MOCK TEST PAPER – 1

INTERMEDIATE (IPC): GROUP – I

PAPER – 3: COST ACCOUNTING AND FINANCIAL MANAGEMENT

Answers are to be given only in English except in the case of the candidates who have opted for Hindi medium. If a candidate has not opted for Hindi medium his/ her answers in Hindi will not be valued.

*Question No. **1** is compulsory.*

*Attempt any **five** questions from the remaining **six** questions.*

Working notes should form part of the answer.

Time Allowed – 3 Hours **Maximum Marks – 100**

1. Answer the following:

(a) A factory produces two products, 'Ghee' and 'Cream' from a single process. The joint processing costs during a particular month are:

Direct Material	₹ 60,000
Direct Labour	₹ 19,200
Variable Overheads	₹ 24,000
Fixed Overheads	₹ 64,000

Sales: Ghee - 200 litre @ ₹ 600 per litre; Cream – 240 litre @ ₹ 200 per litre.

Required:

I. Apportion joints costs on the basis of:

(i) Physical Quantity of each product.

(ii) Contribution Margin method, and

II. Determine Profit or Loss under both the methods.

(b) A machine costing ₹ 10 lakhs, was purchased on 01-04-2021. The expected life of the machine is 10 years. At the end of this period its scrap value is likely to be ₹ 10,000. The total cost of all the machines including new one was ₹ 90 lakhs.

The other information is given as follows:

(i) Working hours of the machine for the year was 4,200 including 200 non-productive hours.

(ii) Repairs and maintenance for the new machine during the year was ₹ 6,000.

(iii) Insurance Premium was paid for all the machine ₹ 9,000.

(iv) New machine consumes 8 units of electricity per hour, the rate per unit being ₹ 3.75

(v) The new machine occupies 1/10th area of the department. Rent of the department is ₹ 2,400 per month.

(vi) Depreciation is charged on straight line basis.

Compute machine hour rate for the new machine.

(c) In respect of two companies having same business risk, following information is given:

Capital employed = ₹ 4,00,000; EBIT = ₹ 60,000; K_e = 12%

Sources	Levered Company (₹)	Unlevered Company (₹)
Debt (@10%)	1,50,000	Nil
Equity	1,50,000	3,00,000

Investor is holding 20% shares in levered company. Calculate increase in annual earnings of investor if he switches his holding from Levered to Unlevered company.

(d) ABC Ltd. has total sales of 10,00,000 all of which are credit sales. It has a gross profit ratio of 25% and a current ratio of 2. The company's current liabilities are ₹ 2,00,000. Further, it has inventories of ₹ 80,000, marketable securities of ₹ 50,000 and cash of ₹ 30,000. From the above information:

(i) Calculate the average inventory, if the expected inventory turnover ratio is three times?

(ii) Also calculate the average collection period if the opening balance of debtors is expected to be ₹ 1,50,000.

Assume 360 days a year. **(5 Marks × 4 = 20 Marks)**

2. (a) ABC Ltd. has its factory at two locations viz Noida and Patparganj. Rowan plan is used at Noida factory and Halsey plan at Patparganj factory.

Standard time and basic rate of wages are same for a job which is similar and is carried out on similar machinery. Normal working hours is 9 hours per day in a 5 day week.

Job at Noida factory is completed in 36 hours while at Patparganj factory it has taken 33 hours 45 minutes. Conversion costs at Noida and Patparganj are ₹ 6,084 and ₹ 5,569 respectively. Overheads account for ₹ 25 per hour.

Required:

(i) To find out the normal wage; and

(ii) To compare the respective conversion costs. **(8 Marks)**

(b) Sophisticated Limited is considering three financing plans. The key information is as follows:

(a) Total investment amount to be raised ₹ 4,00,000

(b) Plans of Financing Proportion:

Plans	Equity	Debt	Preference Shares
A	100%	-	-
B	50%	50%	-
C	50%	-	50%

(c) Cost of debt 10%

Cost of preference shares 10%

(d) Tax rate 30%

(e) Equity shares of the face value of ₹ 10 each will be issued at a premium of ₹ 10 per share.

(f) Expected EBIT is ₹ 10,00,000.

You are required to determine for each plan: -

(i) Earnings per share (EPS)

(ii) The financial break-even point.

(iii) Indicate if any of the plans dominate and compute the EBIT range among the plans for indifference. **(8 Marks)**

3. (a) Navyug Ltd. manufactures chemical solutions for the food processing industry. The manufacturing takes place in a number of processes and the company uses a FIFO process costing system to value work-in-process and finished goods. At the end of the last month, a fire occurred in the factory and destroyed some of the paper files containing records of the process operations for the month.

Navyug Ltd. needs your help to prepare the process accounts for the month during which the fire occurred. You have been able to gather some information about the month's operating activities but some of the information could not be retrieved due to the damage. The following information was salvaged:

- Opening work-in-process at the beginning of the month was 900 litres, 70% complete for labour and 60% complete for overheads. Opening work-in-process was valued at ₹ 29,970.
- Closing work-in-process at the end of the month was 160 litres, 30% complete for labour and 20% complete for overheads.
- Normal loss is 10% of input and total losses during the month were 1,800 litres partly due to the fire damage.
- Output sent to finished goods warehouse was 4,200 litres.
- Losses have a scrap value of ₹ 20 per litre.
- All raw materials are added at the commencement of the process.
- The cost per equivalent unit (litre) is ₹39 for the month made up as follows:

	(₹)
Raw Material	23
Labour	7
Overheads	9
	39

Required:

(i) Calculate the quantity (in litres) of raw material inputs during the month.

(ii) Calculate the quantity (in litres) of normal loss expected from the process and the quantity (in litres) of abnormal loss / gain experienced in the month.

(iii) Calculate the values of raw material, labour and overheads added to the process during the month.

(iv) Prepare the process account for the month. **(8 Marks)**

(b) XYZ Company Ltd. is considering to select a machine out of two mutually exclusive machines. The company's cost of capital is 12 per cent and corporate tax rate is 30 per cent. Other information relating to both machines is as follows:

	Machine – I	Machine – II
Cost of Machine	₹ 30,00,000	₹ 40,00,000
Expected Life	5 Yrs.	5 Yrs.
Annual Income (Before Tax and Depreciation)	₹ 12,50,000	₹ 17,50,000

Depreciation is to be charged on straight line basis:

You are required to calculate:

(i) Discounted Pay Back Period

(ii) Net Present Value

(iii) Profitability Index

The present value factors of ₹ 1 @ 12% are as follows:

Year	01	02	03	04	05
PV factor @ 12%	0.893	0.797	0.712	0.636	0.567

(8 Marks)

4. (a) Amy Ltd. manufacture and sales its product RM. The following figures have been collected from cost records of last year for the product RM:

Elements of Cost	Variable Cost portion	Fixed Cost
Direct Material	30% of Cost of Goods Sold	--
Direct Labour	15% of Cost of Goods Sold	--
Factory Overhead	10% of Cost of Goods Sold	₹ 3,45,000
Administration Overhead	2% of Cost of Goods Sold	₹ 1,06,500
Selling & Distribution Overhead	4% of Cost of Sales	₹ 1,02,000

(i) Break-even Sales (in rupees)

(ii) Profit earned during last year

(iii) Margin of safety (in %)

(iv) Profit if the sales were 10% less than the actual sales.

(Assume that Administration Overhead is related with production activity)

(b) The following figures and ratios are related to a company:

(i)	Sales for the year (all credit)	₹ 30,00,000
(ii)	Gross Profit ratio	25 percent
(iii)	Fixed assets turnover (based on cost of goods sold)	1.5
(iv)	Stock turnover (based on cost of goods sold)	6
(v)	Liquid ratio	1 : 1
(vi)	Current ratio	1.5 : 1
(vii)	Receivables (Debtors) collection period	2 months
(viii)	Reserves and surplus to Share capital	0.6 : 1
(ix)	Capital gearing ratio	0.5
(x)	Fixed assets to net worth	1.20 : 1

You are required to prepare:

(a) Balance Sheet of the company on the basis of above details.

(b) The statement showing working capital requirement, if the company wants to make a provision for contingencies @ 10 percent of net working capital including such provision.

(8 Marks)

5. (a) Discuss cost classification based on variability.

(b) Explain Single and Multiple Overhead Rates.

(c) Write short notes on Bridge Finance.

(d) What is Virtual Banking? State its advantages. **(4 × 4 =16 Marks)**

6. (a) Following information has been provided by a company:

Number of units produced and sold	9,000
Standard labour rate per hour	₹ 12
Standard hours required for 9,000 units	-
Actual hours required	25,641 hours
Labour efficiency	105.3%
Labour rate variance	₹ 1,53,846 (A)

You are required to calculate:

(i) Actual labour rate per hour

(ii) Standard hours required for 9,000 units

(iii) Labour Efficiency variance

(iv) Standard labour cost per unit

(v) Actual labour cost per unit.

(b) The following details of PQR Limited for the year ended 31st March, 2021 are given below:

Operating leverage	1.4
Combined leverage	2.8
Fixed Cost (Excluding interest)	₹ 2.10 lakhs
Sales	₹ 40.00 lakhs
10% Debentures of ₹ 100 each	₹ 25.00 lakhs
Equity Share Capital of ₹ 10 each	₹ 20.00 lakhs
Income tax rate	30 per cent

Required:

(i) Calculate Financial leverage

(ii) Calculate P/V ratio and Earning per Share (EPS)

(iii) If the company belongs to an industry, whose assets turnover is 1.6, does it have a high or low assets turnover?

(iv) At what level of sales, the Earning before Tax (EBT) of the company will be equal to zero?

In the question, assume that 10% Debentures and Share Capital consists of total liabilities.

(10 Marks)

7. Answer any **four** of the following:

(a) Journalise the following transactions in cost books under Non-Integrated system of Accounting.

(i)	Credit Purchase of Material	₹ 27,000
(ii)	Manufacturing overhead charged to Production	₹ 6,000
(iii)	Selling and Distribution overheads recovered from Sales	₹ 4,000
(iv)	Indirect wages incurred for Manufacturing department	₹ 8,000
(v)	Material returned from production to stores	₹ 9,000

(b) Discuss the advantages of raising funds by issue of equity shares.

(c) Elaborate the practical application of Marginal Costing.

(d) Explain the 'Aging Schedule' in the context of monitoring of receivables.

(e) How Economic Batch Quantity is determined? **(4 × 4 =16 Marks)**