

2053

B. Voc. (Food Processing and Preservation)
Fourth Semester
FPP-404: Food Pathogens

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

X-X-X

I. Attempt the following:-

- a) Mention the common sources of food contamination.
- b) Give characteristics and pathogenesis of *Vibrio sp.* and Hepatitis C.
- c) Mention the different methods to control presence of mycotoxins in food.
- d) What are the hazards associated with toxins from Enteric bacteria? (4x2)

UNIT- I

- II. Discuss in detail the risk associated in food borne illness. (8)
- III. Discuss about diarrhoeal disease pathogenesis. (8)

UNIT - II

- IV. Explain the detection methods for *Clostridium botulinum*, *Listeria monocytogenes* and *Salmonella sp.* (8)
- V. Write a note characteristics and pathogenesis of
 - a) *Clostridium perfringens*
 - b) *Staphylococcus aureus* (4,4)

UNIT - III

- VI. How Rota virus and Noro virus is detected in food? Explain the clinical symptoms of Hepatitis A. (8)
- VII. How food borne illness caused by *Giardia lamblia* can be prevented? Explain. (8)

UNIT - IV

- VIII. What are the different methods to control foodborne diseases outbreaks in food service establishments? Explain. (8)
- IX. Discuss in detail about mycotoxins of *Aspergillus sp.* and *Penicillium sp.* (8)

X-X-X