

2019
5th Sem

B.TECH. FOOD TECHNOLOGY
V Semester Examination 2019
Course Code- BFTC- 505
Course Title – Food Plant Design and Maintenance

Roll No:

TIME: 3 hours

Max. Marks: 70

Note: 1. Answer all the questions in Section-A.

2. Answer any four questions in Section- B.

Section A (5*6=30)

- 1) With respect to Food plant layout, what do you understand by the following?
 - a) Plant design (3M)
 - b) Plant Size (3M)
- 2) Define **any two**
 - a) Depreciation (3M)
 - b) Rate of return (3M)
 - c) Discount rate of return (3M)
- 3) Explain **any two**
 - a) Minimum economically viable plant size (3M)
 - b) Net present worth (3M)
 - c) Payback Period (3M)
- 4) Discuss the general design considerations for food plant design. (6M)
- 5) Write a note on:
 - a) A general flow chart for plant design (3M)
 - b) Differences in the Design of Food and Non-Food Processing Plant (3M)

Section B (4*10=40)

- 1) Give a detailed account on the need for pre-feasibility analysis of any food plant design. (10M)
- 2) What are food plant utilities? Explain in detail. (10M)
- 3) Explain the basic types of plant layouts and types of flow patterns employed in designing the layout. (10M)
- 4) Write a note on factors involved in plant location decision. (10M)
- 5) What do you understand by technical analysis of identified venture? Explain. (10M)
- 6) Write a short note on
 - a) Cleaning and sanitation of food plant (3M)
 - b) Illumination of processing facility. (4M)
 - c) Characteristics of construction materials suitable for food equipment. (3M)