

(P.T.O.)

- iii) Personnel handling of packaging material may constitute a major source of contamination in dairy products.
- iv) SPC is preferred over DMC method for enumeration of microbes.
- v) Dye-reduction test is indirect method of testing number of microorganisms.

B) State whether True or False. If false, rewrite the statement after making necessary corrections. (05)

- i) In ATP bioluminescence method enzyme lactase is used for luminescence production.
- ii) Limulus test is specific for glycopolysaccharide residue, it can detect up to 10^{-15} gram of it per ml.
- iii) *Staphylococcus aureus* in food present potential public health hazard since many strains of this microorganisms produce neurotoxin.
- iv) Lipolytic counts are taken using tributyrin agar after preparation of appropriate dilution of the sample.
- v) Aflatoxin B-1 in dairy animals feed is transferred into aflatoxin G-1 and is secreted in milk.

SECTION –‘B’

- Q. 3 Describe in detail HACCP and draft its implementation plan for production of any one fermented dairy food. (06)
- Q. 4 Discuss in detail current test available for monitoring drug residue in milk and milk products. (06)
- Q. 5 Discuss various national and international agencies involved in microbial quality of dairy products. (06)
- Q. 6
- A) Enlist common methods for controlling microbial load in water supplies. (02)
 - B) Enlist the various rapid microbiological techniques used in dairy industry. (02)
 - C) What is concept of risk analysis? (02)
- Q. 7
- A) Discuss in brief the general steps used for effluent treatment in dairy industry. (03)
 - B) Discuss in detail about ICMSF. (03)
- Q. 8 Write a short note on following.
- A) Personal hygiene (02)
 - B) Codex Alimentarius Commission. (02)
 - C) TQM (02)
- Q. 9
- A) Differentiate between QA and QC. (02)
 - B) Write in details method for isolation and enumeration of Salmonella in dairy foods. (04)
