

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, OCTOBER 2012

(CCSS)

BT 5D 01—FOOD MICROBIOLOGY AND BIOTECHNOLOGY

Time : Three Hours

Maximum : 30 Weightage

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

Match the following :-

- | | |
|----------------------------|--|
| 1 Blue-veined cheese | (a) <i>Propionibacterium shermanii</i> . |
| 2 Swiss cheese | (b) <i>Rhodotorula</i> . |
| 3 Green rot in <i>egg</i> | (c) <i>Penicillium roquefortii</i> . |
| 4 Thermotolerant bacteria | (d) <i>Pseudomonas fluorescens</i> . |
| 5 Pink yeast | (e) <i>Clostridium butyricum</i> . |
| 6 Can swells, butyric odor | (f) <i>Saccharomyces cerevisiae</i> . |
| 7 Baker's yeast | (g) <i>Micrococcus luteum</i> . |

Choose the correct answer :

8 Pasteurization exposes liquids for 30 minutes to a holding temperature of :

- | | |
|-------------|-------------|
| (a) 62.8°C. | (b) 62.5°C. |
| (c) 63.8°C. | (d) 61.8°C. |

9 Black rots in eggs is caused by :

- | | |
|--------------------------|--------------------------|
| (a) <i>Pseudomonas</i> . | (b) <i>Proteus</i> . |
| (c) <i>Acetobacter</i> . | (d) <i>Alcaligenes</i> . |

10 The most radioresistant organism of importance to food technologist :

- | | |
|--------------------------|--------------------------|
| (a) <i>C.botulinum</i> . | (b) <i>P.Vulgaris</i> . |
| (c) <i>E.Coli</i> . | (d) <i>Leuconostoc</i> . |

11 Chinese red rice is :

- | | |
|-------------|---------------|
| (a) Miso. | (b) Ang-khak. |
| (c) Tempeh. | (d) Natto. |

Turn over

12 Fishiness in butter is caused by :

- (a) *A. hydrophila*. (b) *Pseudomonas fragi*.
(c) *Fusarium culmorum*. (d) *Alternaria*.

(12 x $\frac{1}{4}$ = 3 weights)

II. Short Answer type questions. Answer *all* nine questions :

- 13 Regulatory mutants.
14 Invertase.
15 Baker's yeast.
16 Pruteen.
17 Enzymes in meat processing.
18 Kumiss.
19 Sauerkraut.
20 Tofu.
21 Salting.

(9 x 1 = 9 weights)

III. Short essay or paragraph questions. Answer any *five* questions :

- 22 SCP.
23 Food additives.
24 Distilled beverages.
25 Cheese manufacture process.
26 Fats from microbes.
27 Pasteurization.
28 Orleans' process.

(5 x 2 = 10 v)

IV. Essay questions. Answer any *two* out of 3 :

- 29 Give an account on the types of food spoilage.
30 Discuss food preservation by drying.
31 Give an account of the yeasts and molds which are important in the food indust

(2 x 4 =