

MOCK TEST PAPER – II
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) Yamuna Ltd manufactures a product, currently utilising 80% capacity with a turnover of Rs.8,00,000 at Rs.25 per unit. The cost data are as under:

Material cost Rs.7.50 per unit, Labour cost Rs.6.25 per unit

Semi-variable cost (Including variable cost of Rs.3.75) per unit Rs.1,80,000.

Fixed cost Rs. 90,000 upto 80% level of output, beyond this an additional Rs. 20,000 will be incurred.

Calculate:

- (i) Activity level at Break-Even-Point
 - (ii) Number of units to be sold to earn a net income of 8% of sales
 - (iii) Activity level needed to earn a profit of Rs. 95,000
- (b) Madhu Ltd has calculated a predetermined overhead rate of Rs.22 per machine hour for its Quality Check (QC) department. This rate has been calculated for the budgeted level of activity and is considered as appropriate for absorbing overheads. The following overhead expenditures at various activity levels had been estimated.

Total overheads	Number of machine hours
Rs.3,38,875	14,500
Rs.3,47,625	15,500
Rs.3,56,375	16,500

You are required to:

- (i) Calculate the variable overhead absorption rate per machine hour.
- (ii) Calculate the estimated total fixed overheads.
- (iii) Calculate the budgeted level of activity in machine hours.
- (iv) Calculate the amount of under/over absorption of overheads if the actual machine hours were 14,970 and actual overheads were Rs.3,22,000.
- (v) State the arguments for and against using departmental absorption rates as opposed to a single or blanket factory wide rate.

(c) From the following information, prepare a summarised Balance Sheet as at 31st March, 20X9:

Working Capital	Rs. 2,40,000
Bank overdraft	Rs. 40,000
Fixed Assets to Proprietary ratio	0.75
Reserves and Surplus	Rs. 1,60,000
Current ratio	2.5
Liquid ratio	1.5

(d) Mr. Om Prakash has taken a personal loan from a commercial bank of Rs.3,00,000 for one year at 18% p.a. It has to pay the loan amount in equal monthly installments (EMIs). Compute the EMI amount to be paid per month and the total interest that would be paid upto the end of sixth month. **(4 × 5 = 20 Marks)**

2. (a) BCC Ltd. manufactures Ordinary Portland Cement (OPC). The standard data for the raw materials that are used to manufacture OPC are as follows:

Material	Composition (%)	Rate per Metric Ton (Rs.)
Limestone	65	565
Silica	20	4,800
Alumina	5	32,100
Iron ore	5	1,800
Others	5	2,400

During the month of February 20X9, A Ltd. produced 500 MT OPC. Actual data related with the consumption and costs are as follows:

Raw Material	Quantity (MT)	Total Cost (Rs.)
Limestone	340	1,90,400
Silica	105	5,09,250
Alumina	25	8,12,500
Iron ore	30	53,400
Others	23	51,750

You are required to find out the following variances related with the production of OPC for the month of February 20X9:

- (i) Material Price Variance
- (ii) Material Mix Variance
- (iii) Material Yield Variance
- (iv) Material Cost Variance.

(8 Marks)

(b) A newly formed company has applied to the commercial bank for the first time for financing its working capital requirements. The following information is available about the projections for the current year:

Estimated level of activity: 1,04,000 completed units of production plus 4,000 units of work-in-progress. Based on the above activity, estimated cost per unit is:

Raw material	Rs. 80 per unit
Direct wages	Rs. 30 per unit

Overheads (exclusive of depreciation)	Rs. 60 per unit
Total cost	<u>Rs. 170 per unit</u>
Selling price	Rs. 200 per unit

Raw materials in stock: Average 4 weeks consumption, work-in-progress (assume 50% completion stage in respect of conversion cost) (materials issued at the start of the processing).

Finished goods in stock	8,000 units
Credit allowed by suppliers	Average 4 weeks
Credit allowed to debtors/receivables	Average 8 weeks
Lag in payment of wages	Average $1\frac{1}{2}$ weeks

Cash at banks (for smooth operation) is expected to be Rs. 25,000

Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only.

Find out the Net Working Capital required.

(8 Marks)

3. (a) The following data are available in respect of Process-I for January 20X9:

(1) Opening stock of work in process: 600 units at a total cost of Rs. 4,20,000.

(2) Degree of completion of opening work in process:

Material	100%
Labour	60%
Overheads	60%

(3) Input of materials at a total cost of Rs.55,20,000 for 9,200 units.

(4) Direct wages incurred Rs.18,60,000

(5) Production overhead Rs.8,63,000.

(6) Units scrapped 200 units. The stage of completion of these units was:

Materials	100%
Labour	80%
Overheads	80%

(7) Closing work in process; 700 units. The stage of completion of these units was:

Material	100%
Labour	70%
Overheads	70%

(8) 8,900 units were completed and transferred to the next process.

(9) Normal loss is 4% of the total input (opening stock plus units put in)

(10) Scrap value is Rs.60 per unit.

You are required to:

(i) Compute equivalent production,

(ii) Calculate the cost per equivalent unit for each element.

- (iii) Calculate the cost of abnormal loss (or gain), closing work in process and the units transferred to the next process using the FIFO method. **(8 Marks)**
- (b) Harappa Ltd has to make a choice between two projects namely A and B. The initial capital outlay of two Projects are Rs.1,35,000 and Rs.2,40,000 respectively for A and B. There will be no scrap value at the end of the life of both the projects. The opportunity cost of capital of the company is 16%. The annual incomes are as under:

Year	Project A	Project B	Discounting factor @ 16%
1	--	60,000	0.862
2	30,000	84,000	0.743
3	1,32,000	96,000	0.641
4	84,000	1,02,000	0.552
5	84,000	90,000	0.476

You are required to calculate for each project:

- (i) Discounted payback period
(ii) Profitability index
(iii) Net present value **(8 Marks)**
4. (a) Nakata Ltd a Vehicle manufacturer has prepared sales budget for the next few months, and the following draft figures are available:

Month	No. of vehicles
October	40,000
November	35,000
December	45,000
January	60,000
February	65,000

To manufacture a vehicle a standard cost of Rs.5,71,400 is incurred and sold through dealers at a uniform selling price of Rs.8,57,100 to customers. Dealers are paid 15% commission on selling price on sale of a vehicle.

Apart from other materials four units of Part - X are required to manufacture a vehicle. It is a policy of the company to hold stocks of Part-X at the end of each month to cover 40% of next month's production. 48,000 units of Part-X are in stock as on 1st October.

There are 9,500 nos. of completed vehicles are in stock as on 1st October and it is policy to have stocks at the end of each month to cover 20% of the next month's sales.

You are required to

- (i) Prepare Production budget (in nos.) for the month of October, November, December and January.
(ii) Prepare a Purchase budget for Part-X (in units) for the months of October, November and December.
(iii) Calculate the budgeted gross profit for the quarter October to December. **(8 Marks)**

- (b) Vasudev Pure Chemicals (VPC) Ltd. requires Rs.25,00,000 for a new plant. This plant is expected to yield earnings before interest and taxes of Rs. 5,00,000. While deciding about the financial plan, the company considers the objective of maximising earnings per share. It has three alternatives to finance the project- by raising debt of Rs. 2,50,000 or Rs. 10,00,000 or Rs. 15,00,000 and the balance, in each case, by issuing equity shares. The company's share is currently selling at Rs. 150, but is expected to decline to Rs.125 in case the funds are borrowed in excess of Rs.10,00,000. The funds can be borrowed at the rate of 10% upto Rs. 2,50,000, at 15% over Rs. 2,50,000 and upto Rs.10,00,000 and at 20% over Rs. 10,00,000. The tax rate applicable to the company is 50%. Which form of financing should the company choose? **(8 Marks)**
5. (a) Discuss the accounting treatment of Idle time and overtime wages.
 (b) What are the essential pre-requisites of integrated accounting system?
 (c) Explain the importance of trade credit and accruals as source of working capital. What is the cost of these sources?
 (d) Write short notes on Bridge Finance **(4 × 4 =16 Marks)**
6. (a) XYZ LLP, contractors and civil engineers, are building a new wing to a school. The quoted fixed price for the contract is Rs.30,00,000. Work commenced on 1st January 20X8 and is expected to be completed on schedule by 30 June 20X9.

Data relating to the contract at the year ended 31st March 20X9 is as follows.

	Amount (Rs.)
Plant sent to site at commencement of contract	2,40,000
Hire of plant and equipment	77,000
Materials sent to site	6,62,000
Materials returned from site	47,000
Direct wages paid	9,60,000
Wage related costs	1,32,000
Direct expenses incurred	34,000
Supervisory staff salaries - Direct	90,000
- Indirect	20,000
Regional office expenses apportioned to contract	50,000
Head office expenses apportioned to contract	30,000
Surveyor's fees	27,000
Progress payments received from school	18,00,000

Additional information:

- Plant is to be depreciated at the rate of 25 % per annum following straight line method, with no residual value.
- Unused materials on site at 31st March are estimated at Rs. 50,000.
- Wages owed to direct workers total Rs. 40,000
- No profit in respect of this contract was included in the year ended 31st March 2016.
- Budgeted profit on the contract is Rs. 8,00,000
- Value of work certified by the surveyor is Rs. 24,00,000.

7. The surveyor has not certified the work costing Rs. 1,80,000

You are required to prepare the account for the school contract for the fifteen months ended 31st March 20X9, and calculate the attributable profit to date. **(8 Marks)**

(b) From the following, prepare Income Statement of Company X and Y

Company	X	Y
Financial leverage	3:1	4:1
Interest	Rs.200	Rs.300
Operating leverage	4:1	5:1
Variable Cost as a Percentage to Sales	$66\frac{2}{3}\%$	75%
Income tax Rate	45%	45%

(8 Marks)

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

- Distinguish between Job Costing and Process Costing.
- Distinguish between product cost and period cost.
- Explain the relevance of time value of money in financial decisions.
- Explain briefly the functions of Treasury Department.
- Write short note on Explicit costs.
 - Write a short note on "Cut - off Rate".

(4 × 4 =16 Marks)