

# **RAMAKRISHNA MISSION VIDYAMANDIRA**

(Residential Autonomous College affiliated to University of Calcutta)

**FIRST YEAR [2018-21]**

**B.A. /B.Sc. SECOND SEMESTER (January – June) 2019**

**Mid-Semester Examination, March 2019**

Date : 27/03/2019

**MICROBIOLOGY (General)**

Time : 11am – 12noon

Paper: II

Full Marks: 25

Answer the following questions:

1. a) Define isosteric and allosteric enzymes. [1+1]  
b) What do you mean by "enzyme inhibition"? Explain the significance of  $K_m$ . [2+1]
2. a) What is nitrification? [2]  
b) Describe the chemoautotrophic nitrification process. [4]
3. a) 'Maltose is a reducing sugar but sucrose is not'— Explain. [2]  
b) Give example of one aromatic and one Hydroxyl group containing amino acids. [1+1]  
c) Briefly explain the controlling points of glycolysis. [3]
4. What is the difference between commensalism and ammensalism? Explain with suitable example. What do you mean soil colloids? [2+2+3]

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