

(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\* (06)  
fermented dairy food.
- Q. 4 Discuss in detail current test available for monitoring drug residue in milk and milk (06)  
products.
- Q. 5 Discuss various national and international agencies involved in microbial quality of (06)  
dairy products.
- 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. (02)  
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 (04)  
foods.

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