

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMEISTER END THEORY EXAMINATION, B.TECH. (D.T.) Degree Course 2016-17

Semester	: VII (New Syllabus)	Academic Year	: 2016-2017
Course No.	: DT-712	Course Title	: Dairy Plant Management and Pollution Control
Credits	: 1+1=2	Total Marks	: 50
Day & Date	: Wednesday, 04/01/2017	Time	: 11.00 to 13.00 Hrs.

- Note :**
- 1) All questions from **Section 'A'** are compulsory.
 - 2) Solve **Any Five** questions from **Section 'B'**.
 - 3) All questions carry equal marks.
 - 4) Draw neat and well labelled diagram wherever necessary.

SECTION – 'A'

Q. 1 A) Choose and indicate the most appropriate answer for the following. (05)

- i) The example of mild alkaline detergent is
 - a) Sodium Hydroxide
 - b) Sodium sulphate
 - c) Sodium bicarbonate
 - d) None of these
- ii) The level of hardness for drinking water should be
 - a) 10 ppm
 - b) 150 ppm
 - c) 200 ppm
 - d) 600 ppm
- iii) Use of hard water in dairy plant has profound effect on
 - a) Refrigeration plant
 - b) Boiler
 - c) Butter churn
 - d) Powder plant
- iv) is the traditional way of appraising performance
 - a) Confidential report
 - b) Score card
 - c) Rating method
 - d) Critical Incident Method
- v) In cleaning process, the substances capable of destroying all pathogenic and almost all non-pathogenic microorganisms are known as
 - a) Surface active agents
 - b) Detergents
 - c) Sanitizers
 - d) Acids

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

- i) Most important constituent in assessing the losses in a milk plant is protein.
- ii) Management by Objectives is the modern performance appraisal frame work offered by Peter Drucker.
- iii) Preventive Maintenance is also termed as Diagnostic or predictive maintenance.
- iv) PFA was promulgated in the year 1947.
- v) Method Study + Time Study = workstudy

Q. 2 A) Do as directed. (05)

- i) What is the role of material balance method in dairy Industry?
- ii) State the two names of any cold sterilizing agents.
- iii) What is the ultimate objective of production planning and control?
- iv) Which act passed in the year 2006 by overruling the all other food related laws.
- v) Define the term plant operating efficiency.

(P.T.O.)

B) Answer in one line.

(05)

- i) What is the meaning of the term ABC analysis?
- ii) Give two examples of Gaseous lubricants.
- iii) Give two examples of Plastic lubricants.
- iv) Give two examples of Solid lubricants.
- v) Give two examples of primary pollutants.

SECTION – 'B'

- Q. 3 What is Production / Operations Management. Write the scope and benefits of production management. (06)
- Q. 4 What is clean milk? Write about personal hygiene to be followed in a dairy plant. (06)
- Q. 5 Discuss the factors affecting the plant operating efficiency. Mention different methods of Estimation of losses in a dairy plant. (06)
- Q. 6
- a) What is job specification and give its importance. (02)
 - b) Differentiate between job enhancement and job enrichment. (02)
 - c) Explain the term motion study. (02)
- Q. 7
- a) Describe the characteristics of dairy effluent. (03)
 - b) Enumerate the types of effluent treatment. (03)
- Q. 8
- a) Differentiate between cleaning and sanitization. (02)
 - b) State the different sanitizers used in dairy cleaning. (02)
 - c) Define pollution. (02)
- Q. 9
- a) Differentiate between BOD and COD. (02)
 - b) Develop a suitable CIP system for a dairy plant. (04)
