

**BACHELOR OF ENGINEERING IN (F. T, B. E.) EXAMINATION, 2019**

(3rd Year, 2nd Semester)

**PROJECT PLANNING LAYOUT & ECONOMICS**

Time : Three hours

Full Marks : 100

Use separate Answer - script for each Part

**PART - I  
(40 Marks)**

Answer any two from the following

1. Draw a plant layout for honey processing unit and describe the reasons for positioning of different section in the layout 20
2. A Food Processing unit is producing 12000 kg of cookies per month. Product has the selling price of 250 per kg.

Details of expenditure are given below

A. Non recurring expenditure	Amount
Plant and machinery	5600000/-
B. Land and Building with storage facilities on rental basis	40000/- per month
C. Recurring expenditure	
1) Cost of raw materials including packaging materials per month	835000
2) Salaries and wages	230000
3) Utility cost and other expanses	160000

Calculate the following

- a) Net Profit per annum   b) Net Profit Ratio   c) Rate of Return   d) Break Even Point (20)

3. What are the different factors that regulate the location of a plant? Describe the most important four factors to be considered before selection of location of a meat processing unit. (20)

[ Turn over

**B.FTBE (3<sup>RD</sup> YEAR, 2<sup>ND</sup> SEMESTER ) EXAMINATION-2019,  
PROJECT PLANNING LAYOUT & ECONOMICS**

**Time: Three hours**

**Full Marks: 100**

**Use separate Answer Script for each Part**

**PART-II ( 60 Marks )**

**1. Answer any two from the followings: ( 5x 2 = 10 )**

- a) What is the main object of providing depreciation in project estimation?
- b) What are issues addressed to define the term depreciation as a process ?
- c) What is the advantage of using the straight line method for calculating depreciation ?
- d) What is the principle of declining balance method of depreciation?

**2 Answer any Two from the followings : ( 5 x 2 =10 )**

- a) What is termed as asset value in project planning?
- b) How one can get the books value of an asset ?
- c) What is known as 'break even point' ?
- d) Which term is called optimum profit per unit of production ?

**3. Answer any Two from the followings: ( 10 x 2=20 )**

a) Following information relates to a fixed asset:

Original Cost of the asset : Rs. 8200000

Scrap Value at the end of the service life: Rs. 200000

The asset value at the end of the second year Rs.7000000

Calculate , using the sum of the years' digits method, the service life of the asset,

b) State the meaning of Capitalized costs , and Replacement value , using suitable example for each case.

c) What is the meaning of alternative investment ? Give a suitable example.

**4. Answer any Two from the followings : ( 10 x 2= 20 )**

(a) What do you mean by Perpetuity in capital investment ? Give a suitable example.

b) State the methods of generating Total Production Costs for running a project .

c) Discuss the method of solving equations for optimizing costs by linear programming process.