

EX/ FTBE / T / 421 /2017

**B.FTBE.--3RD YEAR--2ND SEM EXAMINATION---2017,
PROJECT PLANNING LAYOUT & ECONOMICS**

Time: Three hours

Full Marks: 100

Use separate Answer Script for each Part

PART-I (50 Marks)

(Answer any FIVE questions. All questions carry equal marks)

1. (a) What do you mean by Capital Investment and Interest ? Give a suitable example.
(b) What are the different forms of interests presently running in the banking business ?
2. (a) What is the difference between appreciation and depreciation ?
(b) State the methods of generating Capitalized Cost for running a project .
3. Discuss the method of solving equations for optimizing costs by linear programming process.
4. (a) The original value of a piece of equipment is Rs. 88 lakh , completely installed and ready for use .Its salvage value is estimated to be Rs. 8 lakh at the end of a service life to be 8years. Determine the asset (or book) value of the equipment at the end of 5 years using :
 - a) Straight –line method ,
 - b) Textbook declining –balance method,
5. Discuss the graphical or analytical procedure for finding the optimum values of x and y for the equation to find the least value of C

$$C = 2.33x + 11900/xy + 1.86y + 10$$

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6. Discuss the necessary equations for developing the optimum design of an equipment.

7. Discuss the importance of statistical analysis in plant design.

8. Discuss the application of PERT and CPM in small scale industries.

9. Write short notes on : (Any Two)

a.) Continuous cash flow and Interest compounding.

b.) Depreciation and Break –even point.

c.) Standard deviation in variability of data.

d.) Network diagram and Critical path.

e.) Optimum production rate for minimum cost per unit of production.

