

Shree Guru Kripa's Institute of Management

COST ACCOUNTING & FINANCIAL MANAGEMENT

Reg. No.....

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Date: 20.03.2015

Time Allowed: 3Hrs

Maximum Marks: 100

Question 1 is compulsory (4 × 5 = 20 Marks). Answer any 5 from the remaining 6 (16 × 5 = 80 Marks)

1(a) Compute Funds from Operations from the following data – **[5 Marks]**

(a) Loss on Sale of Investments	₹ 3,00,000
(b) Provision for Taxation	₹ 6,00,000
(c) Transfer to Asset Replacement Reserve	₹ 2,00,000
(d) Gain on Sale of Fixed Assets	₹ 6,00,000
(e) Depreciation for Current Year	₹ 12,00,000
(f) Proposed Dividend	₹ 7,00,000
(g) Securities Premium collected on Capital issued during the year	₹ 4,00,000

Balance in Profit & Loss at year-end and year-beginning were ₹ 14 Lakhs and ₹ 24 Lakhs respectively.

1 (b) Calculate the level of EBIT at which the EPS Indifference Point between the following two financing alternatives will occur –

- (a) Equity Share Capital of ₹ 6,00,000 and 12% Debentures of ₹ 4,00,000 [or]
(b) Equity Share Capital of ₹ 4,00,000, 14% Preference Share Capital of ₹ 2,00,000 and 12% Debentures of ₹ 4,00,000.

Assume that Corporate Tax Rate is 35% and Par Value of Equity Share is ₹ 10 in each case. **[5 Marks]**

1(c) Contractors Ltd undertook a contract on 1st January. On 31st December, when their accounts were made up, the position was as follows –

Contract Price	₹2,00,000	Materials on Hand	₹2,000
Expenditure: Materials	₹39,400	Wages Accrued	₹1,725
Wages	₹63,250	General Expenses Accrued	₹300
General Expenses	₹2,000	Work Certified	₹1,20,000
Plant installed	₹10,000	Cash Received in respect thereof	₹90,000
		Work Finished but Uncertified	₹3,000

The Contract had an Escalation Clause providing that should Material Prices and Wage Rates increase by more than 2.5%, the Contractee would increase the Contract Price by 20% of the rise in the cost of materials and 40% of the rise in the Wage Rates beyond 2.5% in each case.

It is agreed that since the signing of the agreement the Material Prices had gone up by 10% and Wage Rates by 15%, the value of Work Certified does not take into account the effect of the Escalation Clause. Compute the amount admissible as Escalation Claim. **[5 Marks]**

1 (d) The following data is given in respect of Process No. 3 for the month of January. Prepare a Statement of Equivalent Production from the given data. **[5 Marks]**



- (a) Opening Stock – 2,000 units made-up of –
 Direct Materials – I ₹ 12,350, Direct Materials – II ₹ 13,200
 Direct Labour ₹ 17,500, Overheads ₹ 11,000
- (b) Transferred from Process No. 2: 20,000 units at ₹ 1,21,100.
- (c) Transferred to Process No. 4: 17,000 units
- (d) Cost incurred in Process No.3: Materials – ₹ 30,450, Labour – ₹ 61,550, OH – ₹ 60,200.
- (e) Scrap: 1,000 units –Materials 100%, Labour 60%, Overheads 40%
- (f) Normal Loss 10% of production. Scrapped units realized ₹ 4 per unit.
- (g) Closing Stock: 4,000 units – Degree of completion: Materials 80%, Labour 60% & OH 40%.

- 2(a) The following information is given in respect of two Companies, who earn at 30% on the Assets Employed and are subject to tax at 40%. You are required to establish the relationship between Return on Equity and Return on Assets. **[8 Marks]**

Company	Debt at 12%	Equity Capital	Total Funds employed
Company A	₹ 6,000	₹ 4,000	₹ 10,000
Company B	₹ 1,000	₹ 9,000	₹ 10,000

- 2(b) An Executive Manager spends ₹ 10.00 per kilometer on Taxi Fares for his Office Work. He is considering two other alternatives, the Purchase of New Nano Car or a Second-Hand Innova Car. The estimated cost figures are as follows –

Items	New Nano Car	Old Innova Car
Purchase Price	₹ 1,35,000	₹ 1,60,000
Sale Price, after 5 years	₹ 25,000	₹ 40,000
Repairs and Servicing per annum	₹ 12,000	₹ 18,000
Taxes and Insurance per annum	₹ 3,200	₹ 2,400
Petrol Consumption per Litre	20 km	15 km
Petrol / Diesel Price, per Litre	₹ 68.00	₹ 42.00

He estimates that he has to travel 10,800 km annually. Which of the three alternatives will be economical? If his official visit increases and he has to do 18,000 km per annum what should be his decision?

At how many km per annum will the Cost of the two cars Break-Even and why? Ignore Interest and Income-Tax. **[8 Marks]**

- 3(a) Mr. X has made Real Estate investment for ₹ 12,00,000 which he expects will have a Maturity Value equivalent to interest at 12% compounded monthly for 5 years. If most Savings Institutions currently pay 8% compounded quarterly on a 5 year term, what is the least amount for which Mr. X should sell his property? Given that $(1 + R)^n = 1.81669670$ for $R = 1\%$ and $n = 60$ and that $(1 + R)^{-n} = 0.67297133$ for $R = 2\%$ and $n = 20$. **[4 Marks]**

- 3 (b) Hari Ltd has furnished the following information for the month ending 30th June – (in ₹)

Particulars	Master Budget	Actual	Variance
Units produced and sold	80,000	72,000	
Sales	3,20,000	2,80,000	40,000 (A)
Direct Material	80,000	73,600	6,400 (F)
Direct Wages	1,20,000	1,04,800	15,200 (F)
Variable Overhead	40,000	37,600	2,400 (F)
Fixed Overhead	40,000	39,200	800 (F)
Total Cost	2,80,000	2,55,200	



The Standard Costs of the product are as follows –

Particulars	Per unit
Direct Material (1 kg at ₹ 1 per kg)	₹ 1.00
Direct Wages (1 hour at ₹ 1.50 per hour)	₹ 1.50
Variable Overhead (1 hour at ₹ 0.50 per hour)	₹ 0.50

Actual results for June showed that 78,400 kg of material were used and 70,400 labour hours were recorded.

Required: Calculate all Material, Labour, Variable OH and Fixed OH Variances. Also compute Sales Variances under Margin Approach. **[12 Marks]**

4(a) The following annual figures relate to MNP Limited –

Sales (at three months credit)	₹ 90,00,000
Materials Consumed (Suppliers extend one and half months credit)	₹ 22,50,000
Wages paid (one month in arrear)	₹ 18,00,000
Manufacturing Expenses outstanding at end of the year (Cash Expenses are paid one month in arrear)	₹ 2,00,000
Total Administrative Expenses for the year (Cash Expenses are paid 1 month in arrear)	₹ 6,00,000
Sales Promotion Expenses for the year (paid quarterly in advance)	₹ 12,00,000

The Company sells its products on Gross Profit of 25% assuming depreciation as part of the cost of production. It keeps two months' stock of Finished Goods and one month's stock of Raw Materials as inventory. It keeps a cash balance of ₹ 2,50,000. Ignore WIP. Assume 5% Safety Margin.

Work out the Working Capital requirements of the Company on cash cost basis. **[8 Marks]**

4(b) A Company has 3 factories situated in North, East and South with its HO in Mumbai. The Management has received the following summary report on the operations of each factory for a period – (₹ in 000)

Particulars	Sales		Profit	
	Actual	Over/ (Under) Budget	Actual	Over / (Under) Budget
North	1,100	(400)	135	(180)
East	1,450	150	210	90
South	1,200	(200)	330	(110)

Calculate for each factory and for the Company as a whole for the period – (1) Fixed Costs, and (2) Break Even Sales. **[8 Marks]**

5(a) Write Short notes on Seed Capital Assistance. **[4 Marks]**

5(b) Write Short Notes on Financial Management under Resource Constraint. **[4 Marks]**

5(c) List four situations when Batch Costing may be used. **[4 Marks]**

5(d) Give four points of comparison between Explicit and Implicit Costs. **[4 Marks]**

6(a) A Company proposes to install a machine involving a capital cost of ₹ 3,60,000. The life of the machine is 5 years and its salvage value at the end of the life is nil. The machine will produce the net operating income after depreciation of ₹ 68,000 per annum. The Company's Tax Rate is 45%. Calculate IRR of the proposal. The PV Factors for 5 years is as under – **[5 Marks]**

Discounting Factor	14	15	16	17	18
Cumulative Factor	3.43	3.35	3.27	3.20	3.13



- 6(b) C Ltd is a manufacturing Company having three Production Departments A, B, and C, and two Service Departments X and Y. Budgeted Overheads allocated / apportioned for the next year are given below –

Particulars	Total	A	B	C	X	Y
Overhead Allocated / Apportioned	3,21,000	62,000	1,45,000	74,000	16,000	24,000
Budgeted Capacity Machine hours	–	4,500	10,000	7,400	–	–

A technical assessment of the apportionment of expenses of Service Departments is as under –

Service Dept / % of apportioning	A	B	C	X	Y
X	20	40	20	–	20
Y	10	60	20	10	–

Calculate the Overhead Rates of each production department after completing the distribution of Service Department costs to Production Departments by using Simultaneous Equation Method. [6 Marks]

- 6(c) From the following data prepare a Reconciliation Statement – [5 Marks]

(₹)

Profit as per Cost Accounts	1,45,500	Overvaluation of Opening Stock in Cost Accounts	15,000
Works OH under-recovered	9,500	Overvaluation of Closing Stock in Cost Accounts	7,500
Administrative OH under-recovered	22,750	Interest earned during the year	3,750
Selling OH over-recovered	19,500	Rent received during the year	27,000
Bad Debts w/off during the year	9,000	Preliminary Expenses written off during the year	18,000

7. Answer any four of the following –

[4 × 4 = 16 Marks]

- Briefly describe any 4 methods of apportionment of Joint Costs.
- Explain the significance of (i) Capital Gearing Ratio, (ii) Dividend Yield Ratio.
- What is Night Shift Allowance? How is it dealt in Cost Accounting?
- List 4 situations when EOQ & ROQ may not be equal.
- Give the formula for computing (i) Efficiency Ratio, (ii) Capacity Ratio, (iii) Calendar Ratio, and (iv) Activity Ratio.