

**MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR**  
**SEMESTER END THEORY EXAMINATION, B. TECH. (D.T.) DEGREE COURSE 2018-19**

Semester	: VII (New Syllabus)	Academic Year	: 2018--2019
Course No.	: DT-712	Course Title	: Dairy Plant Management & Pollution Control
Credits	: 1+1 = 2	Total Marks	: 50
Day & Date	: Tuesday, 08/01/2019	Time	: 15.00 to 17.00 Hrs.

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

**SECTION – 'A'**

Q. 1 A) Choose the most appropriate answer from the options given below. (05)

- i) The process through which inputs are converted into outputs is referred to as ....
  - a) Transformation process
  - b) Materials management
  - c) Transfusion process
  - d) None of these
- ii) The charts which are used to determine the project schedule are .....
  - a) Flow charts
  - b) Gantt charts
  - c) Pie charts
  - d) Stock charts
- iii) Work study is concerned with .....
  - a) Production planning
  - b) Routing
  - c) Best way of doing Jobs
  - d) Stock charts
- iv) Assessment of efficiency depends on following factors .....
  - a) Check-up
  - b) Clocking the performance
  - c) Synchronization
  - d) All of these
- v) The removal of fat from the effluent is done by .....
  - a) Bar screening
  - b) Air flotation
  - c) Equalization tank
  - d) Sedimentation

B) Answer the following in one line. (05)

- i) Define the term Break Even point.
- ii) State the flow rate for effective CIP in plate heat pasteurizer.
- iii) What should be the maximum limit of BOD (mg/max) as per ISI Standards for disposal of industrial effluent in to irrigation land?
- iv) State the percent permissible losses in condensing and spray drying.
- v) What should be the chloride compound concentration and time for effective cleaning of pumps and pipes?

Q. 2 A) Draw the symbols for following stages which are universally accepted and adopted for process flow charts. (05)

- i) Operation
- ii) Transport
- iii) Permanent storage
- iv) Delay or temporary storage
- v) Inspection

(P.T.O.)

- B) Give expanded form of the following. (05)
- i) AGMARK
  - ii) PFA
  - iii) FSSAI
  - iv) MBO
  - v) COD

**SECTION –‘B’**

- Q. 3 Define production management and discuss the types of production system on the basis of material flow characteristics. (06)
- Q. 4 How do you identify material losses on dairy plant? How the losses in dairy plant can be controlled? (06)
- Q. 5 Discuss about hazardous processes and preventive measures in dairy plant management to control noise and air pollution in the food/dairy industry. (06)
- Q. 6 Discuss the following.
- A) Job evaluation (02)
  - B) Job enhancement (02)
  - C) Job enrichment (02)
- Q. 7.
- A) Discuss industrial legislation in India, particularly for dairy industry. (03)
  - B) Discuss about recruitment and selection of employees in food industry. (03)
- Q. 8 Write short notes on.
- A) Spare parts inventory (02)
  - B) Work study (02)
  - C) Lubricants (02)
- Q. 9
- A) Write a note on cleaning and sanitization of dairy plant. (02)
  - B) Discuss about different components of dairy effluent treatment plants and their operation. (04)

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