

AQ – 837

**First Semester M. Sc. – I (CBCS) Microbiology
Examination**

**MICROBIAL PHYSIOLOGY AND
PHOTOSYNTHESIS**

Paper – III

P. Pages : 2

Time : Three Hours]

[Max. Marks : 80

Note : All questions are compulsory and carry equal marks.

1. Describe in detail chemical organisation of the plasma membrane. 16

OR

Describe in detail Permeable nature of plasma membrane. 16

2. (a) Explain ATP as currency of free energy in living cell. 8
(b) Write a note on free energy change. 8

OR

- (c) Describe High energy phosphate groups. 8
(d) Give detailed account of ATP cycle. 8

AQ-837

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3. (a) Describe bacterial Respiration. 8
(b) Write a note on oxidation – reduction enzymes. 8

OR

- (c) Describe in detail mitochondrial respiration. 8
(d) Explain proton translocation. 8

4. Describe in detail Inhibition of Respiration.

OR

Describe in detail Mechanism of oxidative phosphorylation. 16

5. (a) Give detailed account on photosynthetic pigments. 8
(b) Write a note on dark reaction. 8

OR

- (c) What is photophosphorylation ? 8
(d) Give the detailed account on electron transport carrier in photosynthetic bacteria. 8

