V.P & R.P.T.P SCIENCE COLLEGE , Vallabh Vidyanagar

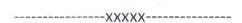
Internal Test: 2018

B.Sc - VI th Semester

Date: 14-03-18

Q.5

Time: 11-00 to 12-30 p.m. Microbiology - US06CMIC03 Total Marks - 25 (03)Q.1 Multiple choice questions. 1. Rotational catalysis was proposed by: a) J. E. Walker c) A.Lehninger b) E. Racker d) Paul Boyer 2. How many ATP are generated on degradation of Glucose in aerobic organism during Glycolysis? a) 08 c) 02 b) 07 d) 10 3. Which of the following enzyme brings reversible shift of the double bond from $\Delta 3$ cis to $\Delta 2$ trans in oxidation of unsaturated fatty acids? (a) Acyl CoA Dehydrogenase (c) Enoyl CoA Isomerase (b) Thiolase (d) Enoyl CoA Hydrase Q.2 Short Answer questions. (Attempt any two) (04)1) Explain P/O ratio. 2) Give outline of the three stages of CO₂ assimilation in photosynthetic Organism. 3) Explain α - Oxidation of fatty acids. Q.3What is oxidative phosphorylation? Explain the mechanism of oxidative phosphorylation. (06)OR Q.3 Discuss the following. (06)(a) ATP synthase (b) Relationship between anabolism and catabolism Discuss the pathway & energetic of TCA cycle. Q.4 (06)OR Q.4 (a) Discuss the amphibolic nature of TCA cycle. (06)(b) List four main activities of HMP pathway. Q.5 Discuss β - Oxidation of C16 fatty acid with its energetic. (06)OR



(06)

Discuss the biosynthesis of Palmitic acids.