- h) Name one inhibitor of oxidative phosphorylation.

[Turn over]

- i) What is chylomicron?
- j) What do you mean by redox potential?
- k) What do you mean by Zwitterion?
- l) What is F_0F_1 complex?
- m) Give example of two non-polar amino acids.
- n) What is SCID?
- o) Give two examples of ketogenic amino acid.

2. Answer any **five** questions from the following:

2×5=10

- a) What is Lineweaver Burk Double Reciprocal plot?
- b) What do you mean by secondary structure of protein?
- c) Mention two significances of neoglucogenesis.
- d) What do you mean by ping-pong model of enzyme action?
- e) What happens when $[S] \gg k_m$ and $k_m \ll [S]$?
- f) What is c value? Why it is considered as paradox?
- g) Give two differences between B-DNA and Z-DNA.
- h) Distinguish between amylose and amylopectin.

3. Answer any **two** questions from the following:

5×2=10

- a) Briefly describe the process of electron transport chain.
- b) Describe briefly about ornithine cycle.
- c) What do you mean by competitive inhibition? Describe the role of pH and temperature on enzyme action.
