

MOCK TEST PAPER –2

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 answer 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 company uses three raw materials Pi, Qu and Ar for a particular product for which the following data applies:

Raw Material	Usage per unit of product (Kg.)	Re-order Quantity (Kg.)	Price per Kg. (Rs.)	Delivery period (in weeks)			Re-order level (Kg.)	Minimum level (Kg.)
				Minimum	Average	Maximum		
Pi	5	10,000	0.10	1	2	3	8,000	?
Qu	2	5,000	0.30	3	4	5	4,750	?
Ar	3	10,000	0.15	2	3	4	?	2,000

Weekly production varies from 350 to 450 units, averaging 400 units of the said product.

What would be the following quantities–

- Minimum Stock of Pi?
 - Maximum Stock of Qu?
 - Re-order level of Ar?
 - Average stock level of Pi?
- (b) The following particulars refer to process used in the treatment of material subsequently, incorporated in a component forming part of an electrical appliance:
- The original cost of the machine used (Purchased in June 2013) was Rs. 1,00,000. Its estimated life is 10 years, the estimated scrap value at the end of its life is Rs.10,000, and the estimated working time per year (50 weeks of 44 hours) is 2,200 hours of which machine maintenance etc., is estimated to take up 200 hours.
No other loss of working time expected, setting up time, estimated at 100 hours, is regarded as productive time. (Holiday to be ignored).
 - Electricity used by the machine during production is 16 units per hour at cost of a 90 paise per unit. No current is taken during maintenance or setting up.
 - The machine required a chemical solution which is replaced at the end of week at a cost of Rs. 200 each time.
 - The estimated cost of maintenance per year is Rs.12,000.

- (v) Two attendants control the operation of machine together with five other identical machines. Their combined weekly wages, insurance and the employer's contribution to holiday pay amount Rs. 1,200.
- (vi) Departmental and general works overhead allocated to this machine for the current year amount to Rs. 20,000.

You are required to calculate the machine hour rate of operating the machine.

- (c) DT Finance Ltd. offers a fixed deposit scheme whereby Rs. 20,000 matures to Rs. 23,880 after 3 years, on a half-yearly compounding basis. If the company wishes to amend the scheme by compounding interest every quarter, what will be the revised maturity value?
- (d) Compute the return on capital employed (total assets basis) from the following information relating to companies X and Y.

	Company X	Company Y
Net Sales for the year	Rs. 3,25,000	?
Total Assets	?	Rs. 55,500
Net Profit on Sales	4%	17%
Turnover of total assets	5 times	?
Gross Margin	38%	Rs. 5,720 (25%)

(4 × 5 Marks = 20 Marks)

2. (a) Tricon Co. furnishes the following information for the month of September, 2020.

Particulars	Budget Details	Static Budget	Actual
Units produced & Sold		4,000	3,200
		(Rs.)	(Rs.)
Direct Material	3 kg p.u. @ Rs. 30 per kg.	3,60,000	3,10,000
Direct Labour	1 hr. p.u. @ Rs. 72 per hr.	2,88,000	2,25,600
Variable Overhead	1 hr. p.u. @ Rs. 44 per hr.	1,76,000	1,47,200
Fixed Overhead		1,80,000	1,68,000
Total Cost		10,04,000	8,50,800
Sales		12,00,000	8,96,000
Profit		1,96,000	45,200

During the month 10,000 kg. of materials and 3,100 direct labour hours were utilized.

Required

- (i) Prepare a flexible budget for the month.
- (ii) Determine the material usage variance and the direct labour rate variance for the actual vs the flexible budget. (8 Marks)
- (b) The summarized Balance Sheet of Trevon Ltd. as on 31-03-2020 and 31-03-2021 are as follows:

	31-03-2020 (Rs.)	31-03-2021 (Rs.)
Assets:		
Fixed Assets at cost	24,00,000	28,50,000
Less: Depreciation	6,90,000	8,70,000

Net Fixed Assets	17,10,000	19,80,000
Investments	3,00,000	2,40,000
Current Assets	8,40,000	9,90,000
Preliminary Expenses	60,000	30,000
	29,10,000	32,40,000
Liabilities:		
Share Capital	9,00,000	12,00,000
Capital Reserve	-	30,000
General Reserve	5,10,000	6,00,000
P&L Account	1,80,000	2,25,000
Debentures (Face Value Rs. 100)	6,00,000	4,20,000
Sundry Creditors	3,60,000	3,90,000
Tax Provision	2,70,000	2,55,000
Proposed Dividend	90,000	1,08,000
Unpaid Dividend	-	12,000
	29,10,000	32,40,000

During 2020-21, the company:

- (1) Sold one machine for Rs. 75,000, the cost of which was Rs. 1,92,000 and depreciation provided for it amounted to Rs. 1,05,000.
- (2) Provided Rs. 2,85,000 as depreciation.
- (3) Redeemed 30% of Debentures at Rs. 103.
- (4) Sold investments at profit and credited to Capital Reserve; and
- (5) Decided to value the stock at cost, whereas earlier the practice was to value stock at cost less 10%. The stock according to books on 31-03-2020 was 1,62,000. Stock on 31-03-2021 was 2,25,000 which was correctly valued at cost.

You are required to prepare the following statements:

- (i) Funds from Operations.
- (ii) Sources and application of funds and statement of changes in working capital.
- (iii) Fixed Assets account and loss on sale of machinery account. **(8 Marks)**

3. (a) The following figures have been taken from the financial accounts of a manufacturing firm for the year ended 31st March, 2021:

	(Rs.)
Direct material consumption	20,00,000
Direct wages	12,00,000
Factory overheads	6,40,000
Administrative overheads	2,80,000
Selling and distribution overheads	3,84,000
Bad debts	32,000
Preliminary expenses written off	16,000
Legal charges	4,000

Dividends received	40,000
Interest on fixed deposit	8,000
Sales- 48,000 units	48,00,000
Closing stock:	
- Finished stock- 4,000 units	3,20,000
- Work-in-process	96,000

The cost accounts for the same period reveal that the Direct Material consumption was Rs. 22,40,000; Factory overhead is recovered at 20% on prime cost; Administration overhead is recovered @ Rs. 4.8 per unit of production; and Selling and Distribution overheads are recovered at Rs. 6.40 per unit sold.

Required:

Prepare Costing and Financial Profit & Loss Accounts and reconcile the difference in the profit as arrived at in the two sets of accounts. **(8 Marks)**

- (b) WX Ltd. is considering a proposal to replace an existing machine.

The details of existing machine and new machine are as under:

Particulars	Existing Machine	New Machine
Cost of Machine	Rs. 3,75,000	Rs. 5,25,000
Estimated life (in years)	10	5
Present Book value	Rs. 1,87,500	-

- Out of the Life of 10 years of present machine, five years have already lapsed. The management can continue with this machine for the remaining lifetime.
- The activity level of both the machines is same.
- Residual value of new machine at the end of the life - Rs. 60,000.
- There will be a saving of Rs. 2,40,000 in the variable cost each year by new machine.
- If the old machine is sold, then it will fetch Rs. 90,000.
- WX Ltd. expects a minimum return of 11 % on the investment.
- Corporate tax - 30%
- No depreciation is to be charged in the year of sale.
- Present value of Rs. 1 @ 11% is as under:

Year	1	2	3	4	5
P/V Factor	0.901	0.812	0.731	0.659	0.593

You are required to comment on the suitability of replacement of the old machine. **(8 Marks)**

4. (a) Harry Transport Service is a Delhi based national goods transport service provider, owning five trucks for this purpose. The cost of running and maintaining these trucks are as follows:

Particulars	Amount
Diesel cost	Rs.15 per km.
Engine oil	Rs. 4,200 for every 14,000 km.
Repair and maintenance	Rs.12,000 for every 10,000 km.
Driver's salary	Rs. 20,000 per truck per month

Cleaner's salary	Rs. 7,000 per truck per month
Supervision and other general expenses	Rs.15,000 per month
Cost of loading of goods	Rs. 200 per Metric Ton (MT)

Each truck was purchased for Rs. 20 lakhs with an estimated life of 7,20,000 km.

During the next month, it is expecting 6 bookings, the details of which are as follows:

Sl. No.	Journey	Distance (in km)	Weight- Up (in MT)	Weight- Down (in MT)
1.	Delhi to Kochi	2,700	15	7
2.	Delhi to Guwahati	1,890	13	0
3.	Delhi to Vijayawada	1,840	16	0
4.	Delhi to Varanasi	815	11	0
5.	Delhi to Asansol	1,280	13	5
6.	Delhi to Chennai	2,185	11	9
	Total	10,710	79	21

Required

- Calculate the total absolute Ton-km for the next month.
 - Calculate the cost per ton-km. **(8 Marks)**
- (b) Kady Ltd. sells goods at a uniform rate of gross profit of 20% on sales including depreciation as part of cost of production. Its annual figures for the year ending 31st March 2021 are as under:

Particulars	(Rs.)
Sales (at 2 months' credit)	12,00,000
Materials consumed (Supplier's credit 2 months)	3,00,000
Wages paid (Monthly at the beginning of the subsequent month)	2,40,000
Manufacturing expenses (Cash expenses are paid – one month in arrear)	3,00,000
Administration expenses (General) (Cash expenses are paid – one month in arrear)	75,000
Selling expenses (Paid quarterly in advance)	37,500

The company keeps one month stock each of raw materials and finished goods. A minimum cash balance of Rs. 40,000 is always kept. The company wants to adopt a 15% safety margin in the maintenance of working capital.

Ignore work in progress.

Find out the requirements of working capital of Kady Ltd. on cash cost basis. **(8 Marks)**

- 'Overtime work should be resorted to only when it is extremely essential.' Discuss the effect of overtime payment on productivity.
- Elaborate the practical application of Marginal Costing.
- Discuss methods of Venture Capital Financing.
- What are the main responsibilities of a Chief Financial Officer of an organisation?

(4 × 4 = 16 Marks)

6. (a) Following data is available from the costing department of Aarya Ltd. which manufactures and markets a single product:

Materials	Rs. 32 per unit	Fixed Cost (Rs.)	Rs. 10,00,000
Conversion Costs (Variable)	Rs. 24 per unit	Present Sales (units)	90,000
Dealer's Margin (10% of Sale)	Rs. 8 per unit	Capacity Utilization	60 %
Selling Price	Rs. 80 per unit		

There is acute competition in the market, thus extra efforts are necessary to enhance the sales. For this, following suggestions have been proposed:

- (i) Reducing selling price by 5 per cent.
- (ii) Increasing dealer's margin by 20 per cent over the existing rate.

Which of these two suggestions would you recommend, if the company desires to maintain the present profit? Give reasons. **(8 Marks)**

- (b) The net sales of Mercy Ltd. is Rs. 45 crores. Earnings before interest and tax of the company as a percentage of net sales is 12%. The capital employed comprises Rs. 15 crores of equity, Rs. 3 crores of 13% Cumulative Preference Share Capital and 15% Debentures of Rs. 9 crores. Income-tax rate is 25%.

- (i) Calculate the Return-on-equity for the company and indicate its segments due to the presence of Preference Share Capital and Borrowing (Debentures).
- (ii) Calculate the Operating Leverage of the Company given that combined leverage is 4.5.

(8 Marks)

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

- (a) How apportionment of joint costs upto the point of separation amongst the joint products using market value at the point of separation and net realizable value method is done? Discuss.
- (b) State the method of costing and the suggestive unit of cost for the following industries:
 - (i) Interior Decoration
 - (ii) Furniture
 - (iii) Brick-works
 - (iv) Sugar company having its own sugarcane field.
- (c) What is Over-capitalisation? State its causes and consequences.
- (d) Briefly discuss advantages & limitations of Payback Period.
- (e) (i) State whether the following statements are true. Give reasons:
 - (I) Safety stock increases as demand increases.
 - (II) To protect against stock outs, a large batch size is a must.
- (ii) 'Finance function is most important for all business enterprises.' Discuss in brief.

(4 × 4 = 16 Marks)