

COMPANY ACCOUNTS COST AND MANAGEMENT ACCOUNTING

Time allowed : 3 hours

Maximum marks : 100

NOTE : All working notes should be shown distinctly.

PART A

(Answer Question No. 1 which is compulsory
and any two of the rest from this part)

Question 1

- (a) State, with reasons in brief, whether the following statements are true or false :
- (i) Accounting Standard-15 deals with earnings per share.
 - (ii) Premium on issue of debentures shall be credited to debentures account along with nominal value of debentures.
 - (iii) As per Accounting Standard-26, intangible asset arising from research should not be recognised as an asset.
 - (iv) No buy-back of partly-paid shares is allowed.
 - (v) An underwriter while entering into a contract for issue of shares should be a registered company. (2 marks each)
- (b) Choose the most appropriate answer from the given options in respect of the following :
- (i) In case of part redemption of debentures, the balance in sinking fund is equal to —
 - (a) 50% of the amount of debentures issued till that date
 - (b) 75% of the amount of debentures issued till that date
 - (c) In proportion to the issue of debentures till that date
 - (d) No limit.
 - (ii) The International Financial Reporting Standard-4 deals with —
 - (a) Share based payments
 - (b) Financial investments
 - (c) Insurance Contracts
 - (d) Evaluation of mineral resources
 - (iii) Which one is not a statistical book —
 - (a) Shares calls book
 - (b) Register of share warrants
 - (c) Register of power of attorneys
 - (d) Register of directors' shareholdings.
 - (iv) Securities premium account is shown on the liability side under the heading—
 - (a) Share capital
 - (b) Reserves and surplus
 - (c) Current liabilities and provisions
 - (d) None of the above.

(v) *Loss suffered from the date of acquisition of business to the date of incorporation should be debited to —*

(a) *Goodwill account*

(b) *Profit and loss account*

(c) *Capital reserve account*

(d) *Capital reduction account.*

(1 mark each)

(c) *Re-write the following sentences after filling-in the blank spaces with appropriate word(s)/figure(s) :*

(i) *The applications bearing the stamp of the respective underwriters are called _____ .*

(ii) *The debentures issued as collateral security has to be mentioned by way of a note in the balance sheet under _____ .*

(iii) *The International Financial Reporting Standard-8 deals with _____ .*

(iv) *_____ advises the Central Government on the formulation and implementation of Accounting Standards in India.*

(v) *The voluntary return of shares by a shareholder to the company for cancellation is called _____ .*

(1 mark each)

Answer 1(a)

- (i) **False** : Accounting Standard (AS) - 15 deals with Employee Benefits while Accounting Standard (AS) - 20 deals with Earning Per Share
- (ii) **False** : Premium on issue of debentures shall be credited to Securities Premium Account.
- (iii) **True** : Intangible assets arising from research is recognized as an expense when it is incurred as per Accounting Standard (AS) –26, hence it is not an intangible asset.
- (iv) **True** : Buy-back of shares is allowed only in case of fully paid-up existing shares in accordance with Section 77 of the Companies Act, 1956.
- (v) **False** : The underwriter need not be a registered company, it can be an individual or partnership firm also.

Answer 1(b)

- (i) (a) 50% of the debentures issued till date.
- (ii) (c) Insurance contracts
- (iii) (d) Register of directors' shareholdings
- (iv) (b) Reserve and surplus
- (v) (a) Goodwill account.

Answer 1(c)

- (i) The applications bearing the stamp of the respective underwriters are called **marked applications** .
- (ii) The debentures issued as collateral security has to be mentioned by way of a note in the balance sheet under **specific loan account** .
- (iii) The International Financial Reporting Standard-8 deals with **Operating Segments**.
- (iv) **National Advisory Committee on Accounting Standards (NACAS)** advises the Central Government on the formulation and implementation of Accounting Standards in India.
- (v) The voluntary return of shares by a shareholder to the company for cancellation is called **surrender of shares** .

Question 2

- (a) *Following are the information of two companies for the year ended 31st March, 2010 :*

	Company-A (Rs.)	Company-B (Rs.)
Equity shares of Rs.10 each	8,00,000	10,00,000
10% Preference shares of Rs.10 each	6,00,000	4,00,000
Profit after tax	3,00,000	3,00,000

Assuming that the market expectation is 18% and 80% of the profits are distributed, what is the price per share you would pay for the equity shares of each company — (i) if you are buying a small lot; and (ii) if you are buying controlling interest shares ?
(6 marks)

- (b) *The balance sheet of Zed Ltd. as on 31st March, 2010 was as follows :*

Liabilities	Rs.	Assets	Rs.
Issued and paid-up capital :		Freehold property	2,00,000
20,000 Equity shares of		Stock	1,20,000
Rs.10 each	2,00,000	Sundry debtors	1,00,000
Profit and loss account	1,80,000	Cash at bank	1,80,000
10% Debentures	1,20,000		
Sundry creditors	1,00,000		
	6,00,000		6,00,000

It was resolved at the annual general meeting :

- (i) *To pay a dividend of 10% and corporate dividend tax @ 12.5% and surcharge of 10% and 2% education cess.*
- (ii) *To issue one bonus share for every four shares held.*

- (iii) To give existing shareholders the option to buy one share of Rs.10 @ Rs.14 for every four shares held prior to the bonus issue.
- (iv) To redeem the debentures at a premium of 5%. All the debentureholders took up the option.

Pass necessary journal entries.

(9 marks)

Answer 2(a)

Calculation of earning per share and dividend per share

Particulars	Company A	Company B
Profit after tax (Rs.)	3,00,000	3,00,000
Less : Preference Dividend (Rs.)	60,000	40,000
Profit for Equity Shareholders (Rs.)	2,40,000	2,60,000
No. of Equity shares issued	80,000	1,00,000
Distributable Profit as Dividend (80% of profit for Equity Shareholders)	1,92,000	2,08,000
Earning per share (Rs.)	3.00	2.60
Dividend per share (Rs.)	2.40	2.08

Earning per share = Profit available for equity shareholders / Number of equity shares

Dividend per share = Distributable Profits / Number of Equity Shares

Value per share for buying a small lot

Value per share = Dividend per share / Market capitalization rate x 100

Company A = Rs. 2.40 / 18 x 100 = Rs.13.33

Company B = Rs. 2.08 / 18 x 100 = Rs.11.56

Value Per Share for Controlling Interest

Value per share = Earning per share / Market capitalization rate x 100

Company A = Rs.3.00 / 18 x 100 = Rs.16.67

Company B = Rs.2.60 / 18 x 100 = Rs.14.44

Answer 2(b)

Journal Entries

Particulars	Dr. (Rs.)	Cr. (Rs.)
Profit and Loss Appropriation A/c	Dr.	22,805
To Proposed Equity Dividend A/c		20,000
To Corporate Dividend Tax A/c		2,805
(Being dividend proposed and tax payable on it)		

<i>Particulars</i>	<i>Dr. (Rs.)</i>	<i>Cr. (Rs.)</i>
Proposed Equity Dividend A/c Dr. To Equity Dividend Payable A/c (Being Dividend Declared)	20,000	20,000
Equity Dividend Bank A/c Dr. To Bank A/c (Being amount transferred to dividend Bank A/c)	20,000	20,000
Equity Dividend Payable A/c Dr. To Equity Dividend Bank A/c (Being Dividend Paid)	20,000	20,000
Corporate Dividend Tax A/c Dr. To Bank A/c (Being corporate dividend tax paid)	2,805	2805
Profit and Loss Appreciation A/c Dr. To Bonus to Shareholders A/c (Being bonus declared for shareholders)	50,000	50,000
Bonus to Shareholders A/c Dr. To Equity Share Capital A/c (Being 5000 equity shares allotted to shareholders)	50,000	50,000
Bank A/c Dr. To Equity Share Capital A/c To Securities Premium A/c (Being 5,000 shares issued at premium)	70,000	50,000 20,000
Securities Premium A/c Dr. To Premium on Redemption of Debentures A/c (Being premium on redemption provided)	6,000	6,000
10% Debentures A/c Dr. Premium on Redemption of Debentures A/c To Bank A/c (Being debentures redeemed)	1,20,000 6,000	1,26,000

Question 3

The authorised capital of Moon Ltd. is Rs.5,00,000 consisting of 2,000, 6% preference shares of Rs. 100 each and 30,000 equity shares of Rs. 10 each. The following was the trial balance of Moon Ltd. as on 31st March, 2010 :

<i>Debit Balances</i>	<i>Rs.</i>
<i>Investment in shares at cost</i>	<i>50,000</i>
<i>Purchases</i>	<i>4,90,500</i>
<i>Selling expenses</i>	<i>79,100</i>
<i>Stock on 1st April, 2009</i>	<i>1,45,200</i>
<i>Salaries and wages</i>	<i>52,000</i>
<i>Cash in hand</i>	<i>12,000</i>
<i>Interim preference dividend for the half year ended 30th September, 2009</i>	<i>6,000</i>
<i>Discount on issue of debentures</i>	<i>2,000</i>
<i>Preliminary expenses</i>	<i>1,000</i>
<i>Bills receivable</i>	<i>41,500</i>
<i>Interest on bank overdraft</i>	<i>7,800</i>
<i>Interest on debentures upto 30th September, 2009</i>	<i>3,750</i>
<i>Sundry debtors</i>	<i>50,100</i>
<i>Freehold property at cost</i>	<i>3,50,000</i>
<i>Furniture at cost less depreciation of Rs. 15,000</i>	<i>35,000</i>
<i>Income-tax paid in advance for 2009-10</i>	<i>10,000</i>
<i>Technical know-how fees at cost, paid during the year</i>	<i>1,50,000</i>
<i>Audit fees</i>	<i>5,000</i>
	<i>14,90,950</i>
<i>Credit Balances</i>	
<i>Sundry creditors</i>	<i>87,850</i>
<i>6% Preference share capital</i>	<i>2,00,000</i>
<i>Equity share capital fully paid-up</i>	<i>2,00,000</i>
<i>5% Mortgage debentures secured on freehold properties</i>	<i>1,50,000</i>
<i>Dividends</i>	<i>4,250</i>
<i>Profit and loss account (1st April, 2009)</i>	<i>28,500</i>
<i>Sales (Net)</i>	<i>6,70,350</i>
<i>Bank overdraft secured by hypothecation of stocks and receivables</i>	<i>1,50,000</i>
	<i>14,90,950</i>

You are required to prepare profit and loss account for the year ended 31st March, 2010 and the balance sheet as on that date after taking into account the following :

- (i) Closing stock was valued at Rs. 1,42,500.
- (ii) Purchases include Rs. 5,000 worth of goods and articles distributed among valued customers.
- (iii) Salaries and wages include Rs. 2,000 being wages incurred for installation of electrical fittings which were recorded under furniture.
- (iv) Bills receivable include Rs. 1,500 being dishonoured bills, 50% of which had been considered irrecoverable.
- (v) Bills receivable of Rs. 2,000 maturing after 31st March, 2010 were discounted.
- (vi) Depreciation on furniture to be charged @ 10% on written down value.
- (vii) Rs. 1,000 discount on issue of debentures to be written off.
- (viii) Interest on debentures for the half year ended on 31st March, 2010 was due on that date.
- (ix) Provide provision, for taxation Rs. 4,000.
- (x) Technical know-how fees is to be written off over a period of 10 years.
- (xi) Rs. 500 of preliminary expenses are to be written off.
- (xii) Salaries and wages include Rs. 10,000 being directors' remuneration.
- (xiii) Sundry debtors include Rs. 6,000 debts due for more than 6 months.
- (xiv) Rate of corporate dividend tax is 12 ½% and surcharge of 10% and 2% education cess.

Keeping in mind the requirements of Part-I and Part-II of Schedule VI of the Companies Act, 1956, prepare the profit and loss account for the year ended 31st March, 2010 and balance sheet as on that date of Moon Ltd. as close thereto as possible. Figures for the previous year can be ignored. (15 marks)

Answer 3

Moon Ltd.

Dr. **Profit and Loss Account for the year ended 31st March, 2010** Cr.

Particulars	Rs.	Particulars	Rs.
To Opening stock	1,45,200	By Sales (net)	6,70,350
To Purchases 4,90,500		By Closing stock	1,42,500
Less : Cost of articles issued as sample treated as advertisement expenditure 5,000	4,85,500		
To Gross Profit c/d	1,82,150		
	<u>8,12,850</u>		<u>8,12,850</u>

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Salaries and wages 52,000		By Gross profit b/d	1,82,150
Less : Director's remuneration 10,000			
42,000		By Dividend	4,250
Less : Capitalisation of Wages incurred for installation of electrical fittings 2,000	40,000		
To Directors' remuneration	10,000		
To Selling expenses	79,100		
To Discount on issue of debentures	1,000		
To Interest on bank overdraft	7,800		
To Interest on debentures 3,750			
Add : Outstanding 3,750	7,500		
To Audit fees	5,000		
To Technical know-how written off	15,000		
To Preliminary expenses written off	500		
To Provisions for bad debts	750		
To Depreciation on furniture	3,700		
To Advertisement (sample goods)	5,000		
To Provision for taxation	4,000		
To Net profit	7,050		
	1,86,400		1,86,400
To Interim dividend on preference shares paid	6,000	By Balance b/d	28,500
Corporate dividend tax (750+75+17*)	842	By Net profit	7,050
To Balance c/d	28,708		
	35,550		35,550

* Rounded off to the nearest rupee.

Balance Sheet of Moon Ltd. as at 31.3. 2010

<i>Liabilities</i>	<i>Rs.</i>	<i>Assets</i>	<i>Rs.</i>
Share Capital		Fixed Assets	
Authorised :		Freehold property at cost	3,50,000
2,000 - 6% Preference shares of Rs.100 each	2,00,000	Furniture at cost 52,000 (35,000+15,000+2,000)	
30,000 Equity shares of Rs.10 each	3,00,000	Less : Depreciation to date 18,700	33,300
	5,00,000	Technical knowhow	1,35,000
Issued and Subscribed		Investments	
2,000-6% Preference shares of Rs.100 each fully paid	2,00,000	Investments in shares at cost	50,000
20,000 Equity shares of Rs.10 each fully paid	2,00,000	Current Assets, Loans and Advances	
Reserves & Surplus		(A) Current Assets:	
Profit and loss account	28,708	Stock in trade	1,42,500
Secured loans		Sundry debtors :	
5% Mortgage debentures (secured on freehold property)	1,50,000	(a) Debts outstanding for a period exceeding 6 months	6,000
Interest Outstanding	3,750	(b) Other Debts	44,850
Bank overdraft (secured by hypothecation of stock and receivable)	1,50,000	Cash in hand	12,000
Unsecured Loans	--	(B) Loans and Advances	
Current Liabilities and Provisions		Bills Receivable	40,000
(A) Current liabilities		Advance tax for 2009-10	10,000
Sundry creditors	87,850	Miscellaneous Expenditure (to the extent not written off)	
(B) Provisions :		Preliminary expenses	500
Provision for taxation	4,000	Discount on issue of debentures	1,000
Corporate dividend tax	842		
	8,25,150		8,25,150

Notes :

- (i) A contingent liability for bills discounted Rs.2,000 which will mature after 31.3.2010.
- (ii) Half year Preference dividend of Rs. 6,000 is not provided for in the account.

Working Notes :

(i) Depreciation on furniture	Rs.
Furniture at cost less depreciation	35,000
Add : Installation charge of electric fittings wrongly included in salaries and wages	2,000
	<u>37,000</u>
Depreciation at 10%	3,700
Gross value of furniture (35,000 + 15,000 + 2,000)	52,000
Less : Accumulated Depreciation (15,000 + 3,700)	<u>18,700</u>
	<u>33,300</u>
(ii) Sundry debtors	
As per trial balance	50,100
Less : Debts due for more than 6 months	<u>6,000</u>
	<u>44,100</u>
Add : Bills dishonoured	<u>1,500</u>
	<u>45,600</u>
Less : Provision for bad debts	<u>750</u>
	<u>44,850</u>
(iii) Bills receivable	
Balance as per trial balance	41,500
Less : Bills dishonoured	<u>1,500</u>
	<u>40,000</u>
(iv) Provision for taxation and advance tax	
Advance tax has been shown as a separate item pending the final assessment when the company might get refund in due course.	

Question 4

On 1st October, 2009, Poddar Ltd. acquired 12,000 equity shares of Bhansali Ltd. of the face value of Rs. 10 each at a price of Rs. 1,70,000. The balance sheets of two companies as on 31st March, 2010 are as follows :

<i>Liabilities</i>	<i>Poddar Ltd. (Rs.)</i>	<i>Bhansali Ltd. (Rs.)</i>
<i>Equity shares of Rs. 10 each</i>	<i>10,00,000</i>	<i>2,00,000</i>
<i>General reserve (1st April, 2009)</i>	<i>4,20,000</i>	<i>1,00,000</i>
<i>Profit and loss account (1st April, 2009)</i>	<i>90,000</i>	<i>40,000</i>
<i>Profit for the year</i>	<i>1,70,000</i>	<i>45,000</i>
<i>Creditors</i>	<i>2,40,000</i>	<i>92,000</i>
<i>Bills payable</i>	<i>80,000</i>	<i>60,000</i>
	<u><u>20,00,000</u></u>	<u><u>5,37,000</u></u>

Assets

Goodwill	3,00,000	70,000
Land and building	4,00,000	1,00,000
Plant and machinery	5,00,000	1,00,000
Stock	2,00,000	40,500
Debtors	3,00,000	1,34,500
Investments	2,00,000	—
Bills receivable	20,000	30,000
Bank	60,000	50,000
Cash	20,000	12,000
	<u>20,00,000</u>	<u>5,37,000</u>

Out of the debtors and bills receivable of Poddar Ltd. Rs.50,000 and Rs. 16,000 respectively represented those due from Bhansali Ltd. The stock in the hands of Bhansali Ltd. includes goods purchased from Poddar Ltd. at Rs.20,000 which includes profit charged by latter company @ 25% at cost. Prepare a consolidated balance sheet as on 31st March, 2010 and also show your workings. (15 marks)

Answer 4

**Consolidated Balance Sheet of Poddar Ltd. and its
Subsidiary Bhansali Ltd. as on 31.3. 2010**

<i>Liabilities</i>		<i>Rs.</i>	<i>Assets</i>		<i>Rs.</i>
Share Capital			Goodwill		3,22,500
Equity Shares of Rs.10 each		10,00,000	Land and Building	<i>Rs.</i>	
Minority Interest		1,54,000	Poddar Ltd.	4,00,000	
Reserves & Surplus :			Bhansali Ltd.	<u>1,00,000</u>	5,00,000
General Reserve		4,20,000	Plant and Machinery		
Profit & Loss Account		2,69,500	Poddar Ltd.	5,00,000	
Current Liabilities :			Bhansali Ltd.	<u>1,00,000</u>	6,00,000
Creditors			Investments		30,000
Poddar Ltd.	2,40,000		Stock :		
Bhansali Ltd.	<u>92,000</u>		Poddar Ltd.	2,00,000	
	3,32,000		Bhansali Ltd.	<u>40,500</u>	
Less : Inter Co. Debts	50,000	2,82,000		2,40,500	
Bills Payable			Less : Stock Reserve	4,000	2,36,500
Poddar Ltd.	80,000		Debtors :		
Bhansali Ltd.	<u>60,000</u>		Poddar Ltd.	3,00,000	
	1,40,000		Bhansali Ltd.	<u>1,34,500</u>	
Less : Inter Co. Debts	16,000	1,24,000		4,34,500	

(2) Calculation of Cost of Control / Goodwill :

	<i>Rs.</i>
Cost of shares	1,70,000
Less : Face value of shares	1,20,000
Cost of Control / Goodwill	<u>50,000</u>

(3) Calculation of Minority Interest :

	<i>Rs.</i>
Paid-up value of capital	80,000
Share of profits	74,000
	<u>1,54,000</u>

(4) Calculation of Final Profit & Loss A/c balance of Poddar Ltd. :

		<i>Rs.</i>
Profit & Loss A/c :		
Balance on 01.04.2009	90,000	
Current year profit	<u>1,70,000</u>	2,60,000
Shares in Bhansali Ltd.		13,500
		<u>2,73,500</u>
Less : Stock Reserve		4,000
		<u>2,69,500</u>

(5) Calculation of value of Goodwill for Balance Sheet :

Cost of Control	50,000
Goodwill - Poddar Ltd.	3,00,000
Goodwill - Bhansali Ltd.	70,000
	<u>4,20,000</u>
Less : Capital Profit (as above)	97,500
Goodwill	<u>3,22,500</u>

PART B

*(Answer Question No. 5 which is compulsory
and any two of the rest from this part)*

Question 5

(a) *State, with reasons in brief, whether the following statements are true or false :*

- (i) *If a worker saves half of time of the standard time, the incentive under Halsey Plan and Rowan Plan will be the same.*
- (ii) *The method of costing used in a refinery is operating costing.*
- (iii) *Fixed budgets are budgets of fixed assets.*

- (iv) *Opportunity cost is recorded in the books of account.*
- (v) *Margin of safety is the difference of actual sale and standard sale.*

(2 marks each)

(b) *Choose the most appropriate answer from the given options in respect of the following :*

- (i) *In element-wise classification of overheads, which one of the following is not included —*
 - (a) *Fixed overheads*
 - (b) *Indirect labour*
 - (c) *Indirect materials*
 - (d) *Indirect expenditure.*
- (ii) *Obsolete stocks are those having —*
 - (a) *Low turnover rate*
 - (b) *No demand for technological change*
 - (c) *No present demand, but may be in future*
 - (d) *None of the above.*
- (iii) *Holiday pay is treated as —*
 - (a) *Fringe benefits cost*
 - (b) *Direct labour cost*
 - (c) *Overheads*
 - (d) *Abnormal loss charged to profit and loss account.*
- (iv) *Incentive schemes include —*
 - (a) *Piece rate wage plan*
 - (b) *Time rate wage plan*
 - (c) *Differential piece rate wage plan*
 - (d) *None of the above.*
- (v) *The management accounting is an extension of —*
 - (a) *Financial accounting*
 - (b) *Responsibility accounting*
 - (c) *Cost accounting*
 - (d) *All of the above.*

(1 mark each)

(c) *Re-write the following sentences after filling-in the blank spaces with appropriate word(s)/figure(s) :*

- (i) *The three categories of inventory for a manufacturer are raw material, work-in-process and _____.*
- (ii) *The time lost by workers who are paid on time basis, is known as_____.*
- (iii) *Quick ratio is the indicator of _____ position of an enterprise.*

- (iv) _____, costs are not useful for decision making as all past costs are irrelevant.
- (v) When there is no _____, profit figures revealed under marginal and absorption costing are identical. (1 mark each)

Answer 5(a)

- (i) **True** : The incentives under Halsey and Rowan plan would be same because half of standard time is saved due to operational efficiency of labour. Since, time saved and the time taken being the same, the incentives calculated as per the formula resulted to the same amount.
- (ii) **False** : The suitable method of costing to be used for a refinery is process costing because refining is done in different consecutive processes.
- (iii) **False** : Fixed budgets are used for estimating costs of a product or a service over a period of time in which the budget is designed to remain unchanged irrespective of the level of activity attained. Hence it is not the budget of fixed assets.
- (iv) **False** : Opportunity cost is not recorded in the books of account, even though it is considered for decision making. Opportunity cost is the benefit foregone which would have been received had it been used for second best use.
- (v) **False** : Margin of safety is the total sales less break-even sales, i.e. the excess of actual sales over break-even sales.

Answer 5(b)

- (i) (a) Fixed overheads
- (ii) (b) No demand for technological change
- (iii) (c) Overheads or (b) Direct labour cost
- (iv) (c) Differential piece rate wage plan
- (v) (d) All of the above.

Answer 5(c)

- (i) The three categories of inventory for a manufacturer are raw material, work-in-process and **finished goods**.
- (ii) The time lost by workers who are paid on time basis, is known as **idle time**.
- (iii) Quick ratio is the indicator of **liquidity** position of an enterprise.
- (iv) **Sunk** costs are not useful for decision making as all past costs are irrelevant.
- (v) When there is no **inventories**, profit figures revealed under marginal and absorption costing are identical.

Question 6

From the following balance sheets and information, prepare a cash flow statement of Rajat Ltd. for the year ended 31 March, 2010 as per Accounting Standard-3 (revised):

Balance Sheets

<i>Liabilities</i>	<i>As on 31st March, 2010 (Rs.)</i>	<i>As on 31st March, 2009 (Rs.)</i>
<i>Equity share capital</i>	<i>6,00,000</i>	<i>5,00,000</i>
<i>10% Redeemable preference capital</i>	<i>—</i>	<i>2,00,000</i>
<i>Capital redemption reserve</i>	<i>1,00,000</i>	<i>—</i>
<i>Capital reserve</i>	<i>1,00,000</i>	<i>—</i>
<i>General reserve</i>	<i>1,00,000</i>	<i>2,50,000</i>
<i>Profit and loss account</i>	<i>70,000</i>	<i>50,000</i>
<i>9% Debentures</i>	<i>2,00,000</i>	<i>—</i>
<i>Sundry creditors</i>	<i>95,000</i>	<i>80,000</i>
<i>Bills payable</i>	<i>20,000</i>	<i>30,000</i>
<i>Liabilities for expenses</i>	<i>30,000</i>	<i>20,000</i>
<i>Provision for taxation</i>	<i>95,000</i>	<i>60,000</i>
<i>Proposed dividend</i>	<i>90,000</i>	<i>60,000</i>
	<u><i>15,00,000</i></u>	<u><i>12,50,000</i></u>
<i>Assets</i>		
<i>Land and building</i>	<i>1,50,000</i>	<i>2,00,000</i>
<i>Plant and machinery</i>	<i>7,65,000</i>	<i>5,00,000</i>
<i>Investments</i>	<i>50,000</i>	<i>80,000</i>
<i>Inventory</i>	<i>95,000</i>	<i>90,000</i>
<i>Bills receivable</i>	<i>65,000</i>	<i>70,000</i>
<i>Sundry debtors</i>	<i>1,75,000</i>	<i>1,30,000</i>
<i>Cash and bank</i>	<i>65,000</i>	<i>90,000</i>
<i>Preliminary expenses</i>	<i>10,000</i>	<i>25,000</i>
<i>Voluntary separation payments</i>	<i>1,25,000</i>	<i>65,000</i>
	<u><i>15,00,000</i></u>	<u><i>12,50,000</i></u>

Additional information :

- (i) A piece of land being sold out for Rs. 1,50,000 (cost Rs. 1,20,000) and the balance land was revalued. Capital reserve consisted of profit on sale and profit on revaluation of land and building.
- (ii) On 1st April, 2009, a plant was sold for Rs. 90,000 (original cost Rs. 70,000 and

written down value Rs. 50,000) and debentures worth Rs.1 lakh were issued at par as part consideration for plant of Rs. 4.5 lakh acquired.

- (iii) Part of the investments (cost Rs. 50,000) was sold for Rs. 70,000.
- (iv) Pre-acquisition dividend received Rs.5,000 was adjusted against cost of investment.
- (v) Directors have proposed 15% dividend for the current year.
- (vi) Voluntary separation cost of Rs.50,000 was adjusted against general reserve.
- (vii) Income-tax liability for the current year was estimated at Rs. 1,35,000.
- (viii) Depreciation @ 15% has been written off from plant account, but no depreciation has been charged on land and building. (15 marks)

Answer 6

Cash Flow Statement of Rajat Limited for the year ended 31st March, 2010

Particulars	Rs.	Rs.
(A) Cash Flow from Operating Activities :		
Net Profit before taxation	2,45,000	
Adjustment for :		
Depreciation	1,35,000	
Preliminary expenses	15,000	
Profit on sale of plant	(40,000)	
Profit on sale of investments	(20,000)	
Interest on debentures	18,000	
Operating profits before working capital changes	3,53,000	
Increase in inventory	(5,000)	
Decrease in bills receivable	5,000	
Increase in debtors	(45,000)	
Increase in creditors	15,000	
increase in bills payable	(10,000)	
Increase in accrued liabilities	10,000	
Cash generated from operations	3,23,000	
Income-tax paid	(1,00,000)	
	2,23,000	
Voluntary separation payments	(1,10,000)	
Net cash from operating activities		1,13,000

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
(B) Cash Flow from Investing Activities :		
Proceeds from sale of land	1,50,000	
Proceeds from sale of plant	90,000	
Proceeds from sale of investments	70,000	
Purchase of plant	(3,50,000)	
Purchase of investment	(25,000)	
Pre-acquisition dividend received	<u>5,000</u>	
<i>Net cash used in investing activities</i>		(60,000)
(C) Cash Flow from Financing Activities :		
Proceeds from issue of equity shares	1,00,000	
Proceeds from issue of Debentures	1,00,000	
Redemption of preference shares	(2,00,000)	
Dividend paid	(60,000)	
Interest paid on debentures	(18,000)	
<i>Net cash used in financing activities</i>		<u>(78,000)</u>
Net decrease in cash and cash equivalents [(A) + (B) + (C)]		(25,000)
Cash and cash equivalents at the beginning of the year		90,000
Cash and cash equivalents at the end of the year		<u>65,000</u>

Working Notes :

Net profit before taxation

	<i>Rs.</i>
Retained profit	70,000
Less : Balance as on 31.3.2009	<u>50,000</u>
	20,000
Add : Provision for taxation	1,35,000
Proposed dividend	<u>90,000</u>
	<u>2,45,000</u>

*Dr.***Land and Building Account***Cr.*

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Balance b/d	2,00,000	By Cash (sale)	1,50,000
To Capital reserve (profit on sale)	30,000	By Balance c/d	1,50,000
To Capital reserve (revaluation profit)	70,000		
	<u>3,00,000</u>		<u>3,00,000</u>

Plant and Machinery Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Balance b/d	5,00,000	By Cash (sale)	90,000
To Profit and loss account	40,000	By Depreciation	1,35,000
To Debentures	1,00,000	By Balance c/d	7,65,000
To Bank	3,50,000		
	<u>9,90,000</u>		<u>9,90,000</u>

Investment Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Balance b/d	80,000	By Cash (sale)	70,000
To Profit and loss account	20,000	By Dividend (pre-acquisition)	5,000
To Bank (balancing figure)	25,000	By Balance c/d	50,000
	<u>1,25,000</u>		<u>1,25,000</u>

Capital Reserve Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Balance c/d	1,00,000	By Land A/c (profit on sale)	30,000
		By Land A/c (profit on revaluation)	70,000
	<u>1,00,000</u>		<u>1,00,000</u>

General Reserve Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Voluntary separation cost	50,000	By Balance b/d	2,50,000
To Capital redemption reserve	1,00,000		
To Balance c/d	1,00,000		
	<u>2,50,000</u>		<u>2,50,000</u>

Proposed Dividend Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Bank (balancing figure)	60,000	By Balance b/d	60,000
To Balance c/d	90,000	By Profit and loss account	90,000
	<u>1,50,000</u>		<u>1,50,000</u>

Provision for Taxation Account

<i>Particulars</i>	<i>Rs.</i>	<i>Particulars</i>	<i>Rs.</i>
To Bank (balancing figure)	1,00,000	By Balance b/d	60,000
To Balance c/d	95,000	By Profit and loss account	1,35,000
	<u>1,95,000</u>		<u>1,95,000</u>

Question 7

(a) Explain briefly the role of a management accountant in a business enterprise. (5 marks)

(b) Pooja Pipes Ltd. uses about 75,000 valves per year and the usage is fairly constant at 6,250 valves per month. The valve costs Rs.1.50 per unit when bought in large quantities; and the carrying cost is estimated to be 20% of average inventory investment on an annual basis. The cost to place an order and process the delivery is Rs.18. It takes 45 days to receive delivery from the date of an order and a safety stock of 3,250 valves is desired.

You are required to determine (i) The most economical order quantity and frequency of orders; (ii) the re-order point; and (iii) the most economical order quantity if the valves cost Rs. 4.50 each instead of Rs. 1.50 each. (5 marks)

(c) A factory produces 300 units of a product per month. The selling price is Rs.120 per unit and variable cost is Rs.80 per unit. The fixed expenses of the factory amount to Rs.8,000 per month.

Calculate —

- (i) The estimated profit in a month wherein 240 units are produced.
- (ii) The break-even sales quantity.
- (iii) The sales to be made to earn a profit of Rs.7,000 per month. (5 marks)

Answer 7(a)

For efficient and effective management of an enterprise management needs financial information in understandable form. The management accountant being principal officer in charge of accounts of the company plays a significant role in providing relevant financial information needed for day to day as well as strategic decisions. The role of management accountant in this direction includes:

- (i) Management accountant establishes, coordinates and administers plans to facilitate the forecasting of sales, preparation of budgets and development of cost standards that facilitates profit planning, capital budgeting and financing.
- (ii) He formulates accounting policy and procedures to facilitate analysis and interpretation of financial data for the use of management.
- (iii) He also assists in tax planning and implementing control schemes for enhancing profit for owners of the business.
- (iv) He keeps up to date information on economic and social matters which may affect the interest of his employer.
- (v) He prepares reports for the use of managers at different layers of management for their rational decision making.

Answer 7(b)

$$(i) \text{ Economic Order Quantity (EOQ)} = \sqrt{\frac{2U \times P}{S}}$$

Where –

U = Annual Requirement = 75,000 units

P = Ordering Cost = Rs.18 per order

S = Carrying Cost per unit per annum = 20% of average inventory

$$= \sqrt{\frac{2 \times 75,000 \times 18}{0.30}}$$

$$= 3,000 \text{ units}$$

Working note :

$$\text{Total carrying cost} = \frac{75,000 \times \text{Rs. } 1.50 \times 20}{100} = \text{Rs. } 22,500$$

$$\text{Carrying cost per unit} = \text{Rs. } 22,500 / 75,000 = \text{Rs. } 0.30$$

Frequency of orders:

$$\text{Number of order per year} = 75,000 / 3000 = 25 \text{ orders}$$

Or Orders may be placed in every 14.6 days, i.e. $365/25 = 14.6$ days

- (ii) Re- Order point = (Lead time x Normal usage) + Safety stock
 $= (1.5 \text{ months} \times 6,250 \text{ units per month}) + 3,250 \text{ units} = 12,625 \text{ units}$
- (iii) EOQ when the cost per valve is Rs. 4.50

$$= \sqrt{\frac{2 \times 75,000 \times 18}{0.90}} = 1732 \text{ units}$$

$$\text{Total carrying cost} = \frac{75,000 \times \text{Rs. } 4.50 \times 20}{100} = \text{Rs. } 67,500$$

$$\text{Carrying cost per unit} = \text{Rs. } 67,500 / 75,000 = \text{Rs. } 0.90$$

Answer 7(c)

Selling price per unit	Rs.120
Less : Variable cost per unit	Rs. 80
Contribution per unit	<u>Rs. 40</u>

$$\text{P/V ratio} = \left(\frac{\text{Contribution} \times 100}{\text{Sales}} \right) = \frac{40}{120} \times 100 = 33\frac{1}{3}\%$$

- (i) Profit on sale 240 units

Sale of 240 units at Rs.120 each	Rs. 28,800
Contribution from above at $33\frac{1}{3}\%$	<u>Rs. 9,600</u>
Less : Fixed cost of one month	Rs. 8,000
Profit	<u>Rs. 1,600</u>

- (ii) Break Even Sales Quantity = Fixed Cost/Contribution per unit
 $\text{Rs. } 8,000 / 40 = 200 \text{ Units}$

- (iii) Sales required to earn a profit of Rs. 7,000

Profit required to be earned	Rs. 7,000
Add : Fixed cost per month	<u>Rs. 8,000</u>
Total contribution to be earned	<u>Rs. 15,000</u>
P/V Ratio	$33\frac{1}{3}\%$

i. e. Sales required to earn Rs. $33\frac{1}{3}\% = \text{Rs. } 100$

Sales required to earn Rs.15,000

$$= \left(\frac{\text{Rs. } 15,000 \times 100}{33\frac{1}{3}} \right) = \text{Rs. } 45,000$$

Question 8

(a) Write a short note on 'pre-determined overheads rate'. (3 marks)

(b) The cost of sale of Product-A is made up as follows : Rs.

Materials used in manufacturing	5,500
Materials used in packing	1,000
Materials used in selling the product	150
Materials used in the factory	75
Materials used in the office	125
Labour required in production	1,000
Labour required for supervision of the management for factory	200
Direct expenses - factory	500
Indirect expenses - factory	100
Office expenses	125
Depreciation - office building and equipment	75
Depreciation - factory	175
Selling expenses	350
Freight on materials	500
Advertising	125

Assuming that all products manufactured are sold, what should be the selling price to obtain a profit of 25% on selling price ? (6 marks)

(c) The Finance Manager of Jay Electrical Ltd. is preparing a flexible budget for the accounting year commencing from 1st April, 2011. The company produces Component-K of a product. Direct material costs Rs.7 per unit. Direct labour averages Rs.2.50 per hour and requires 1.60 hours to produce one unit of Component-K. Salesmen are paid a commission of Re.1 per unit sold. Fixed selling and administration expenses amount to Rs.85,000 per year. Manufacturing overheads has been estimated in the following amounts under specified conditions of volume :

Volume of production (in units)	1,20,000	1,50,000
	Rs.	Rs.
Expenses :		
Indirect material	2,64,000	3,30,000
Indirect labour	1,50,000	1,87,500
Inspection	90,000	1,12,500
Maintenance	84,000	1,02,000
Supervision	1,98,000	2,34,000
Depreciation - Plant and equipment	90,000	90,000
Engineering services	94,000	94,000
Total manufacturing overheads	<u>9,70,000</u>	<u>11,50,000</u>

Normal capacity of production of company is 1,25,000 units.

Prepare a budget of total cost at 1,40,000 units of output. (6 marks)

Answer 8(a)**Pre-determined overhead rate**

Pre-determined overhead rate is determined in advance of the actual production and is computed by dividing the budgeted overhead expenses for the accounting period by the budgeted base for the period i.e.

$$\text{Pre-determined overhead rate} = \frac{\text{Budgeted overhead for the period}}{\text{Budgeted base for the period}}$$

The computation of a pre-determined overhead rate has the following advantages:

- (i) Pre-determined overhead rate facilitates product cost determination immediately after production is completed.
- (ii) In those concerns where the budgetary control system is in operation, all the data for the purpose of calculation of pre-determined overhead rate is available without any extra clerical cost.
- (iii) It is useful when cost plus contracts are undertaken.
- (iv) Cost estimating and competitive pricing, offer ideal situations for use of pre-determined overhead rates.

Answer 8(b)**Cost Sheet**

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
Direct Material : Materials used in manufacturing	5,500	
Materials used in packing material*	1,000	
Freight on materials	<u>500</u>	7,000
Direct Labour : Labour required on production		1,000
Direct Expenses : Direct Factory Expenses		<u>500</u>
Prime Cost		8,500
<i>Add : Factory Overheads :</i>		
Indirect Material : Material used in factory	75	
Indirect Labour : Labour required for supervision of the management for factory	200	
Indirect Expenses : Indirect factory expenses	100	
Depreciation – factory	<u>175</u>	<u>550</u>
Factory Cost or Work Cost		9,050
<i>Add : Office and administrative overheads :</i>		
Indirect Material : Material used in office	125	
Indirect Expenses : Office expenses	125	
Depreciation	<u>75</u>	<u>325</u>
Total Cost of Production		9,375

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
<i>Add :</i> Selling and distribution overheads :		
Indirect Material : Material used in selling the product	150	
Indirect Expenses : Selling	350	
Advertising	125	625
Cost of Sales		10,000
Profit [33 ½ % on cost (25% on sale)]		3,333
Sales		13,333

* Treated as primary packing material. Otherwise it may be treated as selling expenses.

Answer 8(c)

Jay Electricals Ltd.

Budget for the year commencing from 1st April, 2011

Output 1,40,000 units

<i>Particulars</i>	<i>Rate per unit (Rs.)</i>	<i>(Rs.)</i>
<i>Variable Costs :</i>		
Direct Material	7.00	9,80,000
Direct Labour	4.00	5,60,000
Salesman's Commission	1.00	1,40,000
Indirect Material	2.20	3,08,000
Indirect Labour	1.25	1,75,000
Inspection	0.75	1,05,000
Total Variable Costs (1)		22,68,000
<i>Semi-Variable Costs</i>		
Maintenances (WN:1)		
— Fixed		12,000
— Variable	0.60	84,000
Supervision (WN : 2)		
— Fixed		54,000
— Variable	1.20	1,68,000
Total Semi-Variable Costs (2)		3,18,000
<i>Fixed Costs</i>		
Selling and Administration Expenses		85,000
Depreciation : Plant and Equipment		90,000
Engineering Services		94,000
Total Fixed Costs (3)		2,69,000
Total Costs = (1) + (2) + (3)		28,55,000

Working Notes :

1. Maintenance cost - Variable cost per unit = Change in Cost / Change in Output
= 18,000/30,000
= Rs. 0.60 per unit
Total Variable Cost for 1,20,000 units = 1,20,000 x 0.60 = Rs. 72,000
Total Fixed Costs = 84,000 – 72,000 = Rs. 12,000
 2. Supervision Cost
Variable Cost per unit = Change in Cost/Change in Output
= 36,000/30,000 = Rs. 1.20 per unit
Total Variable Cost for 1,20,000 units = 1,20,000 x 1.20 = Rs. 1,44,000
Total Fixed Costs = 1,98,000 – 1,44,000 = Rs. 54,000
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