COST AUDIT & MANAGEMENT AUDIT

Full Marks: 100

Section A

Answer any four questions [4x15=60]

(1). (a) As a Cost and Management Auditor, you are asked to look into the proposed decision to temporarily suspend operations due to depressed market conditions:

₹ in '000

Budgeted level (per annum)	Capacity Utilisation	
	60%	80%
Direct Material	1950	2600
Direct Labour	2400	3200
Production overhead	1260	1380
Administrative Overhead	620	660
Selling & Distribution overhead	680	740
Total	6760	8380

The company is likely to operate at 50% capacity only and turnover is expected to be ₹ 49.5 lacs p.a. Market Research indicates that the depression will be over in a year and after that they can effect a sale of ₹90 lacs p.a utilizing 75% of capacity.

If operations are suspended for a year, the following cost will be incurred:

– Fixed cost ₹ 4,00,000

– Settlement with labour force ₹ 3,50,000

– Maintenance of Plant will continue and cost ₹1,00,000

– Cost of reopening will be ₹1,00,000

Draft a report to the Management of the following two options:

(i) To suspend production for one year and restart thereafter when market improves.

(ii) To continue production at 50% capacity level. **[12]**

(b) A company manufactures various types of product under review. As a Cost Auditor would you accept the absorption of 'Selling and Distribution' expenses as a percentage on Sales Values? **[3]**

(2). (a) UPS Ltd. has its own power generation plant using steam. The data relating to the same for the period 2012-13 are:

Productions	**Steam**	**Electricity**
Units	27,000	15,000
Costs:	₹	₹
A. Fuel		
(i) Coal	3240	-
(ii) Others	972	-
B. Steam	-	2700
C. Utilities		

(i) Gas	3645	-
(ii) Electricity	648	-
(iii) Others	405	450
D. Fixed Costs	1215	450
	10125	3600

The State Electricity Board has offered electricity at a concessional rate of ₹ 0.18 per unit between 10 p.m and 6 a.m (third shift) as against the normal rate of ₹ 0.27 per unit for the rest of the period.

Discuss the implications of accepting the offer assuming that utilities costs are partly fixed to the extent of 25%.

If utilities are fully variable, what would be the position? **[8]**

(b) TNT Ltd. has received an enquiry for supply of 2,00,000 numbers of Special Type of Machine Parts. Capacity exists for manufacture of the machine parts, but a fixed investment of ₹80,000/- and working capital to the extent of 25% of Sales Value will be required to undertake the job.

The costs estimated as follows:

Raw Materials- 20,000Kgs @ ₹2.50 per kg.

Labour Hours- 9,000 of which 1,200 would be overtime hours payable at double the labour rate.

Labour Rate- ₹ 2 per hour.

Factory Overhead - ₹ 2 per direct labour hours.

Selling and Distribution Expenses - ₹ 23,000

Material recovered at the end of the operation will be ₹6,000 (estimated).

The Company expects a Net Return of 25% on Capital Employed.

You are Management Accountant of the Company. The Managing Director requests you to prepare a Cost and Price Statement indicating the price which should be quoted to the Customer. **[7]**

(3). (a) CDMA Ltd. operates a small machine shop that manufactures one standard product available from many other similar businesses as well as products to customer order. The accountant has prepared the annual statement shown here:

	Custom sales	**Standard sales**	**Total sales**
Sales	50,000	25,000	75,000
Material	10,000	8,000	18,000
Labour	20,000	9,000	29,000
Depreciation	6,300	3,600	9,900
Power	700	400	1,100
Rent	6,000	1,000	7,000
Heat and light	600	100	700
Others	400	900	1,300
Total expenses	44,000	23,000	67,000
Net income	6,000	2,000	8,000

The depreciation charges are for machines used in the respective product lines. The power charge is apportioned on the estimate of power consumed. The rent is for the building space, which has been leased for ten years at ₹7,000 per year. The rent as well as heat and light are apportioned to the product lines based on the amount of floor space occupied. All other costs are current expenses identified with the product line causing them.

A valued custom parts customer has asked CDMA Ltd. if its shop would manufacture 5,000 special units. CDMA Ltd. is already working at capacity and would have to give up some other business in order to take this business. The company cannot refuse on custom orders already agreed to, but it could reduce the output of its standard product by about one-half for one year while producing the specially requested custom parts. The customer is willing to pay ₹7 for each part. The material cost will be about ₹2 per unit, and the labour will be ₹3.60 per unit. CDMA Ltd. will have to dish out ₹2,000 for a special device, which will be discarded when the job is done.

Calculate and present the following costs:

(i) The incremental cost of the order,

(ii) The full cost of the order,

(iii) The opportunity cost of taking the order. **[10]**

(b) How are Cost Accounting Standards different from Cost Accounting Records Rules? **[5]**

(4). (a) The following figures are extracted from the statement prepared by the Cost Accountant and the Trial Balance of ABC Ltd., which is a single product company:

	Year ending 31.3.13	31.3.12 (₹ in lakhs)	31.3.11
Gross sales inclusive of Excise Duty	2,240	1,970	1,885
Excise Duty	295	280	265
Raw Materials consumed	1,140	1,060	975
Direct Wages	35	32	27
Power and Fuel	30	27	24
Stores and Spares	6	5	4
Depreciation charged to production cost centres	16	15	13
Factory overheads:			
Salaries and Wages	5	4	3
Depreciation	2	2	2
Rates and Taxes	1	1	1
Other overheads	6	5	4
Administrative overheads:			
Salaries and Wages	10	9	8
Rates and Taxes	2	2	2
Other overheads	162	154	148
Selling and distribution overheads:			
Salaries and Wages	7	6	5
Packing and Forwarding	6	6	5
Depreciation	1	1	1
Other overheads	124	118	108

Interest	85	74	68
Bonus and Gratuity	12	10	9
Gross Current Assets	840	724	640
Current Liabilities and Provisions	324	305	246

You are required to compute the following ratios as per requirement of Para 9 the Cost Audit Report Rules 2011:

(i) Operating Profit as percentage of Value Addition.

(ii) Value Addition as percentage of Net Sales.

The computation should be based on EBDIT as Operating Profit. **[7]**

(b) Who is competent authority in companies to appoint cost auditor? What procedure is required to be followed by a company in respect of appointment of cost auditor? **[4]**

(c) A company, manufacturing Cotton Textile, wrote off in the same year, the expenditure in replacement of Copper Rollers used for printing fabrics and Stainless Steel frames used for Dying Yarn whose life are more than one year. State whether the Cost Auditor can qualify the report for these? **[4]**

(5). **(a)** A sugar mill has a boiler which uses its own by product, bagasse as fuel. The steam generated is first used for generation of power and the exhaust steam is used in the process of sugar manufacture. The following details are extracted from the financial accounts and cost accounting records of the sugar mill:

Sugar produced	49,00,000	quintals
Steam generated and consumed	24,90,000	tonnes
Fuel (Bagasse) consumed for production of stream	12,46,900	tonnes
Cost of generation of steam including cost of water (other than fuel cost)	₹ 11,50,80,000	
Steam used for generation of power	11,50,000	tonnes
Power purchased from Electricity Board @ ₹5.75 per KWH	97,00,000	KWH
Power generated from steam turbine	9,64,30,000	KWH
Variable conversion cost for generation of power (excluding cost of steam)	₹7,74,28,000	

Additional Information:

(1) The sales value of bagasse, if sold in the open market is ₹1,750 per tonne.

(2) The exhaust steam (after generation of power) transferred to sugar manufacturing process is valued at 85% of the cost of production of steam.

Prepare two separate cost sheet for steam and power as per Cost Accounting Record Rules and compute the average cost of power as per Para 5 of the Annexure to the Cost Audit Report Rules, 2011. **[10]**

(b) In dealing with the financial position of a company as per para 9 of the Annexure to the Cost Audit Report, state your opinion regarding: **[5]**

(i) Is the Capital Employed to be computed as at the beginning of the accounting period or at the end of the accounting period or average of both?

(ii) Should investments like National Savings Certificates deposited with Government authorities for Sales Tax, Excise etc. as security be treated as investments outside the business?

(iii) How is 'net worth' defined in this para? The para also states "if there is any change in the composition of the net worth during the year, special mention may be made along with the reasons there for." How would you take care of this provision?

(iv) Should the net sales figure include other service charges and jobbing income?

(v) In case the financial accounts of the company are yet to be finalized and audited, should the cost auditor provide the data under para 9?

Section B

Answer any two Questions [2x10]

(6). **(a)** Give an "Audit Programme" as an Internal Auditor of Wage Audit. **[5]**

(b) What is the role of the Audit Committee as per SEBI guideline and as stipulated in Section 292A of the Companies Act? **[5]**

(7). (a) "Management Audit can be potent tool for managerial control and reduction of cost". Do you agree with the above statement? Briefly comment on the potential of management audit as a tool for managerial control and reduction of costs. **[5]**

(b) Discuss the aspects of Internal Control system in relation to Stores including WIP. **[5]**

(8). **(a)**What are the basic differences between 'Management Audit' and 'Operational Audit'?

[5]

(b) What are the points should be considered by the management auditor in the evaluation and measurement of capacity utilization? **[5]**

Section c

Answer any two questions [2x10=20]

(9). **(a)**Balance sheets for 2010 and 2011 and an income statement for 2011 of Sipow Inc. are shown below: The extract balance sheets and income statement were prepared using the LIFO inventory cost flow method. Calculate & analysis current ratio, inventory turnover, long term debt to-equity ratio and operating profit margin for -2011 for LIFO and FIFO inventory valuation methods.

Balance Sheet of Sipow Inc.	**2011**	**2010**
ssets	₹	₹
Cash	105	95
Receivables	205	195
Inventories	310	290
Total current assets	**620**	**580**
Gross property, plant, and equipment	1,800	1,700
Accumulated depreciation	360	340
Net property, plant, and equipment	1,440	1,360
Total assets	**2,060**	1,940
Liabilities and equity	₹	₹
Payables	110	90
Short-term debt	160	140
Current portion of long-term debt	55	45
Current liabilities	325	275
Long-term debt	610	690
Deferred taxes	105	95
Closing stock	300	300
Additional paid in capital	400	400
Retained earnings	320	180
shareholders' equity	**1,020**	**880**
Total liabilities and equity	**2,060**	**1,940**

Income Statement

Year	**2011 (₹)**
Sales	4,000
Cost of goods sold	3,000
Gross profit	1,000
Operating expenses	
Operating profit	350
Interest expense	50
Earnings before taxes	300
Taxes	100
Net income	200
Dividends	**60**

Additional Information:

The company uses the LIFO inventory cost flow assumption to account for inventories. As compared to FIFO, inventories would have been ₹100 higher in 2011 and ₹90 higher in 2010.

(b) *AZ Transport Group plc comprises three divisions AZ Buses, AZ Taxis and Maintenance.*
AZ Buses operates a fleet of eight vehicles on four different routes. Each vehicle has a capacity of 30 passengers. There are two vehicles assigned to each route, and each vehicle completes five return journeys per day, for six days each week, for 52 weeks per year.

AZ Buses is considering its plans for year ending 31 December. Data in respect of each route is as follows:

		Route W	*Route X*	*Route Y*	*Route Z*
Return travel distance	*(km)*	*42*	*36*	*44*	*38*
Average number of passengers per trip					
Adults		*15*	*10*	*25*	*20*
Children		*10*	*8*	*5*	*10*
Return journey fares per trip (₹)					
Adults		*3.00*	*6.00*	*4.50*	*2.20*
Children		*1.50*	*3.00*	*2.25*	*1.10*

The following cost estimates have been made for AZ Buses

	₹
Fuel and repairs per kilometre	*0.1875*
Drivers wages per vehicle per work-day	*120*
Vehicle fixed cost per vehicle per annum	*2 000*

General fixed cost per annum 3 00 000

Required:

1. *Prepare a statement showing the planned contribution of each route and the total contribution and profit of the AZ Buses division for the year ending 31 December.*
2. *Assuming no change in the child fare, calculate the effect on the contribution of route W of increasing the adult fare to ₹3.75 per return journey if this reduces the number of adult passengers using this route by 20% and assuming that the ratio of adult to child passengers remains the same. Recommend whether or not AZ Buses should amend the adult fare on route W.*

The Maintenance division comprises two fitters who are each paid an annual salary of ₹15 808, and a transport supervisor who is paid an annual salary of ₹24 000.

The work of the Maintenance division is to repair and service the buses of the AZ Buses division and the taxis of the AZ Taxis division. In total there are eight buses and six taxis which need to be maintained. Each vehicle requires routine servicing on a regular basis on completion of 4 000 kilometres and every two months each vehicle is fully tested for safety.

The annual distance travelled by each taxi in the fleet is 1,28, 000 kilometres.

The projected material costs associated with each service and safety check are ₹100 and ₹75 respectively. The directors of AZ Transport Group plc are concerned over the efficiency and cost of its own Maintenance division and have decided to employ an additional new employee at an annual salary of ₹20 000 to improve overall efficiency.

The company has also invited its local garage to tender for the Maintenance contract for its fleet and the quotation / received was for ₹90 000 per annum including parts and labour.

If the Maintenance division is closed down the two fitters are made redundant with a redundancy payment of 6 months' salary to each fitter. The transport supervisor will be retained at the same salary but will be redeployed elsewhere in the Group where his services can be used.

Required:

i. *Calculate the cost of the existing Maintenance function.*
ii. *Analyse & advise whether to award the Maintenance contract to the local garage on financial grounds.*

(c) *In a meeting held at Malaysia towards the end of 2013, the Directors of HTML Inc. have taken a decision to diversify. At present HTML Inc. sells all finished goods from its own warehouse. The company issued debentures on 01.01.2013 and purchased fixed assets on the same day. The purchase prices have remained stable during the concerned period. Following information is provided to you:*

Income Statements

	2012 (₹)		2013 (₹)	
Cash Sales	30,000		32,000	
Credit Sales	2,70,000	3,00,000	3,42,000	3, 74,000
Less: Cost of goods sold		2,36,000		2,98,000
Gross Profit		***64,000***		***76,000***
Less: Expenses				

Warehousing	13,000		14,000	
Transport	6,000		10,000	
Administrative	19,000		19,000	
Selling	11,000		14,000	
Interest on Debenture		49,000	2,000	59,000
Net Profit		**15,000**		**17,000**

Balance Sheet

	2012 (₹)		2013 (₹)	
Fixed Assets (Net Block)	-	30,000	-	40,000
Debtors	50,000		82,000	
Cash at Bank	10,000		7,000	
Stock	60,000		94,000	
Total Current Assets (CA)	**1,20,000**		**1,83,000**	
Creditors	50,000		76,000	
Total Current Liabilities (CL)	**50,000**		**76,000**	
Working Capital (CA - CL)		70,000		1,07,000
Total Assets		**1,00,000**		**1,47,000**
Represented by:				
Share Capital		75,000		75,000
Reserve and Surplus		25,000		42,000
Debentures				30,000
Total Liabilities		**1,00,000**		**1,47,000**

Assume opening stock of ₹40,000 for the year 2013. You are required to calculate & analyse the following ratios for the years 2012 and 2013.

(i) *Gross Profit Margin Ratio*

(ii) *Operating Profit Ratio*

(iii) *Stock turnover ratio*

(iv) *Profitability ratio*