

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

Vallabh Vidyanagar

Internal Test : 2014

Date: 12-03-14

B.Sc VIth Semester

Total Marks - 30

Time : 3-30 to 5-00 p.m

Microbiology - US06CMIC03

Q.1 Short Answer questions. (Attempt any three) (06)

1. What is P/O ratio ?.
2. How many subunits are there in mitochondrial F_1 of ATP synthase ? Give its Composition.
3. Explain Pasteur effect.
4. Give Anaplerotic reactions of TCA cycle.
5. Explain α - Oxidation of fatty acids.
6. What is ACP ? Explain its role in fatty acid biosynthesis.



Q.3 List and discuss the main components of mitochondrial ETC. (08)

OR

Q.3 Discuss the following.

- (a) ATP synthase (04)
- (b) Bacterial Photophosphorylation (04)

Q.4 Discuss the following.

- (a) Amphibolic nature of TCA cycle. (04)
- (b) Significance of HMP pathway. (04)

OR

Q.4 Calculate ATP generation on complete degradation of One molecule of Glucose giving related reactions. (08)

Q.5 Discuss Biosynthesis of Saturated fattyacids. (08)

OR

Q.5 Discuss the β -Oxidation of Palmitic acid with its energetic. (08)

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