

# KANYASHREE UNIVERSITY

M.Sc. 1<sup>st</sup> SEMESTER EXAMINATION 2022

Subject- Food and Nutrition

Course- CC -5

**Nutritional Biochemistry**

Full Marks- 40

Time- 2.00 Hours

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## Group-A

[Answer **any four** questions]

**5 × 4 = 20**

1. Write down Cori cycle. 5
2. Compare between active transport and passive transport. 5
3. Write down a short note on coenzyme. 5
4. What is enzyme inhibition? Explain its significance. 5
5. Briefly discuss the role of carnitine in the transfer of fatty acids. 5
6. Briefly describe the steps of Urea Cycle. 5
7. Enumerate the regulation of cholesterol biosynthesis. 5

## Group-B

[Answer **any two** questions]

**10 × 2 = 20**

8. Describe the steps of Krebs cycle. Calculate the energy generation from one molecule of acetyl-coA. 7 + 3
  9. Discuss the factors affecting the kinetics of enzymatic reaction. What is Isoenzyme? 7 + 3
  10. What are aromatic amino acids? What do you mean by the term deamination and transamination? Write the irreversible steps in Glycolysis. 2 + 4 + 4
  11. Write the energetics for  $\beta$  oxidation of one molecule of Palmitic acid. What is the difference between Substrate level phosphorylation and oxidative phosphorylation? 5 + 5
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