

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 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 is undecided as to what kind of wage scheme should be introduced. The following particulars have been compiled in respect of three workers, which are under consideration of the management.

Particulars	I	II	III
Actual hours worked	380	100	540
Hourly rate of wages (in Rs.)	40	50	60
Productions in units:			
- Product A	210	-	600
- Product B	360	-	1350
- Product C	460	250	-
Standard time allowed per unit of each product is:			
	A	B	C
Minutes	15	20	30

For the purpose of piece rate, each minute is valued at Rs. 1/-

You are required to compute the wages of each worker under:

- Guaranteed hourly rate basis.
 - Piece work earning basis, but guaranteed at 75% of basic pay (Guaranteed hourly rate if his earnings are less than 50% of basic pay.)
 - Premium bonus basis where the worker received bonus based on Rowan scheme.
- (b) A company gives the following information:

Margin of Safety	Rs.7,50,000
Total Cost	Rs.7,75,000
Margin of Safety (Qty.)	15,000 units
Break Even Sales in Units	5,000 units

You are required to calculate:

- (i) Selling price per unit
 - (ii) Profit
 - (iii) Profit/ Volume Ratio
 - (iv) Break Even Sales (in Rupees)
 - (v) Fixed Cost
- (c) The following information has been extracted from the accounts of X Ltd. for the Financial Year 2019-20:

Equity share capital of Rs.10 each	Rs. 8,00,000
7% preference share capital of Rs.10 each	Rs. 4,00,000
Tax @30%	Rs. 1,20,000
Depreciation	Rs. 60,000
Equity dividend paid	20 per cent
Market price of equity shares	Rs. 40

You are required to compute the following, showing the necessary workings-

- (i) Dividend yield on the equity shares
 - (ii) Cover for the preference and equity dividends
 - (iii) Earnings per equity share.
- (d) Manav Ltd.'s EBIT is Rs 5,00,000. The company has 10%, 20 lakh debentures. The equity capitalization rate i.e. K_e is 16%.

You are required to calculate:

- (i) Market value of equity and value of firm
- (ii) Overall cost of capital.

(4 x 5 Marks = 20 Marks)

2. (a) A company manufactures a product from a raw material, which is purchased at Rs.180 per kg. The company incurs a handling cost of Rs.1,460 plus freight of Rs.940 per order. The incremental carrying cost of inventory of raw material is Rs.2.5 per kg per month. In addition, the cost of working capital finance on the investment in inventory of raw material is Rs.18 per kg per annum. The annual production of the product is 1,00,000 units and 2.5 units are obtained from one kg. of raw material.

Required:

- (i) Calculate the economic order quantity of raw materials.
- (ii) Determine, how frequently company should order for procurement be placed.
- (iii) If the company proposes to rationalize placement of orders on quarterly basis, determine the percentage of discount in the price of raw materials should be negotiated?

Assume 360 days in a year.

(8 Marks)

- (b) Day Ltd., a newly formed company has applied to the Private 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	Completed Units of Production 31,200 plus unit of work in progress 12,000
Raw Material Cost	Rs. 40 per unit
Direct Wages Cost	Rs. 15 per unit
Overhead	Rs. 40 per unit (inclusive of Depreciation Rs. 10 per unit)
Selling Price	Rs. 130 per unit
Raw Material in Stock	Average 30 days consumption
Work in Progress Stock	Material 100% and Conversion Cost 50%
Finished Goods Stock	24,000 Units
Credit Allowed by the supplier	30 days
Credit Allowed to Purchasers	60 days
Direct Wages (Lag in payment)	15 days
Expected Cash Balance	Rs. 2,00,000

Assume that production is carried on evenly throughout the year (360 days) and wages and overheads accrue similarly. All sales are on the credit basis. You are required to calculate the Net Working Capital Requirement on Cash Cost Basis. **(8 Marks)**

3. (a) G K Ltd. produces a product "XYZ" which passes through two processes, viz. Process-A and Process-B. The details for the year ending 31st March, 2020 are as follows:

	Process A	Process - B
40,000 units introduced at a cost of	Rs. 3,60,000	-
Material consumed	Rs. 2,42,000	2,25,000
Direct wages	Rs. 2,58,000	1,90,000
Manufacturing expenses	Rs. 1,96,000	1,23,720
Output in units	37,000	27,000
Normal wastage of inputs	5%	10%
Scrap value (per unit)	Rs. 15	20
Selling price (per unit)	Rs. 37	61

Additional Information:

- (a) 80% of the output of Process-A, was passed on to the next process and the balance was sold. The entire output of Process- B was sold.
(b) Indirect expenses for the year was Rs. 4,48,080.
(c) It is assumed that Process-A and Process-B are not responsibility centre.

Required:

- (i) Prepare Process-A and Process-B Account.
(ii) Prepare Costing Profit & Loss Account showing the net profit/ net loss for the year.

(8 Marks)

- (b) Navjeevan Limited wants to replace its old manual machine with a new automatic machine. Two models A and B are available at the same cost of Rs. 5,00,000 each. Salvage value of the old machine is Rs. 1,00,000. The utilities of the existing machine can be used if the company purchases Model A. Additional cost of utilities to be purchased in that case are Rs. 1,00,000. If the company purchases Model B then all the existing utilities will have to be replaced with new

utilities costing Rs. 2,10,000. The salvage value of the old utilities will be Rs. 20,000. The earnings after taxation are expected to be:

Year	(Cash inflows of)	
	Model A (Rs.)	Model B (Rs.)
1	1,00,000	2,00,000
2	1,50,000	2,10,000
3	1,80,000	1,80,000
4	2,00,000	1,70,000
5	1,70,000	40,000
Salvage value at the end of year 5	50,000	60,000

The targeted return on capital is 15%. You are required to –

- Compute, for the two machines separately, net present value, discounted payback period and desirability factor; and
- Advice which of the machines is to be selected?

Year	1	2	3	4	5
P.V. Factor @ 15%	0.87	0.76	0.66	0.57	0.50

(8 Marks)

- A construction company undertook a contract at an estimated price of Rs.108 lakhs, which includes a budgeted profit of Rs.18 lakhs. The relevant data for the year ended 31.03.2020 are as under:

Particulars	(Rs.'000)
Materials issued to site	5,000
Direct wages paid	3,800
Plant hired	700
Site office costs	270
Materials returned from site	100
Direct expenses	500
Work certified	10,000
Work not certified	230
Progress payment received	7,200

A special plant was purchased specifically for this contract at Rs.8,00,000 and after use on this contract till the end of 31.03.2020, it was valued at Rs.5,00,000. The cost of materials at site at the end of the year was estimated at Rs.18,00,000. Direct wages accrued as on 31.03.2020 was Rs.1,10,000.

Required:

Prepare the Contract Account for the year ended 31st March, 2020.

(8 Marks)

- (b) Balance Sheet of Jungle Limited as on 31stMarch, 2019 and 31stMarch, 2020 are furnished below:

	(Amount in Rupees)	
Liabilities	As at 31stMarch, 2019	As at 31stMarch, 2020
Equity Share Capital	75,00,000	1,02,50,000
General Reserve	42,50,000	50,00,000
Profit & Loss Account	15,00,000	18,75,000
13% Debentures of face value Rs.100 each	58,00,000	43,50,000
Current Liabilities	30,00,000	32,50,000
Proposed Dividend	7,50,000	9,10,000
Provision for Income tax	22,50,000	24,75,000
Total	2,50,50,000	2,81,10,000
Assets	As at 31stMarch, 2019	As at 31stMarch, 2020
Goodwill	10,00,000	7,75,000
Land & Building	68,00,000	61,20,000
Plant & Machinery	75,12,000	1,07,95,000
Investment	25,00,000	21,25,000
Stock	33,00,000	27,50,000
Debtors	24,45,000	36,20,000
Cash and Bank	14,93,000	19,25,000
Total	2,50,50,000	2,81,10,000

Following additional information is available:

- During the financial year 2019-20 the company issued equity shares at par.
- Debentures were redeemed on 1st April, 2019 at a premium of 10%.
- Some investments were sold at a profit of Rs.75,000 and the profit was credited to General Reserve Account.
- During the year an old machine costing Rs.23,50,000 was sold for Rs.6,25,000. Its written down value was Rs.8,00,000.
- Depreciation is to be provided on plant and machinery at 20% on the opening balance.
- There was no purchase or sale of land and building.
- Provision for tax made during the year was Rs.4,50,000.

You are required to prepare a Cash Flow Statement for the year ended 31stMarch, 2020.

(8 Marks)

- Describe the salient features of budget manual..
 - Distinguish clearly Bin cards and Stores Ledger.
 - Explain in brief the features of Commercial Papers.
 - Explain the principles of "Trading on equity".

(4 x 4 Marks = 16 Marks)

6. (a) Aaradhya Ltd. manufactures a commercial product for which the standard cost per unit is as follows:

Particulars	(Rs.)
Material:	
5 kg. @ Rs.4 per kg.	20.00
Labour:	
3 hours @ Rs.10 per hour	30.00
Overhead	
Variable: 3 hours @ Rs.1	3.00
Fixed: 3 hours @ Rs.0.50	1.50
Total	54.50

During January, 2020, 600 units of the product were manufactured at the cost shown below:

Particulars	(Rs.)
Materials purchased:	
5,000 kg. @ Rs.4.10 per kg.	20,500
Materials used:	
3,500 kg.	
Direct Labour:	
1,700 hours @ Rs.9	15,300
Variable overhead	1,900
Fixed overhead	900
Total	38,600

The flexible budget required 1,800 direct labour hours for operation at the monthly activity level used to set the fixed overhead rate.

Compute:

- (i) Material price variance,
- (ii) Material Usage variance;
- (iii) Labour rate variance;
- (iv) Labour efficiency variance;
- (v) Variable overhead expenditure variance;
- (vi) Variable overhead efficiency variance;
- (vii) Fixed overhead expenditure variance;
- (viii) Fixed overhead volume variance.

(8 Marks)

- (b) P Ltd. has the following capital structure at book-value as on 31st March, 2020:

Particulars	(Rs.)
Equity share capital (10,00,000 shares)	3,00,00,000
11.5% Preference shares	60,00,000

10% Debentures	1,00,00,000
	4,60,00,000

The equity shares of the company are sold for Rs. 300. It is expected that the company will pay next year a dividend of Rs. 15 per equity share, which is expected to grow by 5% p.a. forever. Assume a 35% corporate tax rate.

Required:

- (i) Compute weighted average cost of capital (WACC) of the company based on the existing capital structure.
- (ii) Compute the new WACC, if the company raises an additional Rs. 50 lakhs debt by issuing 12% debentures. This would result in increasing the expected equity dividend to Rs. 20 and leave the growth rate unchanged, but the price of equity share will fall to Rs. 250 per share.

(8 Marks)

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

- (a) State the differences between Job costing and Batch costing.
- (b) Distinguish between Fixed and Flexible Budgets.
- (c) State any four factors which need to be considered while planning for working capital requirement.
- (d) Define 'Present Value' and 'Perpetuity'.
- (e) (i) What are the costs of availing Trade Credit?
- (ii) Discuss cost classification based on its controllability.

(4 x 4 Marks = 16 Marks)