

Code No: RT41357

**R13****Set No. 1**

**IV B.Tech I Semester Supplementary Examinations, February/March - 2018**  
**FOOD PROCESSING PLANT DESIGN AND LAYOUT**  
**(Agriculture Engineering)**

Time: 3 hours

Max. Marks: 70

*Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B*

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**PART-A (22 Marks)**

1. a) Explain the principles of plant layout [4]
- b) Explain salient features of maize processing plant [4]
- c) What are the salient features of poultry plants? [4]
- d) What is optimum plant design? [3]
- e) What is the importance of air conditioning in food processing plants? [4]
- f) What are the different methods for removal of particulate solids? [3]

**PART-B (3x16 = 48 Marks)**

2. a) Explain general considerations for plant layout [8]
- b) Explain layout of equipment in detail [8]
3. a) What are the salient features of oilseeds processing plants? Draw the layout of oilseeds processing plant [8]
- b) What are the salient features of vegetable processing plants? Draw the layout of vegetable processing plant [8]
4. a) What are the factors involved in the plant location decision [8]
- b) What are the salient features of fish processing plants? Draw the layout of fish processing plant [8]
5. a) Explain different types of project designs [8]
- b) What are the design considerations of a food processing plant [8]
6. a) Explain the maintenance of food plant building [8]
- b) Explain different handling equipment used in food processing plants [8]
7. a) Explain the importance of cleaning and sanitation in food processing plants [8]
- b) Explain different methods for treatment of food plant waste water [8]