



**JAZ-003-1193004**      Seat No. \_\_\_\_\_

**M. Sc. (Microbiology) (Sem. III) (CBCS)  
(W.E.F. 2016) Examination**

**December - 2019**

**Micro - 316 : Food Biotechnology  
(Elective)**

**Faculty Code : 003**

**Subject Code : 1193004**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**1** Answer briefly any **seven** of the following : (2 Marks each) **14**

- (a) What is FDA ?
- (b) What are food borne infections?
- (c) What is the importance of cheese starter cultures?
- (d) Define the terms EPA and ISI.
- (e) Enlist toxins produced by clostridia.
- (f) What is canning?
- (g) What is the difference between wine and beer?
- (h) Highlight the importance of quality assurance in food industry.
- (i) What is the difference between prebiotics and probiotics ?
- (j) What is putrefaction?

**2** Answer any **two** of the following : (7 Marks each) **14**

- (a) Describe the importance of yeasts in the production of wines.
- (b) Discuss methods used to prevent microbial spoilage of sausages.
- (c) Explain algae as SCP and methods to produce algal biomass.

- 3 Answer the following : (7 Marks each) 14
- (a) Give an account of starter culture microbes. Why are lactic acid bacteria important as starter cultures in dairy industries?
  - (b) Write a note on detection of genetically modified organisms.

**OR**

- 3 Answer the following : (7 Marks each) 14
- (a) Discuss distribution, morphological diversity and ecological importance of cyanobacteria.
  - (b) Describe the role of plant tissue culture for improvement of food additives.
- 4 Answer the following questions : (7 Marks each) 14
- (a) Give a detailed account on sterilization and dehydration as food preservation techniques.
  - (b) Discuss the differences between food borne infections and intoxications with suitable examples.
- 5 Answer any **two** of the following questions : (7 Marks each) 14
- (a) Give a detailed account on IPR and animal welfare.
  - (b) Write a note on biosensor in food industry.
  - (c) Discuss about microbial quality standards of food.
  - (d) Write a note on HACCP.
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