

2072

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. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- a) What are common sites of food borne illness?
- b) Define briefly the pathogenesis and clinical symptoms of *Staphylococcus aureus* and *Bacillus* sp.
- c) Define mycotoxins. Give methods to control mycotoxins in food
- d) Give control measures for food borne illness in food service outlets (4x2)

**UNIT - I**

II. Discuss in detail significance and incidence of foodborne illness. (8)

- III. a) What are common sources of food contamination?  
b) Discuss various risk factors associated in food borne illness. (3,5)

**UNIT - II**

- IV. Discuss isolation and detection methods for *Clostridium perfringens* and *Shigella* sp. (8)
- V. Discuss the various characteristics and pathogenesis of *Salmonella* sp. And *Listeria monocytogenes*? (8)

**UNIT - III**

- VI. Give clinical symptoms of Hepatitis A and Hepatitis C virus. Describe the detection methods for polio virus. (8)
- VII. How food borne illness caused by *Entamoeba histolytica* can be prevented? Explain (8)



(2)

**UNIT - IV**

- VIII. Describe the methods to control foodborne diseases outbreaks in industrial establishments. (8)
- IX. Discuss in detail toxins of enteric bacteria? What are the hazards associated with it? (8)

x-x-x