

**V.P & R.P.T.P SCIENCE COLLEGE**

Vallabh Vidyanagar

Internal Test : 2019

Date: 05-10-~~18~~ 19

B.Sc Vth Semester

Total Marks - 25

Time : 11-00 to 12-15 p.m Microbiology - US05CMIC03

**Q.1 Multiple choice questions.**

**(05)**

- 1) Which proteins act as a carrier to move substances across the cytoplasmic membrane in active transport ?
  - a) Facilitator proteins
  - b) Trans membrane proteins
  - c) Binding proteins
  - d) Peripheral proteins
- 2) Which of the following is antiviral drug used against AIDS?
  - a) Acyclovir
  - b) AZT
  - c) Amantadine
  - d) None of the above
- 3) Purification process for UMP Synthase was set out by :
  - a) Ron Kaback
  - b) James Sumner
  - c) Kuhne
  - d) Mary Ellen Jones
- 4) Name the type of reaction in which NAD is used as co-enzyme.
  - a) Carboxylation
  - b) Phosphorylation
  - c) Alkylation
  - d) Oxidation – Reduction
- 5) Which of the following covalent modification leads to activation of glycogen phosphorylase ?
  - (a) Acetylation
  - (b) Phosphorylation
  - (c) Adenylation
  - (d) Methylation



**Q.2 Discuss passive transport processes of solute transport across the membrane.**

**(05)**

OR

**Q.2 Write a note on Siderophore .**

**(05)**

**Q.3 Explain the mode of action of :**

**(05)**

- (i) Sulfonamides (ii) Penicillin

OR

**Q.3 Discuss the process of Endospore formation in Bacteria.**

**(05)**

**Q.4 Discuss various factors affecting Enzyme activity.**

**(05)**

OR

**Q.4 (a) What is active site ? List the salient features of active site.**

**(03)**

**(b) Write only Six classes of IUB system of enzyme Classification**

**(02)**

**Q.5 What is Km ? Derive the equation to calculate Km value.**

**(05)**

OR

**Q.5 Write on :**

**(a) Discuss double reciprocal plot with its significance.**

**(03)**

**(b) Draw a plot  $1/V_0$  vs  $1/S_0$  in presence of competitive inhibitor & label all axis clearly.**

**(02)**

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