



# MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code : AUE801HU ENGINEERING ECONOMY & FINANCIAL MANAGEMENT

UPID : 008184

Time Allotted : 3 Hours

Full Marks : 70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable

## Group-A (Very Short Answer Type Question)

1. Answer any ten of the following :

[ 1 x 10 = 10 ]

- (I) Define financial management.
- (II) Write two advantages of ratios.
- (III) Define working capital.
- (IV) What do you mean by capital budgeting?
- (V) Define BEP.
- (VI) Define firm.
- (VII) Explain law of supply.
- (VIII) Write down formula of current ratio.
- (IX) Define MOS.
- (X) Define gross working capital.
- (XI) Define acid test ratio.
- (XII) Define net working capital.

## Group-B (Short Answer Type Question)

Answer any three of the following :

[ 5 x 3 = 15 ]

2. Define operating cycle. [5]
3. Define IRR. [5]
4. Calculate P/V Ratio from the following data: [5]  
 Sales = Rs. 2,50,000  
 Variable Cost = Rs. 1,50,000  
 Fixed Cost = Rs. 40,000. Also calculate variable cost at Rs. 2,00,000 of sales.
5. The equity capital and total debt of Super Industries Ltd. amount to Rs. 150 lakhs and Rs. 300 lakhs respectively. The EBIT of the company amounts to Rs. 90 lakhs. Calculate the return on investment of the company. [5]
6. Define indifference curves. What are the features of indifference curve? [5]

## Group-C (Long Answer Type Question)

Answer any three of the following :

[ 15 x 3 = 45 ]

7. A company is planning to purchase a machine. Two machines A and B are available, each costing ' 5 lakhs. In comparing the profitability of the machines, a discounting rate of 10% is to be used and machines to be written off in five years by straight line method of depreciation with nil residual value. Cash inflows after tax are expected as follows: [ 15 ]

(Rs. In lakhs)

Year	Machine A	Machine B
1	1.5	0.5
2	2.0	1.5
3	2.5	2.0
4	1.5	3.0
5	1.0	2.0

Indicate which machine would be profitable using the following methods of ranking investment proposals :

- (i) Pay back period method
- (ii) Net present value method
- (iii) Profitability index method. and
- (iv) Average rate of return method

8. (a) What are the difference between trial balance and balance sheet? [ 7 ]  
(b) 'Errors are not detected by trial balance'----- Explain. [ 8 ]
9. From the following ledger balances prepare a Trial Balance as on 31st December, 2023: [ 15 ]  
Machinery Rs. 3,00,000; Purchases Rs. 7,22,100; Opening stock Rs. 4,80,000; Land and building Rs. 3,60,000; Trade expenses Rs. 20,000; Bills payable Rs. 30,000; Cash at Bank Rs. 31,500; Commission paid Rs. 1,40,000, Salary Rs. 45,000; Purchase return Rs. 15,000; Discount allowed Rs. 2,100; Sales Rs. 11,40,000; Debtors Rs. 2,40,000; Bills Receivable Rs.1,20,000; Carriage inward Rs. 4,500; Carriage Outward Rs.7,200; 10% loan Rs. 1,20,000; Sales return Rs. 15,400; Furniture Rs. 30,000; Bad debts Rs. 7,200; Capital Rs. 12,50,000 ; Wages Rs. 60,000 Reserve for doubts Rs. 30,000 (1.1.2023).
10. Explain long run perfect competition market. [ 15 ]
11. (a) Define elasticity of demand. [ 8 ]  
(b) If the price of certain goods falls from Rs. 20/- to Rs.10/-, that causes increase in the demand from 43 units to 75 units. Calculate the price elasticity of demand. [ 7 ]

\*\*\* END OF PAPER \*\*\*