Paper – 8: Cost Accounting & Financial Management

Time Allowed: 3 Hours **Full Marks: 100**

Section A-Cost Accounting

(Answer Question No. 1 which is compulsory and any three from the rest in this section)
Working Notes should form part of the answer.

Question.1

(a) A factory makes use of component purchased from the market for assembling its final product. Current usage varies between 300 and 450 units per week and replenishment time is normally two weeks but, can go up to five weeks. What will be the minimum stock level of component in units? [2]

(b) XYZ Co. Ltd. is having 400 workers at the beginning of the year and 500 workers at the end of the year. During the year 20 workers were discharged and 15 workers left the Company. What will be the labour turnover rate under "Separation Method? [2]

(c) The monthly cost of maintenance of machinery for 12,000 machine hours run is ₹ 1,70,000 and for 18,500 hours it is ₹ 2,02,500. What will be the cost of maintenance for 14,000 hours? [2]

(d) Define Direct Expenses with example. [2]

(e) The cost per unit of a product manufactured amounts to ₹ 160 (75% variable) when production is 10,000 units. If production increases by 25%, what will be the cost of production per unit? [2]

(f) Compute the Inventory Turnover Ratio from the following:
Opening stock=₹ 17,000
Closing stock=₹ 13,000
Material consumed=₹ 90,000 [2]

Question.2

(a) The particulars relating to 1,200 kgs. of a certain raw material purchased by a company during June, were as follows:-
Lot prices quoted by supplier and accepted by the Company for placing the purchase order:
Lot up to 1,000 kgs. @ ₹ 22 per kg.
Between 1,000- 1,500 kgs, @ ₹ 20 per kg.
Between 1,500-2,000 kgs. @ ₹ 18 per kg.
Trade discount – 20%.
Additional charge for containers @ ₹ 10 per drum of 25 kgs.
Credit allowed on return of containers, @ ₹ 8 per drum.
Sales tax at 10% on raw material and 5% on drums.
Total freight paid by the purchaser ₹ 340/-
Insurance at 2.5% (on net invoice value) paid by the purchaser.
Stores overhead applied at 5% on total purchase cost of material.
The entire quantity was received and issued to production.
The containers are returned in due course. Draw up a suitable statement to show:-
(a) Total cost of material purchased and

(b) Unit cost of material issued to production. [3+3]

(b) A and B are two workers working in a manufacturing Company and their output during a particular 40 hours week was 96 and 111units respectively. The guaranteed rate per hour is ₹ 12 per hour, low piece rate is ₹ 4 per unit, and high piece rate is ₹6 per unit. High task is 100 units per week. Compute the total earnings and labour cost per unit under Taylor and Gantt Task Bonus plan. [2+2]

(c) State the treatment of the following items in cost record [2x3=6]
(i) Interest on Borrowing for Working Capital
(ii) Incentives to indirect Workers
(iii) Rectification Cost/ Re-Work Cost

Question.3

(a) XYZ Ltd. manufactures four products A, B, C and D. whose data are given below:

	A	B	C	D
Direct Materials (₹)	3,000	6,000	9,000	18,000
Direct Labour (₹)	1,500	3,000	4,500	9,000
Direct Labour Hours	50	100	150	300
Machine Hours	30	15	10	5

Your are required to prepare a statement showing the allocation of factory overheads (Which amount to ₹1,08,000) using the basis of allocation as under:
(i) Direct Material Cost
(ii) Direct Labour Cost
(iii) Direct Labour Hours
(iv) Machine Hours
Out of these four bases of allocation, which you prefer and why? [2+2+2+2+2]

(b)

Trial Balance as on 31.3.2013

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
Material consumed	25,00,000		
Salaries	15,00,000	Special subsidy received from Government towards Employee salary	2,75,000
Employee Training Cost	2,00,000	Recoverable amount from Employee out of perquisites extended	35,000
Perquisites to Employees	4,50,000		
Contribution to Gratuity Fund	4,00,000		
Lease rent for accommodation provided to employees	3,00,000		
Festival Bonus	50,000		
Unamortised amount of Employees cost related to a discontinued operation	1,90,000		

Compute the Employee Cost as per CAS-7. [6]

Question.4

(a) ABC Ltd. has three production departments X, Y, Z and two service departments S and C. The following details are extracted from the books of accounts in respect of indirect expenses incurred during April 2012:

Indirect Cost	Amount (₹)
Indirect wages	9,000
Lighting and heating	1,200
Rent and rates	12,000
Electric power	6,000
Depreciation	24,000
Sundry expenses	7,800
	60,000

Following further details are collected for distribution of the above costs:

Particulars	Departments				
	X	Y	Z	S	C
Value of machinery (in ₹ '000)	60	50	80	10	—
Horse power (H.P.) of machines	40	45	60	5	—
Light points (Nos.)	20	30	40	20	10
Floor space (sq. meters)	150	200	250	100	50
Direct wages (in ₹ '000)	30	20	40	4	6
Machine hours worked	4,250	3,380	7,120		

The cost of the service departments are apportioned percentagewise as follows:

Departments	X	Y	Z	S	c
S	20	30	40	—	10
C	40	20	30	10	—

Calculate:

(a) Overhead Recovery rates showing the basis of apportionment.

(b) Total cost of job 321 (with element wise and dept. wise cost break down), the job card of which contain the following details:

Particulars	Dept X	Dept Y	Dept Z
Direct materials used	₹268	₹ 131	₹102
Direct wages	₹300	₹250	₹300
Machine hours worked	10	12	12

[9+3=12]

(b) Write a short note on Bill of Material. [4]

Question.5

(a) A manufacturer requires 9,600 units of a certain component annually. This is currently purchased from a regular supplier at ₹ 50 per unit. The cost of placing an order is ₹ 60 per order and the annual carrying cost is ₹ 5 per piece. What is the economic order quantity (EOQ) for placing order?

Recently the supplier has expressed his willingness to reduce the price to ₹ 48, if the total requirements are obtained from him in two equal orders and to ₹ 47, if the entire quantity required is purchased in one lot. Analyse the cost of the three options and recommend the best course.

What other factors should also be considered before the decision is taken? [3+3+2]

(b) Purchase of Materials ₹ 3,00,000 (inclusive of Trade Discount ₹ 3,000); Fee on Board ₹ 12,000; Import Duty paid ₹ 15,000; Freight inward ₹ 30,000 ; Insurance paid for import by sea ₹ 12,000; Rebates allowed ₹ 4,000; Cash discount ₹ 3,000; CENVAT Credit refundable ₹ 7,000; Subsidy received from the Government for importation of these materials ₹ 18,000. Compute the landed cost of material (i.e. value of receipt of material). [4]

(c) What are the factors influencing the selection of Overhead Recovery Rate? [4]

Section B–Financial Management
(Full Marks: 40)

Answer Question no.6 which is compulsory and any two from the rest in this section.

Question.6

(a) Ascertain the future value of an amount of ₹ 70,000 at 8% compounded semi annually for 5 Years. [2]

(b) A Company has a profit margin @ 25% and assets turnover of 3 times. What is the company's return on investment? [2]

(c) Chennai Cotton Mills Limited makes a right issue at ₹ 5.50 a share of one new share for every four shares held. Before the issue, there were 10 million shares outstanding and the share price was ₹ 6. Based on the above information you are required to compute-

(i) The total amount of new money raised

(ii) How many rights are required to buy one new share? [1+1]

(d) Mann & 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? [2]

Question.7

(a) The Global Instrument Corporation is trying to determine the effect of its Inventory Turnover Ratio and Days Sales Outstanding (DSO) on its cash-flow cycle. The Global Corporation's sales last year (all on credit) were ₹ 1,50,000 and it earned a net profit of 6%. Its Inventory Turnover Ratio was 5 and DSO was 36.5 days. Global had fixed assets totaling ₹ 35,000 and its payable deferral period is 40 days. Calculate Global Instrument Corporation's

(i) Cash Conversion cycle.

(ii) Total Asset Turnover and ROA, if it holds negligible amounts of cash and marketable securities.

(iii) Cash Conversion Cycle, Total Asset Turnover and Return on Assets, if it's Inventory Turnover can be raised to 7.3. [2+4+4]

(b) What are the commonly employed measures of financial performance? [6]

Question.8

(a) State the functions performed by the Securities & Exchange Board of India (SEBI). [6]

(b) Pioneer Technology Ltd. is foreseeing a growth rate of 12% per annum in the next 2 years. The growth rate is likely to fall to 10% for the third year and fourth year. After that the growth rate is expected to stabilize at 8% per annum. If the last dividend paid was ₹1.50 per share and the investors' required rate of return is 16%, what would be the intrinsic value per equity share of Pioneer Technology Ltd. as of date?

Note: You may use the following table:

Years	0	1	2	3	4	5
P.V Interest factors at 16%	1.00	0.86	0.74	0.64	0.55	0.48

[10]

Question.9

(a) A Company is currently facing working capital crunch. You are required to discuss the various areas that you would like to look into and suggest the ways by which the company can overcome the problem. [4]

(b) Project A and B are analysed and you have determined the following parameters. Advise the investor on the choice of a project:

Particulars	**Project A**	**Project B**
Investment	₹8 cr.	₹6 cr.
Project Life	8 years	10 years
Construction period	4 years	4 years
Cost of capital	15%	18%
N.P.V. @ 12%	₹3,700	₹4,565
N.P.V. @ 18%	₹425	₹425
I.R.R.	45%	32%
Rate of return	20%	27%
Payback	5 years	7 years
B.E.P.	45%	35%
Profitability index	1.70	1.30

[4]

(c) The annual turnover of VIBGYOR Limited is ₹ 12 million of which 80% is on credit. Debtors are allowed one month to clear off the dues. ALLBANK Factors Ltd. (a factor company) is willing to advance 90% of the bill raise on credit for a fee of 2% a month plus a commission of 3% on the total amount of debts. Vibgyor Ltd. as a result of this arrangement is likely to save ₹43,200 annually in management costs and avoid bad debts at 1% on the credit sales. A scheduled bank has come forward to make an advance equal to 90% of the debts at an interest rate of 12% p.a. However its processing fee will be at 2% on the debts. Should the company avail of the factoring service or the offer of the bank? Give reasons. [5]

(d) XYZ Ltd. Wants to raise ₹ 5,00,000 as additional capital. It has two mutually exclusive alternative financial plans. The current EBIT is ₹ 17,00,000 which is likely to remain unchanged. The relevant information is –
Present Capital Structure: 3,00,000 Equity of ₹ 10 each and 10% Bonds of ₹ 20,00,000.

Tax Rate	50%
Current EBIT	₹ 17,00,000
Current EPS	₹ 2.50
Current Market Price	₹ 25 per share

Financial Plan I	20,000 Equity Shares at ₹ 25 per share
Financial Plan II	13% Debenture of ₹ 5,00,000

What is the indifference level of EBIT? [3]