

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

OR

- (a) Explain gluconeogenesis 8
- (b) Describe glyoxylate pathway. 8
2. Explain oxidation of methane and methanol. 16

OR

- (a) Explain serine pathway 8
- (b) Describe oxidation of formaldehyde. 8
3. Describe biosynthesis of purine nucleotide. 16

OR

- (a) Describe inhibitors of nucleotide synthesis 8
- (b) Explain formation of coenzymes. 8
4. Describe biosynthesis of fatty acid with example. 16

OR

- (a) Explain catabolism of tyrosine 8
- (b) Explain ortho cleavage pathway. 8
5. Explain biosynthesis of branched chain amino acid. 16

OR

- (a) Explain catabolism of L-alanine 8
- (b) Explain catabolism of glycine. 8

