B. PRODUCTION ENGG. SUPPLEMENTARY EXAMINATION, 2017

(4^{th} Year, 1^{st} Semester)

PRODUCTION ECONOMICS AND FINANCIAL MANAGEMENT

Full Marks:100 Time: Three Hours

Answer any Five questions taking at least two questions from each part.

PART-I

1. a) What is Managerial Economics ? What are the various theories involved in Microeconomics?
   b) What is production function? What are the types of it?
   c) What is marginal product of a factor?
   d) What is Marginal Rate of Technical Substitution?
   e) Discuss the effect of Technological Progress on Production Function

8+4+2+2+4

2. a) Discuss on the law of returns to scale for long run analysis of production.
   b) Derive the conditions for maximization of profit subject to given cost.
   c) The production function of a firm is given as: $Q= 5.0\ L^{0.65}\ K^{0.35}$, where L and K are Labour and Capital units respectively. The price of Labour and Capital are Rs.100 and Rs.200 respectively. Determine the least cost combination of inputs for an output of 1500 units. Also determine the value of least cost. 4+6+10

3. a) What is the law of demand? What are the factors affecting the demand?
   b) What is the law of supply? What are the exceptions to the law of supply?
   c) What is price elasticity of demand? What are the types of it?
   b) Discuss on various cost curves according to modern theory of cost.

5+5+5+5

4. a) What is equilibrium price of a commodity ?
   b) What are the conditions for existence of perfect competition?
   c) Discuss on market situations: Monopoly, Monopsony, Duopoly and Oligopoly.

2+6+12

PART-II

5. a) What are the various types of Finance? What do you understand by " Business Finance" ?

b) What is " Financial Management"? What are the scope of Financial Management?

c) What are the objectives of Financial Management?

d) What are the functions of Finance Manager?

7+5+4+4

6. a) What do you mean by working capital? What are needs of it? What are the various types of it? What are the methods of calculation of it?

b) What is Capital Budgeting? What are the steps of Capital Budgeting Process?

12+8

7. a) A company has two alternative proposals as follows:

	Proposal 1 Automatic Machine	Proposal II Ordinary Machine
Cost of the machine:	Rs.2,20,000	Rs.60,000
Estimated Life	5.5 yrs	8 yrs
Estimated Sales p.a.	Rs.1,50,000	Rs.1,50,000
Cost: Materials	Rs.50,000	Rs.50,000
Cost of Labour	Rs.12,000	Rs.60,000
Cost of Variable overheads	Rs.24,000	Rs.20,000

Based on profit of the proposal, which one is to be recommended? Determine the return on investment for both the proposals.

b) Discuss various methods of Capital Budgeting for evaluation of projects.

8+12

8. a) What do you mean by Time value of Money? Derive the expression of Present Value of an annuity.

b) A company has to select one of the following projects:

	Project A	Project B
Cost	Rs. 22,000	Rs.20,000
Cash inflows:		
Year 1	Rs.12,000	Rs. 2,000
Year 2	Rs. 4,000	Rs.2,000
Year 3	Rs. 2,000	Rs.4,000
Year 4	Rs.10,000	Rs.20,000

Using the internal rate of Return (IRR) method recommend which project is preferable.

6+14
