

1059

B. Voc. (Food Processing and Preservation)

Fourth Semester

FFP-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) Significance of food borne illness.
- b) What is the difference between food borne infection and food poisoning?
- c) How bacteria can be isolated from contaminated food.
- d) What are the characteristics of Rota virus?
- e) Give an account of benefits prevention of protozoan food borne diseases.
- f) What are enteric bacteria? (6x2)

**UNIT - I**

- II. a) Discuss various natural sources of food contamination.
- b) Explain risk factors associated with food borne illness. (4,3)
- III. What are the most common food categories implicated in outbreaks of food borne diseases. How incidence of any food borne illness can be controlled. (7)

**UNIT - II**

- IV. Discuss characteristics, pathogenesis and clinical symptoms caused by *Listeria monocytogenes* and *Shigella sp.* (7)
- V. a) Discuss methods to isolate and detect *Clostridium sp.* involved in causing food borne diseases.
- b) Write a note on pathogenesis of food borne illness caused by *Salmonella sp.* (4,3)

**UNIT - III**

- VI. How Hepatitis virus can be cultured in laboratory. What are the recent methods to detect the Hepatitis A and C virus in clinical samples? (7)
- VII. Explain pathogenesis of *Entamoeba histolytica* involved in causing food borne diseases. How the infection can be controlled. (7)

(2)

**UNIT - IV**

VIII. Explain the specific control measures adopted in commercial food sectors to control food borne diseases outbreaks. (7)

IX. Write short notes on:-

a) Mycotoxins produced by *Penicillium sp.*

b) Damage caused by enterotoxins. (2x3½)

x-x-x