

**Paper 10 – Cost & Management Accounting and  
Financial Management**

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Full Marks : 100

Time allowed: 3 hours

**Part A : (Cost and Management Accounting)**

**Section - I**

1. Answer the following questions:

(a) Choose the correct answer from the given four alternatives:

[1×6=6]

(i) When actual price is higher or lower than the standard price, then it is

- (A) Sales price variance
- (B) Sales volume variance
- (C) Sales mix variance
- (D) Sales quantity variance

(ii) If the actual output is more than the budgeted output, volume variance is

- (A) Favourable
- (B) Non-favorable
- (C) No impact
- (D) None of the above

(iii) Marginal costs is taken as equal to

- (A) Prime Cost plus all variable overheads
- (B) Prime Cost minus all variable overheads
- (C) Variable overheads
- (D) None of the above

(iv) \_\_\_\_\_ is the first step of budgetary system and all other budgets depends on it.

- (A) Cost budget
- (B) Sales budget
- (C) Production budget
- (D) None of the above

(v) Which of the following statements are true for forecast and budget?

- (A) Forecast and budget are one and same thing
- (B) Budget is prepared after the forecast
- (C) Forecast and budget both can be expressed in financial form
- (D) All of the above

(vi) Determine Contribution if Sales is ₹ 1,50,000 and P/V ratio is 40%.

- (A) ₹ 60,000
- (B) ₹ 70,000
- (C) ₹ 30,000
- (D) None of the above

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(b) Match the statement in Column I with most appropriate statement in Column II [1×4=4]

Column I	Column II
(i) Marginal Costing	(A) Fixed Cost
(ii) Period Cost	(B) marginal income
(iii) Contribution margin	(C) Break even Analysis.
(iv) P/V ratio	(D) Variable costing

(c) State whether the following statements are True/False? [1×4=4]

- (i) Break even Analysis is based on the assumption that total fixed cost does not change.
- (ii) Sales Value Variance is the difference between actual sales and budgeted sales.
- (iii) A favourable budget variance is always an indication of efficient performance.
- (iv) P/V ratio indicates the relationship between profit and sales.

### Section II

Answer any three Question from Q. No 2, 3, 4 and 5. Each Question carries 12 Marks.

2. (a) The share of total production and the cost-based fair price computed separately for each of the four units in industry are as follows:

(Amount in ₹)

Units	A	B	C	D
Share of Production (%)	40	25	20	15
Direct Material	300	360	340	380
Direct Labour	200	240	280	320
Depreciation	600	400	320	200
Other Overheads	600	600	560	480
	1,700	1,600	1,500	1,380
20% Return on Capital Employed	1,260	860	700	460
<b>FAIR PRICE</b>	<b>2,960</b>	<b>2,460</b>	<b>2,200</b>	<b>1,840</b>
Capital Employed per unit				
Net Fixed Assets (₹ per unit)	6,000	4,000	3,200	2,000
Working Capital (₹ per unit)	300	3,000	300	300
<b>Total Capital (₹ per unit)</b>	<b>6,300</b>	<b>4,300</b>	<b>3,500</b>	<b>2,300</b>

Required:

What should be the uniform price fixed for the product of the industry?

- (b) A retail dealer in garments is currently selling 24,000 shirts annually. He supplies the following details for the year ended 31st March 2017.

Selling price per shirt: ₹800

Variable cost per shirt: ₹600

Fixed Cost:

Staff salaries: ₹24,00,000

General Office Cost : ₹ 8,00,000

Advertising Cost: ₹ 8,00,000

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As a Cost Accountant, you are required to answer the following each part independently:

- (i) Calculate Break Even Point and margin of safety in sales revenue and number of shirts sold.
- (ii) Assume that 30,000 shirts were sold during the year, find out the net profit of the firm.

[6+6]

3. (a) AKASH LTD. operates a system of Standard Costing. The company has normal monthly machine-hour capacity of 100 machines working 8 hours per day for 25 working days in the month of April 2017.

- (i) The standard time Required to manufacture one unit of products is 4 hours. The Budgeted fixed overhead was ₹1,50,000.
- (ii) In the month of April 2017, the company actually worked for 24 days for average 750 machine-hours per day.
- (iii) The Actual production was 4500 units, and the actual fixed overhead was ₹ 1,60,000.

You are required to compute:

- (A) Fixed overhead efficiency variance
- (B) Fixed overhead capacity variance
- (C) Fixed overhead calendar variance

(b) Arun Ltd. follows standard costing system and the following information is available for the month of April, 2017.

i) Actual Production – 1,500 kg.

Materials Consumed			Labour deployed		
Type	Quantity (kgs.)	Rate (₹ per kg.)	Worker	Time worked (hours)	Rate (₹ per hour)
A	550	5.00	P	32	11.00
B	200	6.00	Q	14	9.00
C	350	2.00	R	20	11.00
D	400	5.00	S	10	18.00

ii) Details of standard materials and labour cost based on production of 1,000 kgs. are as under:

Consumption of Materials			Deployment of labour		
Type	Quantity (kgs.)	Rate (₹ per kg.)	Worker	Time (hours)	Rate (₹ per hour)
A	400	4.00	P	20	10.00
B	100	5.00	Q	10	8.00
C	200	2.50	R	15	12.00
D	300	6.00	S	7	20.00

From the above information you are required to compute.

[6+6]

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4. (a) The monthly budgets for manufacturing overhead of SHAHEEN LTD. for two levels of activity were as follows:

Capacity	60%	100%
Budgeted production	600	1,000
	₹	₹
Wages	1,200	2,000
Consumable stores	900	1,500
Maintenance	1,100	1,500
Power & Fuel	1,600	2,000
Depreciation	4,000	4,000
Insurance	1,000	1,000
	9,800	12,000

Required:

- (i) Indicate which of the items are fixed, variable and semi-variable;  
(ii) Prepare a Budget for 80% capacity; and

- (b) Sintex Ltd. has prepared its expense budget for 20,000 units in its factory for the year 2017 as detailed below:

	₹ per unit
Direct Materials	45
Direct Labour	20
Variable overhead	15
Direct Expenses	6
Selling Expenses (20% fixed)	15
Factory Expenses (100% fixed)	7
Administration Expenses (100% fixed)	4
Distribution Expenses (85% variable)	12
Total	₹124

Prepare Flexible budget for the production of 14,000 units and 18,000 units. [5+7]

5. Write short note on any three of the following: [4×3=12]
- (a) Limitations of BEP (any four limitations)  
(b) Transfer Pricing based on Opportunity Cost.  
(c) Advantages of Budgetary Control (any four advantages)  
(d) Causes of Labour Efficiency Variance (any four causes)

## Part B : (Financial Management)

### Section - III

6. Answer the following questions:

(a) Choose the correct answer from the given four alternatives:

[1×6=6]

- (i) Profit for the objective of calculating a ratio may be taken as
- (A) Profit before tax but after interest
  - (B) Profit before interest and tax
  - (C) Profit after interest and tax
  - (D) All of the above
- (ii) If reserve for bad and doubtful debts is mentioned in the question of Funds Flow Statement Preparation, it can be shown as
- (A) In the schedule by deducting from total debtors under current assets
  - (B) In the schedule separately under the heading of capital liabilities
  - (C) Both A and B
  - (D) None of the above
- (iii) Which one of the following will increase the operating cycle?
- (A) increasing the accounts payable period
  - (B) decreasing the accounts payable period
  - (C) decreasing the cash cycle
  - (D) increasing the inventory period
- (iv) If the CAPM is used to estimate the cost of equity capital, the expected excess market return is equal to the:
- (A) Return on the stock minus the risk-free rate.
  - (B) Difference between the return on the market and the risk-free rate.
  - (C) Beta times the market risk premium.
  - (D) Beta times the risk-free rate.
- (v) If a firm has low fixed costs relative to all other firms in the same industry, a large change in sales volume (either up or down) would have:
- (A) a smaller change in EBIT for the firm versus the other firms.
  - (B) no effect in any way on the firms as volume does not effect fixed costs.
  - (C) a decreasing effect on the cyclical nature of the business.
  - (D) a larger change in EBIT for the firm versus the other firms.
- (vi) In mutually exclusive projects, project which is selected for comparison with others must have
- (A) higher net present value
  - (B) lower net present value
  - (C) zero net present value
  - (D) all of the above

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(b) Match the statement in Column I with appropriate statement in Column II [1×4=4]

Column I	Column II
(i) ROI	(A) Solvency ratio
(ii) DSCR	(B) Investment Decision
(iii) NPV	(C) Capital Structure
(iv) NOI	(D) Profitability Ratio

(c) State whether the following statements are True or False: [1×4=4]

- (i) In working capital management we find that profitability varies inversely with liquidity.
- (ii) The goal of the firm should be to maximize earnings per share.
- (iii) A capital investment involves making a current cash outlay in the expectation of future benefits.
- (iv) If a company has no fixed costs, its DOL equals 1.

7. (a) The following information is given to you as on 31-03-2017 for a company:

Current Ratio	2.5
Liquid Ratio	1.5
Fixed Assets (net)	1,80,000
Working Capital	60,000
Reserves and Surplus	40,000
Bank Overdraft (Short term)	10,000
Assume that there is no long term loan or fictitious assets.	

Make a statement of proprietary fund and match it with fixed assets and as many details of current assets net of current liabilities.

(b) AM Limited had the following condensed Trial Balance as at 31.03.2017:

Debit	Amount (₹)	Credit	Amount (₹)
Cash	7,500	Current Liabilities	15,000
Account Receivable	30,000	Long-Term Notes Payable	25,500
Investments	20,000	Bonds Payable	25,000
Plant Assets	67,500	Capital Stock	75,000
Land	40,000	Retained Earnings	24,500
	1,65,000		1,65,000

During 2016-2017, the following transactions took place:

- A tract of land was purchased for ₹ 7,750 cash.
- Bonds payable in the amount of ₹ 6,000 were retired for cash at face value.
- An additional ₹ 20,000 equity shares were issued at par for cash.
- Dividends totalling ₹ 9,375 were paid.
- Net income for 2016-2017 was ₹ 28,450 after allowing for depreciation of ₹ 9,500.
- Land was purchased through the issuance of ₹ 22,500 in bonds.
- AM Ltd. sold a part of its investments portfolio for ₹ 12,875 cash. The transaction resulted in a gain of ₹ 1,375 for the firm.
- Current liabilities increased to ₹ 18,000 at 31-3-2017.
- Accounts receivable at 31-3-2017 total ₹ 38,000.

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Prepare a abridged statement of cash flows from Financing Activities for 2016-2017, under indirect method. [7+5]

8. (a) A firm is considering pushing up its sales by extending credit facilities to any one of the following categories of customers: (i) Customers with a 10% risk of non-payment, and (ii) Customers with a 25% risk of non-payment. The incremental sales expected in category (i) is ₹ 2,40,000 and in category (ii) is ₹ 6,50,000. The cost of production and selling costs are 60% of sales while the collection costs amount to 5% of sales in case of category (i) and 10% of sales in case of category (ii).

You are required to advise the firm about extending credit facilities to each of the above categories of customers. (Use sale value for bad debts).

- (b) M & Co. earns ₹ 5 per share having capitalization rate of 10 percent and has a return on investment @ 20 percent. According to Walter's model, what should be the price per share at 30 percent dividend payout ratio? M & Co. earns ₹5 per share having capitalization rate of 10 percent and has a return on investment @ 20 percent. According to Walter's model, what should be the price per share at 30 percent dividend payout ratio? [7+5]

9. (a) A Ltd. is examining two mutually exclusive investment proposals. The management uses Net Present Value Method to evaluate new investment proposals. Depreciation is charged using Straight-line Method. Other details relating to these proposals are:

Particulars	Proposal X	Proposal Y
Annual Profit before tax (₹)	13,00,000	24,50,000
Cost of the Project (₹)	90,00,000	180,00,000
Salvage Value (₹)	1,20,000	1,50,000
Working Life	4 years	5 Years
Cost of capital	10%	10%
Corporate Tax Rate	30%	30%

The present value of ₹1 at 10% discount rates at the end of first, second, third, fourth and fifth year are 0.9091; 0.8264; 0.7513; and 0.6209 respectively.

You are required to advise the company on which proposal should be taken up by it.

- (b) A company's expected annual net operating income (EBIT) is ₹ 50,000. The company has ₹ 2,00,000, 10% debentures. The equity capitalization rate ( $K_e$ ) of the company is 12.5%. Find the value of the firm under Net Income approach. [8+4]

10. Write short note on any three of the following: [3×4=12]

- Financial lease
- Standards for Comparison in Ratio Analysis
- Difference between Fund Flow and Cash Flow statement (any four difference)
- How does financial leverage increase the potential reward to the shareholders?