

M.Sc. (Part—I) Semester—II (CBCS Scheme) Examination
MICROBIOLOGY
(Microbial Metabolism)
Paper—VII

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) All questions carry equal marks.

1. Describe tricarboxylic acid cycle in detail. Write in brief on intracellular location of TCA Cycle. 16

OR

Describe Embden-Mayerhof-Parnas pathway in detail. Give bioenergetics of the EMP pathway in brief. 16

2. Explain ribulose monophosphate pathway in detail. 16

OR

(a) Explain oxidation of methane. 8

(b) Describe xylulose monophosphate pathway. 8

3. Describe biosynthesis of pyrimidine nucleotide. 16

OR

(a) Explain regulation of nucleotide synthesis. 8

(b) Describe inhibitors of nucleotide synthesis. 8

4. Describe biosynthesis of saturated fatty acid with example. 16

OR

(a) Explain reductive catabolism. 8

(b) Describe meta cleavage pathway. 8

5. Describe biosynthesis of aromatic amino acids. 16

OR

(a) Explain assimilation of inorganic nitrogen. 8

(b) Explain catabolism of glycine. 8

