

AATMAN ACADEMY

Model Test Paper – 3 IPCC COST FM Nov 2013

Time : 3 Hours

[100 marks]

Question 1 is compulsory, Attempt any Five from remaining.

Q. 1

[4 x 5 = 20 Marks]

a) X Ltd. is committed to supply 24,000 bearings per annum to Y Ltd. on a steady basis. It is estimated that it costs 10 paise as inventory holding cost per bearing per month and that the set-up cost per run of bearing manufacture is Rs. 324.

- What would be the optimum run size for bearing manufacture?
- Assuming that the company has a policy of manufacturing 6,000 bearing per run, how much extra costs the company would be incurring as compared to the optimum run suggested in (a) above?
- What is the minimum inventory holding cost?

b) A skilled worker in XYZ Ltd. Is paid a guaranteed wage rate of Rs. 30 per hour. The standard time per unit for a particular product is 4 hours. P, a machineman, has been paid wages under the Rowan Incentive Plan and he had earned an effective hourly rate of Rs. 37.50 on the manufacture of that particular product.

What could have been his total earnings and effective hourly rate, had he been put on Halsey Incentive Scheme (50%)?

c) From the following information, prepare a summarised Balance Sheet as at 31st March, 2002:

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)

A company actually sold 8000 units of A and 10,000 units of B at ₹ 12 and ₹ 16 per unit respectively against a budgeted sale of 6000 units of A at ₹ 14 per unit and 9000 units of B at ₹ 13 per unit. The standard costs of A and B are ₹ 8 and ₹ 10 per unit respectively and the corresponding actual costs are ₹ 5.5 and ₹ 14.5 per unit.

Compute the product wise sales margin mix and sales margin price variances, indicating clearly, whether the variances are favorable or adverse. (5 Marks) (May 2011)

Q. 2

[8 + 8 Marks]

(a)

5. ABC Ltd. maintains cost ledgers separately on a double entry basis. Following are the ledger balances as on 1st April 2012:

	Debit (₹)	Credit (₹)
Stores Ledger Control A/c	6,00,000	-
Work-in progress Control A/c	3,00,000	-
Manufacturing Overhead Control A/c	-	30,000
Finished Goods Control A/c	5,00,000	-
Cost Ledger Control A/c	-	13,30,000
Total	14,00,000	14,00,000

The following transactions took place during the year

	(₹)
Finished Product (at Cost)	5,50,000
Manufacturing overhead incurred	1,70,000
Raw material purchased	2,50,000
Wages paid to factory labour	80,000
Indirect wages	40,000
Cost of sales	3,50,000
Materials issued to production	2,70,000
Sales returned (at cost)	18,000
Purchase returned	26,000
Manufacturing overhead charged to production	1,70,000

From the above information you are required to prepare Cost Ledger Control A/c, Stores Ledger Control A/c, Work-in-progress Control A/c, Finished Goods Control A/c, Manufacturing Overhead control A/c, Wages Control A/c, Cost of Sales A/c. (8 Marks)

(b)

Paints Ltd. manufactures 2,00,000 tins of paint at normal capacity. It incurs the following manufacturing costs per unit:

	₹
Direct material	7.80
Direct labour	2.10
Variable overhead	2.50
Fixed overhead	4.00
Production cost / unit	16.40

Each unit is sold for ₹ 21, with an additional variable selling overhead incurred at ₹ 0.60 per unit.

During the next quarter, only 10,000 units can be produced and sold. Management plans to shut down the plant estimating that the fixed manufacturing cost can be reduced to ₹ 74,000 for the quarter.

When the plant is operating, the fixed overheads are incurred at a uniform rate throughout the year. Additional costs of plant shut down for the quarter are estimated at ₹ 14,000.

You are required:

- To advise whether it is more economical to shut down the plant during the quarter rather than operate the plant.
- Calculate the shut down point for the quarter in terms of numbering units.

Q. 3

[8 + 8 Marks]

7. (a) The Cost accountant of Xylo Ltd. has already allocated and apportioned the fixed overheads for the period although service department costs are yet to be reapportioned. Information for the period is as follows:

	Production Departments		Service Departments		Total
	A	B	X	Y	
Allocated and apportioned	₹ 18,000	₹ 34,000	₹ 9,600	₹ 12,000	₹ 73,600
Apportionment of costs:					
X	50%	30%	-	20%	
Y	60%	30%	10%	-	

What are the total Overheads included in production department- A if the Simultaneous equation method is used to reapportion service department costs?

(b)

A firm has sales of Rs. 75,00,000 variable cost of Rs. 42,00,000 and fixed cost of Rs. 6,00,000. It has a debt of Rs. 45,00,000 at 9% and equity of Rs. 55,00,000.

- What is the firm's ROI?
- Does it have favourable financial leverage?
- If the firm belongs to an industry whose asset turnover is 3, does it have a high or low asset leverage?
- What are the operating, financial and combined leverages of the firm?
- If the sales drop to Rs. 50,00,000, what will be the new EBIT?
- At what level the EBT of the firm will be equal to zero?

Q. 4

[8 + 8 Marks]

- (a) Deluxe Limited undertook a contract for Rs.5,00,000 on 1st July, 2006. On 30th June, 2007 when the accounts were closed, the following details about the contract were gathered:

	Rs.
Materials Purchased	1,00,000
Wages Paid	45,000
General Expenses	10,000
Plant Purchased	50,000
Materials on Hand 30.06.2007	25,000
Wages Accrued 30.06.2007	5,000
Work Certified	2,00,000
Cash Received	1,50,000

Work Uncertified	15,000
Depreciation of Plant	5,000

The above contract contained an escalator clause which read as follows:

"In the event of prices of materials and rates of wages increase by more than 5% the contract price would be increased accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case." It was found that since the date of signing the agreement the prices of materials and wage rates increased by 25%. The value of the work certified does not take into account the effect of the above clause.

Prepare the contract account. Workings should form part of the answer.

(b)

A Company earns a profit of Rs.3,00,000 per annum after meeting its Interest liability of Rs.1,20,000 on 12% debentures. The Tax rate is 50%. The number of Equity Shares of Rs.10 each are 80,000 and the retained earnings amount to Rs.12,00,000. The company proposes to take up an expansion scheme for which a sum of Rs.4,00,000 is required. It is anticipated that after expansion, the company will be able to achieve the same return on investment as at present. The funds required for expansion can be raised either through debt at the rate of 12% or by issuing Equity Shares at par.

Required:

- (i) Compute the Earnings Per Share (EPS), if:
 - the additional funds were raised as debt
 - the additional funds were raised by issue of equity shares.
- (ii) Advise the company as to which source of finance is preferable.

Q. 5

[10 + 6 Marks]

a) XYZ Co. Ltd. is a pipe manufacturing company. Its production cycle indicates that materials are introduced in the beginning of the production cycle; wages and overhead accrue evenly throughout the period of the cycle. Wages are paid in the next month following the month of accrual. Work in process includes full units of raw materials used in the beginning of the production process and 50% of wages and overheads are supposed to be conversion costs. Details of production process and the components of working capital are as follows:

Production of pipes	12,00,000 units
Duration of the production cycle	One month
Raw materials inventory held	One month consumption
Finished goods inventory held for	Two months
Credit allowed by creditors	One month
Credit given to debtors	Two months
Cost price of raw materials	Rs. 60 per unit
Direct wages	Rs. 10 per unit
Overheads	Rs. 20 per unit
Selling price of finished pipes	Rs. 100 per unit

Required to calculate:

- (i) The amount of working capital required for the company.
- (ii) Its maximum permissible bank finance under all the three methods of lending norms as suggested by the Tondon Committee, assuming the value of core current assets: Rs. 1,00,00,00.

b) Explain the followings

- (a) Explain the concept of Indian depository receipts.
- (b) Discuss the advantages of preference share capital as an instrument of raising funds.
- (c) Explain the relevance of time value of money in financial decisions.

Q. 6

[8 + 8 Marks]

- a)
 9. Jigyasa Ltd. is drawing a production plan for its two products Minimax (MM) and Heavyhigh (HH) for the year 2013-14. The company's policy is to hold closing stock of finished goods at 25% of the anticipated volume of sales of the succeeding month. The following are the estimated data for two products:

	Minimax (MM)	Heavyhigh (HH)
Budgeted Production units	1,80,000	1,20,000
	(₹)	(₹)
Direct material cost per unit	220	280
Direct labour cost per unit	130	120
Manufacturing overhead	4,00,000	5,00,000

The estimated units to be sold in the first four months of the year 2013-14 are as under

	April	May	June	July
Minimax	8,000	10,000	12,000	16,000
Heavyhigh	6,000	8,000	9,000	14,000

Prepare production budget for the first quarter in monthwise.

b)

Beta Company Limited is considering replacement of its existing machine by a new machine, which is expected to cost Rs.2,64,000. The new machine will have a life of five years and will yield annual cash revenues of Rs.5,68,750 and incur annual cash expenses of Rs.2,95,750. The estimated salvage value of the new machine is Rs.18,200. The existing machine has a book value of Rs.91,000 and can be sold for Rs.45,500 today.

The existing machine has a remaining useful life of five years. The cash revenues will be Rs.4,55,000 and associated cash expenses will be Rs.3,18,500. The existing machine will have a salvage value of Rs.4,550, at the end of five years.

The Beta Company is in 35% tax- bracket, and write off depreciation at 25% on written-down value method.

The Beta Company has a target debt to value ratio of 15%. The Company in the past has raised debt at 11% and it can raise fresh debt at 10.5%.

Beta Company plans to follow dividend discount model to estimate the cost of equity capital. The Company plans to pay a dividend of Rs.2 per share in the next year. The current market price of Company's equity share is Rs.20 per equity share. The dividend per equity share of the Company is expected to grow at 8% p.a.

Required:

- Compute the incremental cash flows of the replacement decision.
- Compute the weighted average cost of Capital of the Company.
- Find out the net present value of the replacement decision.
- Estimate the discounted payback period of the replacement decision.
- Should the Company replace the existing machine ? Advise.

Q. 7 [Answer Any four]

[16 Marks]

- Short Note : Venture capital financing
- Bridge Finance
- Discuss the essential of a good cost accounting system?
- Distinguish between Cost reduction and Cost control.
- ABC Material Costing System.

Good Luck