

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014**(UG—CCSS)****Open Course—Biotechnology****BT 5D 01—FOOD MICROBIOLOGY AND BIOTECHNOLOGY**

Time : Three Hours

Maximum Weightage : 30

I. Objective Type Questions. Answer *all* questions :

1 Water activity of fresh meat and fish :

- (a) 0.93 – 0.98. (b) 0.98 and above.
(c) 0.85 – 0.93. (d) 0.60 – 0.85.

2 Which is known as dairy mold :

- (a) Trichothecium. (b) Geotrichum candidum.
(c) Aspergillus flavur. (d) Penicillium chrysogenum.

3 The mold which causes diseases of grapes :

- (a) Spirotrichum. (b) Trichoderma.
(c) Botrytis. (d) Scopulariopsis.

4 The micro-organisms used as test organism for penicillin detected in milk :

- (a) B. subtilis. (b) B. pumilus.
(c) B. cereus. (d) B. polymyxa.

5 Pyogenic streptococcus cause mastitis in cow :

- (a) S. pyogenes. (b) S. agalactiae.
(c) S. thermophilus. (d) S. avicum.

6 Which one is single cell protein :

- (a) Pruteen. (b) Breed.
(c) Sausage. (d) Butter.

7 Which among is not a thermophilic bacteria :

- (a) E.coli. (b) Bacillus.
(c) Micrococcus. (d) Streptococcus.

Turn over

8 Who is father of canning :

- (a) Pasteur. (b) Koch.
(c) Nicolas Appert. (d) Paul Erlich.

9 Which among is not a food preservative used in food preservation :

- (a) Lactic acid. (b) Acetic acid.
(c) Sodium benzoate. (d) Calcium chloride.

10 Which one is a radiation resistant bacteria :

- (a) Micrococcus luteus. (b) Micrococcus roseus.
(c) Bacillus. (d) Clostridium.

11 Which organism produce Aflatoxin :

- (a) Aspergillus flavus. (b) Penicillium.
(c) Candida albicans. (d) Fusarium.

12 The recommended level of sodium nitrite in food :

- (a) 500 ppm. (b) 200 ppm.
(c) 100 ppm. (d) 400 ppm.

(12 X ¼ = 3 weightage)

II. Short Answer Type Questions. Answer all *nine* questions :

- 13 Food additives. 14 What is hydrocooling ?
15 Idli. 16 Xanthan production.
17 Amylases. 18 Botulism.
19 Enterotoxin. 20 Listeria monocytogenes.
21 Flat sour spoilage.

(9 x 1 = 9 weightage)

III. Short Essay or Paragraph Questions. Answer any *five* questions :

- 22 Give a brief note on mycotoxins.
23 HACCP concept.
24 FDA and USDA.
25 Chemical food preservative.
26 Production of proteolytic enzymes.
27 Discuss about different distilled beverages.
28 Give an account on oriented fermented foods.

(5 x 2 = 10 weightage)

IV. Essay Questions. Answer any *two* questions :

29 Write an essay on role of Yeast and mold in food industry.

30 Discuss about general principles underlying microbial spoilage of food.

31 Discuss about microbes in food.

(2 x 4 = 8 weightage)