20. (a) Explain the production of vinegar by quick mode.

Or

(b) Describe in detail about brewing of beer.

SECTION C — $(3 \times 10 = 30)$

Answer any THREE questions.

- 21. Discuss about the intrinsic factors affecting the growth of micro organism.
- 22. Bring out the common types of spoilage in vegetables.
- 23. Give the principles underlying meat spoilage.
- 24. Discuss the symptoms, foods involved and prevention of botulism.
- 25. Summarize the general procedure for production of sauerkraut.

S.No. 8767

22 SACND 1

(For candidates admitted from 2022-2023 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Part III - Allied

FOOD MICROBIOLOGY

Time: Three hours

Maximum: 75 marks

SECTION A — (20 marks)

Answer ALL questions.

I. (A) Choose the correct answer:

 $(5 \times 1 = 5)$

- 1. Identify the lowest water activity of bacteria
 - (a) 0.80

(b) 0.88

(c) 0.91

- (d) 0.75
- 2. In bread bacillus subtilis causes
 - (a) decay

(b) rotting

(c) ropiness

- (d) pigmentation
- 3. Spoilage of soft drinks is evidenced by
 - (a) cloudiness and ropiness
 - (b) offensive odour and taste
 - (c) rancidity and sourness
 - (d) discolouration and clarity

| 4. | The toxin produced by staphylococcus aureus is | | |
|------------|--|-----|--------------------|
| | (a) neurotoxin | (b) | interotoxin |
| | (c) hepatoxin | (d) | aflatoxin |
| 5 . | Miso is fermented product obtained from | | |
| | (a) soyabean | (b) | chinese red rice |
| | (c) wheat gluten | (d) | polished rice mash |
| | (B) Fill in the blanks: | | $(5\times 1=5)$ |
| 6. | Locomotion effected by one or more whip like then structures in protozoa is called ——— | | |
| 7. | Black mold rot in vegetables is caused by | | |
| 8. | Proteus causes spoilage of eggs by producing | | |
| 9. | Traveller's diarrhoea is caused by | | |
| 10. | ———— organism grow first in idli batter. | | |
| II. | Answer ALL the questions: $(5 \times 2 = 10)$ | | |
| 11. | What are thermopiles? | | |
| 12. | Mention the sources of contamination in honey. | | |
| 13. | What is putrefaction? | 1 | |
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- 14. What is mean by infestation?
- 15. What is koji?

SECTION B —
$$(5 \times 5 = 25)$$

Answer ALL the questions, choosing either (a) or (b).

16. (a) Outline the general characteristics of algae.

Or

- (b) Write about the growth of micro organisms.
- 17. (a) Enlist the common molds responsible for spoilage in bread.

Or

- (b) Express the sources of contamination in fruits.
- 18. (a) Write short notes on fungal rotting of egg.

Or

- (b) Mention the sources of contamination in milk.
- 19. (a) List the foods involved and prevention of shigellosis.

Or

(b) Brief about the food poisoning caused by Bacillus cereus.