

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 correct or incorrect:
- (i) The bonus share issue cannot be made unless the existing partly-paid shares are fully paid-up.
 - (ii) In India, corporate financial statements in general do not include a cash flow statement to explain movement of cash during the accounting period.
 - (iii) A company is not under any legal obligation to make good its past losses before distributing its current profits as dividends.
 - (iv) The Accounting Standard-21 mandates an Indian company to present consolidated financial statements.
 - (v) In India, corporate financial statements are prepared recognising legal forms of the transaction and ignoring the substance. (2 marks each)
- (b) Choose the most appropriate answer from the given options in respect of the following :
- (i) Securities premium money can be used for —
 - (a) Payment of dividend
 - (b) Writing off goodwill
 - (c) Issuance of fully paid bonus shares
 - (d) None of the above.
 - (ii) 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.
 - (iii) Pre-paid expenses are shown in balance sheet as —
 - (a) Current assets
 - (b) Intangible assets
 - (c) Wasting assets
 - (d) Fixed assets.

- (iv) *The balance of forfeited shares after reissue of the same is transferred to—*
- Capital reserve account*
 - Share capital account*
 - Profit and loss account*
 - Debenture redemption fund account.*
- (v) *Divisible profits include —*
- General reserves*
 - Profit on revaluation of assets*
 - Profit prior to incorporation period*
 - Capital reserve.* (1 mark each)
- (c) *Re-write the following sentences after filling-up the blank spaces with appropriate word(s)/figure(s) :*
- Accounting as a 'language of business' communicates the financial results of corporate enterprise to various _____ by means of financial statements.*
 - If a company offers to its equity shareholders the right to buy one equity share of Rs. 100 each at Rs. 120 for every 4 equity share of Rs. 100 each and the market value of a share is Rs. 180, then the value of the right is Rs. _____ .*
 - The bonus share can be issued only if _____ of the company permits such an issue.*
 - Accounting Standard-17: Segment reporting is mandatory for all commercial, industrial and business reporting corporate enterprises, whose turnover for the accounting period exceeds Rs. _____ .*
 - Consolidated financial statements are presented by a _____ company to provide financial information about the economic activities of its group.* (1 mark each)

Answer 1(a)

- Correct** - The bonus shares are always fully paid-up and issued to existing shareholders on a pro-rata basis. Bonus issue is not made unless the partly paid shares, if any, existing are made fully paid up.
- Correct** – The preparation and presentation of cash flow statement in India is not mandatory for all types of corporate enterprises. However the companies which are required to prepare and present such statements should prepare and present cash flow statements as per revised Accounting Standard (AS) - 3.
- Incorrect** - In general a company is under no legal obligation to make good a debit balance in its profit and loss account resulting from past losses before distributing its current profits. But so much of the loss sustained by a company in the past years as is attributable to the amount of provisions made for depreciation must be set off against the current profit of the company before a dividend is declared. But from the view point of sound commercial policy, it is desirable to apply current profits in making good lost capital before distribution of dividends.

- (iv) **Incorrect** - The Companies Act, 1956 does not make it obligatory on the part of the holding company to prepare group accounts or consolidated accounts. In case, if a holding company prepares and present consolidated financial statements, it has to follow the principles and procedures as laid down under Accounting Standard (AS) - 21.
- (v) **Incorrect** - Transactions and other events are accounted for and presented in accordance with their substance and financial reality and not merely with their legal form. While the legal form of a lease agreement is that the lessee may acquire no legal title to the leased asset, in the case of financial leases, the substance and financial reality are that the lessee acquires the economic benefits of the use of the leased assets for the major part of its economic life. Therefore, a financial lease is recognized in the lessee's balance sheet both as an asset and as an obligation to pay future lease payments.

Answer 1(b)

- (i) (c) Issuance of fully paid bonus shares
- (ii) (a) Goodwill account
- (iii) (a) Current assets
- (iv) (a) Capital reserve account
- (v) (a) General reserves

Answer 1(c)

- (i) Accounting as a 'language of business' communicates the financial results of corporate enterprise to various **interested parties / stakeholders** by means of financial statements.
- (ii) If a company offers to its equity shareholders the right to buy one equity share of Rs.100 each at Rs.120 for every 4 equity share of Rs.100 each and the market value of a share is Rs.180, then the value of the right is Rs. **12**.
- (iii) The bonus share can be issued only if **Articles of Association** of the company permits such an issue.
- (iv) Accounting Standard-17: Segment reporting is mandatory for all commercial, industrial and business reporting corporate enterprises, whose turnover for the accounting period exceeds Rs. **50 crores** .
- (v) Consolidated financial statements are presented by a **holding** company to provide financial information about the economic activities of its group.

Question 2

(a) Write short notes on **any two** of the following :

- (i) Objectives of international accounting standards
- (ii) Loss on issue of debentures
- (iii) Firm underwriting.

(3 marks each)

(b) Following is the balance sheet of Anupam Ltd. as on 31st March, 2008 :

Liabilities		Rs.
2,00,000, 14% Preference shares of Rs.100 each, fully called	2,00,00,000	
Less : Calls in arrears @ Rs. 20 per share	<u>4,00,000</u>	1,96,00,000
10,00,000 Equity shares of Rs.10 each, Rs.8 per share called	80,00,000	
Less : Calls-in-arrears	<u>20,000</u>	
	79,80,000	
Add : Calls-in-advance	<u>10,000</u>	79,90,000
Securities premium		5,10,000
General reserve		1,50,00,000
10,000, 15% Debentures @ Rs.1,000 each, fully paid		1,00,00,000
Current liabilities and provisions		<u>10,00,000</u>
		<u>5,41,00,000</u>
Assets		
Fixed assets		1,30,00,000
Investments		28,00,000
Other current assets		2,15,00,000
Cash and bank balances		<u>1,68,00,000</u>
		<u>5,41,00,000</u>

On 1st April, 2008, the Board of directors decided that —

- The fully paid preference shares are to be redeemed at a premium of 4% on 1st May, 2008 and for that purpose 6 lakh equity shares of Rs.10 each are to be issued at a premium of 5%.
- 3,000 Equity shares owned by Mohan, an existing shareholder, who has failed to pay the allotment money and the first call money @ Rs.3 and Rs.2.50 per share respectively, equity shares are to be forfeited on 31st May, 2008.
- The final call of Rs.2 per share is to be made on 7th July, 2008 on equity shares.

All the above are duly complied with according to schedule. The amount due on the issue of fresh issue and on final call are also duly received except from Sohan who had failed to pay the first call for his 1,400 equity shares, has again failed to pay the final call also. These shares of Sohan are to be forfeited on 31st August 2008.

Show the necessary journal entries.

(9 marks)

Answer 2(a)(i)

Objectives of International Accounting Standards

The International Accounting Standards are formulated by International Accounting Standards Board (IASB). The IASB has issued International Accounting Standards on

various matters relating to accounting policies, preparation and disclosure of financial statements. The main objectives of these standards is to bring uniformity and enhance inter-firm comparability pertaining to –

- (i) Recognition of transaction in financial statements.
- (ii) Measurement of these transactions and events.
- (iii) Presentation of these transactions and events in the financial statements in a manner that is meaningful and understandable to the users in making economic decisions across the frontiers.

The IASB has issued 41 International Accounting Standards (some of them were withdrawn) in addition to 8 International Financial Reporting Standards. The last decade has witnessed a sea change in the global economic scenario. It is now recognized by all that differences among countries in financial accounting and reporting practices are a primary impediment to the free flow of capital. In view of this, the Institute of Chartered Accountants of India has decided in principle to enforce the convergence of Indian Accounting Standards with International Financial Reporting Standards from 1st April, 2011.

Answer 2(a)(ii)

Loss on issue of debentures

If a company issues debentures at par or at a discount which are redeemable at a premium, the premium payable on redemption of the debentures should be treated as capital loss. Redemption of debentures at a premium is a known loss at the time of issue of debentures as the terms of issue generally contain such provisions for redemptions. As such, it would be prudent on the part of the company to write off such loss during the life of the debentures. The loss to be incurred by a company for a particular issue of debentures is ascertained in the following manner :

1. If the debentures are issued at par and redeemable at a premium, the loss will be equal to the amount of premium payable on redemption.
2. If the debentures are issued at a discount and redeemable at a premium, the loss will be equal to the total amount of discount on issue and the amount of premium on redemption. In such a case, there is no need to debit discount on Issue of Debenture Account. Instead, "Loss on Issue of Debenture Account" should be debited with total loss.

Loss on issue of debentures account is written off gradually every year during the life of the debentures. The unwritten off amount is shown in the balance sheet under 'Miscellaneous Expenditure Account'.

Answer 2(a)(iii)

Firm underwriting

Firm underwriting refers to a definite commitment by the underwriter or underwriters to take up an agreed number of shares or debentures of a company irrespective of the number of shares or debentures subscribed by the public. In such an instance, the underwriters are committed to take up the agreed number of shares or debentures in addition to unsubscribed shares or debentures, if any. Even if the issue is oversubscribed, the underwriters are liable to take up the agreed number of shares or debentures.

While computing the individual liability of the underwriters, the 'firm underwriting' can be dealt with in any of the following manner in the absence of any specific instructions:

- (a) The 'firm underwriting' may be adjusted against the individual liability of each underwriter separately or may be treated at par with marked applications.

In such a case, the statement of liability of underwriters will be as under:

Gross Liability (agreed ratio-total shares underwritten)	xxxx
Less : Marked applications including firm underwriting	<u>xxxx</u>
Balance left	
Less : Unmarked application (ratio of gross liability)	xxxx
Net liability	
Add : Firm underwriting	<u>xxxx</u>
Total Liability	<u>xxxx</u>

- (b) The benefit of 'firm underwriting' may be shared by all underwriters or firm underwriting may be treated at par with unmarked applications. In such case, the shares/debentures underwritten firm will be included in the unmarked forms. In such case, the state of liability of underwriters will appear as shown above except that shares/debentures underwritten firm by each underwriter will not be specifically adjusted against his individual liability but will be included in the total unmarked forms to be distributed amongst all underwriters in the ratio of their gross liability.

Answer 2(b)

Journal Entries

Date	Particulars	Dr. (Rs.)	Cr. (Rs.)
2008	Bank A/c	Dr.	
May 1	To Equity Share Capital A/c	63,00,000	
	To Securities Premium A/c		60,00,000
	(Being Equity Shares issued at premium)		3,00,000
	Securities Premium A/c	Dr. 7,20,000	
	To Premium on Redemption of Redeemable Preference Shares A/c		7,20,000
	(Being Premium on Redemption of Preference shares provided)		
	General Reserve A/c	Dr. 1,20,00,000	
	To Capital Redemption Reserve A/c		1,20,00,000
	(Being capital redemption reserve account created)		
	14% Preference Share Capital A/c	Dr. 1,80,00,000	
	Premium on Redemption A/c	Dr. 7,20,000	
	To Preference Shareholders A/c		1,87,20,000
	(Being amount due to preference shareholders)		

<i>Date</i>	<i>Particulars</i>	<i>Dr. (Rs.)</i>	<i>Cr.(Rs.)</i>
	Preference Shareholders A/c To Bank A/c (Being paid to preference shareholders)	Dr. 1,87,20,000	1,87,20,000
May 31	Equity Share Capital A/c To Equity Share Allotment A/c To Equity Share 1st Call A/c To Forfeited Shares A/c (Being 3,000 shares forfeited due to non-payment of calls)	Dr. 24,000	9,000 7,500 7,500
July 7	Equity Share Final Call A/c To Equity Share Capital A/c (Being final call due on equity shares)	Dr. 19,94,000	19,94,000
	Bank A/c Calls in Advance A/c To Equity Share Final Call A/c (Being Final Call received on Equity Shares)	Dr. 19,81,200 Dr. 10,000	19,91,200
Aug.31	Equity Share Capital A/c To Equity Share 1st Call A/c To Equity Share 2nd Call A/c To Forfeited Shares A/c (Being 1,400 shares forfeited due to non-payment of calls)	Dr. 14,000	3,500 2,800 7,700

Question 3

(a) Comment on **any two** of the following statements :

- As a matter of prudence, whole of free reserves should not be utilised in the case of buy-back of shares.
- As a matter of sound commercial policy, current profits are to be applied while 'paying dividend out of current profits without making good past losses.'
- In case of under-subscription of shares, question of returning the money does not arise at all. (3 marks each)

(b) Following are the balance sheets of Asha Ltd. and Bipasha Ltd. as on 31st March, 2008 :

<i>Liabilities</i>	<i>Asha Ltd. (Rs.)</i>	<i>Bipasha Ltd. (Rs.)</i>
Capital (Rs. 10 per share)	10,00,000	8,00,000
Profit and loss account	4,00,000	2,00,000
Loan from Asha Ltd.	—	80,000
Bills payable	80,000	60,000
	<u>14,80,000</u>	<u>11,40,000</u>

<i>Assets</i>		
<i>Machinery</i>	<i>3,00,000</i>	<i>2,80,000</i>
<i>Furniture</i>	<i>50,000</i>	<i>20,000</i>
<i>Debtors</i>	<i>2,50,000</i>	<i>8,00,000</i>
<i>Loan to Bipasha Ltd.</i>	<i>80,000</i>	<i>—</i>
<i>Shares in Bipasha Ltd.</i>	<i>7,00,000</i>	<i>—</i>
<i>Bills receivable</i>	<i>1,00,000</i>	<i>40,000</i>
	<u><i>14,80,000</i></u>	<u><i>11,40,000</i></u>

Asha Ltd. purchased 75% shares of Bipasha Ltd. for Rs.7,00,000 on 31st March, 2008. Bills payable of Bipasha Ltd. include bills of Rs.20,000 accepted in favour of Asha Ltd.

Prepare a consolidated balance sheet.

(9 marks)

Answer 3(a)(i)

Section 77A of the Company (Amendment) Act, 1999 states that a company may purchase its own shares or other specified securities (e.g. employees' stock option or other securities as may be notified by the Central Government from time to time) out of:

- (i) its free reserves (i.e. reserves which are free for distribution as dividend) and includes balance of securities premium account or/ and
- (ii) the proceeds of any shares or other specified securities.

However, as a matter of prudence, the entire free reserve should not be utilized for the purpose of buy-back and the following items should be adjusted against free reserves to arrive at the net amount of free reserves that can be utilized for the purpose of buy-back:

- (1) Unamortised miscellaneous expenditure.
- (2) Unamortised deferred revenue expenditure.
- (3) Contingent liabilities likely to mature and not provided for.
- (4) Purchased goodwill.
- (5) Any diminution of long-term investments not provided for.
- (6) Any impairment in the value of tangible assets not provided for.

Answer 3(a)(ii)

A company is under no legal obligation to make good a debit balance in its Profit and Loss Account resulting from past losses before distributing current profits. But so much of the loss sustained by a company in the past financial year and years falling after 28th December, 1960 as is attributable to the amount of provision made for depreciation, must be set off against the current profits of the company before a dividend is declared. The position in respect of set off of past losses for determining divisible profits may be summarized as under:

- (1) In respect of previous years ending before 28th December, 1960, arrears of depreciation need not be taken into account.

(2) In respect of previous years, ending after 28th December, 1960 :

- (a) All arrears of depreciation not provided for must be set off against the profits of the current year;
- (b) The losses of such years must be set off to the extent to which they consist of depreciation provided in the books.

But from the view point of sound commercial policy, however, it is desirable to apply current profits in making good lost capital.

Answer 3(a)(iii)

In practical situations, it rarely happens that the number of shares applied for is exactly equal to the number of shares offered to public for subscription. In case of under-subscription of shares, number of shares applied for, is less than the number of shares offered by the company. All applications are accepted in full. If the minimum subscription has not been subscribed, all application money may be required to be returned. However, in case of over-subscription of shares, the company returns the money to the applicants whose applications have either been rejected or have been accepted partially. Hence, in case of under-subscription, the question of returning the money does not arise at all.

Answer 3(b)

**Consolidated Balance Sheet of Asha Ltd. And Bipasha Ltd.
As on 31st March, 2008**

<i>Liabilities</i>		<i>Rs.</i>	<i>Rs.</i>	<i>Assets</i>		<i>Rs.</i>	<i>Rs.</i>
Share Capital:				Machinery :			
Shares of Rs. 10 each		10,00,000		Asha Ltd.		3,00,000	
Minority Interest			2,50,000	Bipasha Ltd.		<u>2,80,000</u>	5,80,000
Reserve and Surplus:				Furniture :			
Profit and Loss A/c		4,00,000		Asha Ltd.		50,000	
Capital Reserve			50,000	Bipasha Ltd.		<u>20,000</u>	70,000
Current Liabilities :				Debtors :			
Loan from Asha Ltd.	80,000			Asha Ltd.		2,50,000	
Less : Inter Co.debts	<u>80,000</u>		Nil	Bipasha Ltd.		<u>8,00,000</u>	10,50,000
Bills payable				Loan to			
				Bipasha Ltd.		80,000	
Asha Ltd.	80,000			Less : Inter Co.			
				debts		<u>80,000</u>	Nil
Bipasha Ltd.	<u>60,000</u>			Bills Receivables :			
	1,40,000			Asha Ltd.		1,00,000	
Less : Inter Co.debts.	<u>20,000</u>	1,20,000		Bipasha Ltd.		<u>40,000</u>	
						1,40,000	
				Less: Inter Co.debts		<u>20,000</u>	<u>1,20,000</u>
						<u>18,20,000</u>	<u>18,20,000</u>

Working Notes :**1. Allocation of capital profit of Bipasha Ltd.**

	<i>Rs.</i>
Profit & Loss Account balance as on 31.3.2008	2,00,000
Share of Asha Ltd. – 75%	1,50,000
Share of Minority Shareholders	<u>50,000</u>

2. Calculation of Capital Reserve :

Paid-up value of shares	6,00,000
Share of capital profit	1,50,000
	<u>7,50,000</u>
Less : Cost of shares	7,00,000
Capital reserve	<u>50,000</u>

3. Calculation of Minority Interest :

Paid up Values of shares	2,00,000
Share of Capital Profit	50,000
	<u>2,50,000</u>

Question 4

(a) Distinguish between **any two** of the following :

(i) 'Underwriters' and 'brokers'.

(ii) 'Marked applications' and 'unmarked applications'.

(iii) 'Calls-in-arrears' and 'calls-in-advance'. (3 marks each)

(b) Following is the balance sheet of Ramesh Ltd. as on 31st March, 2008 :

<i>Liabilities</i>	<i>Rs.</i>
Equity shares of Rs. 10 each	10,00,000
12% Preference shares of Rs. 100 each	10,00,000
General reserve	6,00,000
Profit and loss account	4,00,000
15% Debentures	10,00,000
Creditors	<u>8,00,000</u>
	<u>48,00,000</u>
 <i>Assets</i>	
Goodwill	5,00,000
Building	15,00,000
Plant	10,00,000

<i>Investment in 10% stock (market value of Rs.5,20,000, nominal value Rs. 5,00,000)</i>	<i>4,80,000</i>
<i>Stock</i>	<i>6,00,000</i>
<i>Debtors</i>	<i>4,00,000</i>
<i>Cash</i>	<i>1,00,000</i>
<i>Preliminary expenses</i>	<i>2,20,000</i>
	<u><u>48,00,000</u></u>

Additional information —

Assets are revalued as follows:

Building : Rs.32,00,000; Plant : Rs.18,00,000; Stock : Rs.4,50,000; and Debtors : Rs.3,60,000.

Average profit before tax of the company is Rs. 12,00,000 and 12.5% of the profit is transferred to general reserve, rate of taxation being 50%. Normal dividend expected on equity shares is 8% while fair return on capital employed is 10%. Goodwill may be valued at 3 years' purchase of super profits.

Ascertain the value of each equity share under fair value method. (9 marks)

Answer 4(a)(i)

Underwriters and brokers

The persons or institutions underwriting a public issue of shares or debentures are called 'underwriters'. The underwriters may be individuals, partnership firms or joint stock companies. But, an issue of shares or debentures is hardly underwritten by a single individual as it involves more risk and attaches greater responsibility. Generally, an issue of shares or debentures of a company is underwritten by two or more firms jointly. The consideration payable to the underwriters for underwriting the issue is known as underwriting commission. Some specialized financial institutions set-up by the Government in the public sector are also playing an active role these days in underwriting shares or debentures of a company.

Brokers merely promise or try to procure subscriptions to the shares or debentures issued; they do not take any responsibility of subscribing to the shares or debentures of the company. They simply procure subscriptions for shares or debentures from the public on behalf of the company and in exchange of their service rendered to the company, they get remuneration called brokerage.

Answer 4(a)(ii)

Marked applications and unmarked applications

When the issue of shares or debentures of a company is underwritten by two or more persons, it is usual that the applications for shares or debentures sent through the underwriters should bear a stamp of the respective underwriters. The applications bearing the stamp of the respective underwriters are called "marked applications" while the applications received directly by the company which do not bear any stamp of the underwriters are called "unmarked applications".

If the entire issue of shares or debentures is underwritten by only one underwriter, the marking of applications is immaterial. But, the issue of shares or debentures is generally underwritten by more than one underwriter as the risk is distributed among the underwriters in an agreed ratio. In such a case it is essential that the applications sent through the underwriters should be marked properly so as to determine their respective liability correctly. The purpose of distinguishing between marked and unmarked applications is to determine the liability of individual underwriters.

Answer 4(a)(iii)

Calls-in-arrears and Calls-in-advance

Calls-in-arrears refers to the amount called up by the company which has not yet been paid by the shareholders till the last day fixed for payment thereof. The amount of calls-in-arrears is shown by way of deduction from the called-up capital in the Balance Sheet. Generally interest is charged on calls-in-arrears. The maximum rate of interest as per Table A is 5% p.a. The interest on calls-in-arrears account is transferred to the Profit and Loss Account at the end of the year.

Calls-in-advance refers to the amount paid by the shareholders in excess of the amount due from them. A company may accept calls-in-advance only if Articles authorize to do so. Interest is allowed on calls-in-advance. The amount of calls-in-advance is shown under separate heading on the Liabilities Side of the Balance Sheet. The maximum rate of interest as per Table A is 6% p.a. It is a debt of a company until, the calls are made and the amount already paid is adjusted. It is to be noted that the money received on calls-in-advance does not become part of share capital. No dividend is paid on calls-in-advance.

Answer 4(b)

	<i>Rs.</i>	<i>Rs.</i>
<i>Assets :</i>		
Building		32,00,000
Plant		18,00,000
Stock		4,50,000
Debtors		3,60,000
Cash		1,00,000
		<u>59,10,000</u>
<i>Less : Liabilities :</i>		
Creditors	8,00,000	
Debentures	<u>10,00,000</u>	<u>18,00,000</u>
Capital Employed		<u>41,10,000</u>
Calculation of Actual Profit :		
Average Profit		12,00,000
Less : Income from Investment		50,000
		<u>11,50,000</u>

	<i>Rs.</i>
Less : Income Tax 50%	5,75,000
Actual Profit	5,75,000
Less : Transfer to Reserve 12.50%	71,875
	5,03,125
Less : Preference Dividend	1,20,000
Profit for Equity Shareholders	3,83,125
Super Profit = Actual Profit – Normal Profit	
Normal Profit (Return) = 10% on Capital Employed	
= Rs.41,10,000 x 10% = Rs. 4,11,000	
Super Profit = Rs. 5,75,000 – Rs. 4,11,000 = Rs. 1,64,000	
Goodwill = Rs.1,64,000 x 3 = Rs.4,92,000	
Net assets for equity shareholders = Capital Employed + Goodwill + Investment – Preference Capital	
= Rs.41,10,000 + Rs.4,92,000 + Rs. 4,80,000 – Rs. 10,00,000 = Rs. 40,82,000	
Value per share (intrinsic value) = Rs. 40,82,000 / 1,00,000 = Rs. 40.82	
Value per share yield method = $\frac{\text{Expected rate of dividend} \times \text{Paid up Value}}{\text{Normal rate of dividend}}$	
Expected rate of dividend = $\frac{\text{Rs. 3,83,125} \times 100}{\text{Rs. 10,00,000}} = 38.31\%$	
Value per Share = $\frac{38.31 \times 10}{8} = \text{Rs.47.89}$	
Value per share as per fair value method = $\frac{\text{Intrinsic value} + \text{Yield value}}{2}$	
= $\frac{\text{Rs. 40.82} + \text{Rs. 47.89}}{2}$	
= Rs.44.36 approx.	

Note :

- (i) Debentures are excluded from capital employed for calculating super profit.
- (ii) Normal profit is calculated on capital employed. It may also be calculated on average capital employed, then answers will change accordingly.

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) Cost accounting is a branch of financial accounting.

- (ii) *Bin card shows the value of a material at any moment of time.*
- (iii) *In absorption costing, the valuation of inventories is higher than in marginal costing technique.*
- (iv) *A budget manual is a summary of all the financial budgets.*
- (v) *Cost reduction is cost control.* (2 marks each)
- (b) *Choose the most appropriate answer from the given options in respect of the following :*
 - (i) *Administration overheads are recovered as a percentage of —*
 - (a) *Direct materials*
 - (b) *Direct wages*
 - (c) *Prime cost*
 - (d) *Works cost.*
 - (ii) *For contracts which are very near to completion, the profit is ascertained by the formula —*
 - (a) *Estimated profit x Work certified / contract price*
 - (b) *Estimated profit x Work certified / contract price x cash received / Work certified*
 - (c) *Estimated profit x Work certified / contract price x cost of work / Total cost to date*
 - (d) *Any of the above in the absence of specific instruction.*
 - (iii) *The type of process loss that should not affect the cost of inventories is —*
 - (a) *Abnormal loss*
 - (b) *Normal loss*
 - (c) *Seasonal loss*
 - (d) *Standard loss.*
 - (iv) *Cost-Volume-Profit analysis is most important for the determination of the—*
 - (a) *Volume of operations necessary to break-even*
 - (b) *Variable revenues necessary to equal fixed costs*
 - (c) *Relationship between revenues and costs at various levels of operation*
 - (d) *Sales volume necessary to equal fixed costs.*
 - (v) *For shoe manufacturers, the most suitable cost system is —*
 - (a) *Job costing*
 - (b) *Batch costing*
 - (c) *Contract costing*
 - (d) *None of the above.* (1 mark each)
- (c) *Re-write the following sentences after filling-up the blank spaces with appropriate word(s)/figure(s) :*
 - (i) *Cost is a fact whereas price is a _____.*

- (ii) *Imputed costs are relevant for _____.*
- (iii) *A _____ is the cost that has already been incurred and cannot be avoided by decisions taken in the future.*
- (iv) *Economic lot size is the order size that _____ the total cost of ordering and storing.*
- (v) *A profit centre is a division or organisational unit concerned with controlling both _____ and costs. (1 mark each)*

Answer 5(a)

- (i) **False** : Cost accounting is a specialized branch of accounting and not of financial accounting. Its main purpose is recording, ascertainment, analysis and presentation of cost information pertaining to a product or a service unit.
- (ii) **False** : Bin card shows only the quantity of material and not its value. This card is prepared by stores department. It details out only quantity of material available at a moment of time.
- (iii) **True** : This is so because stock in absorption costing is valued at total cost basis. The stock is valued at variable cost in case of marginal costing.
- (iv) **False** : A budget manual lays down the details of the organizational set up, duties and responsibilities of executives at different layers.
- (v) **False** : Cost reduction and cost control, are two different approaches for enhancing efficiency. Their concepts and procedures are quite different.

Answer 5(b)

- (i) (d) Works cost.
- (ii) (a) Estimated Profit x Work Certified / Contract Price
Or (d) Any of the above in the absence of specific instruction.
- (iii) (a) Abnormal loss
- (iv) (c) Relationship between revenues and costs at various levels of operation.
- (v) (b) Batch costing.

Answer 5(c)

- (i) Cost is a fact whereas price is a **policy**.
- (ii) Imputed costs are relevant for **decision making**.
- (iii) A **sunk cost** is the cost that has already been incurred and cannot be avoided by decisions taken in the future.
- (iv) Economic lot size is the order size that **minimizes** the total cost of ordering and storing.
- (v) A profit centre is a division or organizational unit concerned with controlling both **sales / (revenue)** and costs.

Question 6

(a) Write short notes on **any two** of the following :

(i) Bases of apportionment

(ii) Cost plus contracts

(iii) Labour turnover.

(3 marks each)

(b) A factory is currently working at 50% capacity and produces 1,000 units. From the following information, you are required to estimate profits of the factory when it works at 60% and 80% working capacity respectively and offer your critical comments:

At 60% working capacity, raw material cost increases by 2% and selling price falls by 2%. At 80% working capacity, raw materials cost increases by 5% and selling price falls by 5%. At 50% capacity working, the product costs Rs.180 per unit and is sold at Rs.200 per unit. The unit cost of Rs.180 is made up as follows :

	Rs.	
Raw material	100	
Labour	30	
Factory overheads	30 (40% fixed)	
Administration overheads	20 (50% fixed)	(9 marks)

Answer 6(a)(i)**Bases for apportionment**

The following are the various bases for the apportionment of the overhead expenses among the various cost centres :

- (a) *Direct Wages* - Under this method overheads are distributed among the centre in proportion to the direct wages of the respective centres,
- (b) *Number of Workers* - Under this method the total number of workers working in each centre forms the basis.
- (c) *Direct Labour Hours* - The overhead cost is distributed in the proportion to the centres in the proportion of the total number of hours worked in each centre.
- (d) *Floor Area* - The relative area of the cost centre is used as a basis for apportionment of certain expenses-like rent, rates, taxes, heating, lighting, air conditioning, etc.
- (e) *Machine Hours* - Machine hour rate indicates the cost per hour of the machine used.

Answer 6(a)(ii)**Cost Plus contracts**

Cost Plus contract is a contract in which the value of the contract is ascertained by adding a certain percentage of profit over the total cost of the work. In other words, it is a pricing method, under which contractee agrees to reimburse the actual cost plus the agreed percentage of profit. This is used in case of those contracts whose exact cost cannot be correctly estimated at the time of undertaking a work. This method is usually adopted in the works of construction during war time, urgent works, defence, public

utility works, ship building, etc. Government and Semi Government organizations usually adopt the cost plus contracts to assign works. Generally, in such contract, contractor and contractee have clear agreement, about the items of cost to be included, type of material to be used, labour rates for different grades, etc.

Following are the benefits of cost plus contracts :

1. It is possible to know the cost of contract, cost per each element and the amount of profit to the contractor.
2. The contractor carries on the work promptly and expeditiously.
3. When the works are to be carried out urgently and the value of the contract is high, the cost-plus contract method is usually adopted.
4. The contractee can exercise an effective control over the work at different stages as well as over the various elements of cost.
5. It assumes a fixed percentage margin profit to the contractor.
6. The contractor is protected from wide fluctuations in the prices of the elements of costs. He will also get benefits of escalation clause.
7. The benefit of social justice is also obtained by the method.

Answer 6(a)(iii)

Labour turnover

The rate of change in the labour force is known as labour turnover. It is the ratio at which the employees leave the concern during a given period in relation to the average number of workers employed during a period. It can be measured by relating the engagements and losses in the labour force to the total number employed at the beginning of the period. All the losses must be taken into account regardless of the cause for leaving. Labour turnover reduces the labour productivity and increases costs. The rate of labour turnover depends on a number of factors, like, the nature of the industry, its size, location, nature of labour, etc.

The commonly used techniques for measuring labour turnover is expressed by the under noted formula :

1. Separation Rate Method

$$\text{Labour turnover} = \frac{\text{Separation during a given period}}{\text{Average number of workers during the period}} \times 100$$

2. Net Labour Turnover Rate Method or Replacement Method

$$\frac{\text{Number of replacements during a given period}}{\text{Average working force during the period}} \times 100$$

3. Labour Flux Rate Method

$$\frac{\left(\frac{\text{Number of separation}}{\text{during a period}} \right) \times \left(\frac{\text{Number of new employees}}{\text{during a given period}} \right)}{\left(\text{Average number of workforce during the given period} \right)} \times 100$$

Answer 6(b)**Flexible Budget***Present Capacity – 50% - 1000 units*

	<i>Cost classification</i>	<i>50% capacity 1,000 units</i>		<i>60% capacity 1,200 units</i>		<i>80% capacity 1,600 units</i>	
		<i>Per unit Rs.</i>	<i>Total Rs. (000's)</i>	<i>Per unit Rs.</i>	<i>Total Rs. (000's)</i>	<i>Per unit Rs.</i>	<i>Total Rs. (000's)</i>
Raw Materials	V	100	100.0	102	122.4	105	168.0
Labour	V	30	30.0	30	36.0	30	48.0
Factory Overheads (60%)	V	18	18.0	18	21.6	18	28.8
Adm. Overheads (50%)	V	10	10.0	10	12.0	10	16.0
Total Variable Cost (V)		158	158.0	160	192.0	163	260.8
Sales (S – V)		200	200.0	196	235.2	190	304.0
Contribution		42	42.0	36	43.2	27	43.2
Factory Overheads	F	12	12.0	10	12.0	7.50	12.0
Admn. Overheads	F	10	10.0	8.33	10.0	6.25	10.0
Total Fixed Costs	F	22	22.0	18.33	22.0	13.75	22.0
Total Cost (V+F)		180	180.0	178.33	214.0	176.75	282.8
Profit (Sales – Total Cost)		20	20.0	17.67	21.2	13.25	21.2

The profit at 60% and 80% capacities is the same and as such, it is not advisable to increase the production to 80%. However increase to 60% capacity is advisable.

Question 7

- (a) *What are the objectives of financial statement analysis ?* (6 marks)

OR

“Although including interest in the normal cost is practically difficult but excluding interest altogether may lead to wrong managerial decisions.” Comment.

(6 marks)

- (b) *A company has annual fixed cost of Rs.1,40,00,000. In the year 2007-08, sales amounted to Rs.6,00,00,000 as compared with Rs.4,50,00,000 in the preceding year 2006-07. Profit in 2007-08 is Rs.42,00,000 more than that in 2006-07. On the basis of the above information, answer the following :*

- (i) *At what level of sales, the company would have break-even ?*

- (ii) *Determine profit/loss on a forecasted sales volume of Rs.8,00,00,000.*
- (iii) *If there is a reduction in selling price by 10% in the financial year 2008-09 and company desires to earn the same amount of profit as in 2007-08, what would be the required sales volume ?* (9 marks)

Answer 7(a)

Financial statement analysis is very much helpful in assessing the financial position and profitability of a concern. The main objectives of analyzing the financial statement are as follows :

- (i) The analysis would enable the present and the future earning capacity and the profitability of the concern.
- (ii) The operational efficiency of the concern as a whole as well as department wise can be assessed. Hence, the management can easily locate the areas of efficiency and inefficiency.
- (iii) The solvency of the firm, both short-term and long-term, can be determined with the help of financial statement analysis which is beneficial to trade creditors and debenture holders.
- (iv) The comparative study in regard to one firm with another firm or one department with another department is possible by the analysis of financial statements.
- (v) Analysis of past results in respect of earning and financial position of the enterprise is of great help in forecasting the future results. Hence it helps in preparing budgets.
- (vi) It facilitates the assessment of financial stability of the concern.
- (vii) The long-term liquidity position of funds can be assessed by the analysis of financial statements.

Answer to Alternate Question 7(a)

Interest is an element of cost and therefore, should be included in cost. Interest is the cost to be paid for the use of capital; capital is also a factor of production just as labour. If interest is not included in cost calculation, a number of managerial decisions may be taken wrongly. Thus, where a decision involves replacement of labour with expensive machinery, the question of interest assumes importance, since, if interest is not included, the cost accountant may conclude that machinery is cheaper. In inventory control, interest is an important item to be considered. Payment of interest depends entirely on the financing policies and financing pattern. In reality, whether a firm raises a certain sum of money from the proprietor or borrows from the outside does not make any difference as far as production efficiencies are concerned. Thus, an amount of notional interest may be charged on the total capital whether it is borrowed or not.

Another practical difficulty arises in the calculation of the amount of capital on which interest should be worked out. While the fixed capital is readily ascertainable, working capital keeps on changing. If notional interest is to be charged, the problem of determining a proper rate of interest arises. In the money and capital markets, there is a large number of rates depending upon different factors like risk, period of maturity, bank rate, etc. By including interest on the proprietor's capital amount by taking that

figure in the cost of production, we would obviously be including profit since the closing stock will be valued at a higher figure.

Hence, it is true that there are practical difficulties in including interest as part of the normal cost. However, excluding it altogether may lead to wrong managerial decisions which are not desirable. Therefore, it is suggested that while interest may be excluded from the regular cost sheet, cost calculations for other purposes for decision making should include a proper amount of notional interest where the interest will be material.

Answer 7(b)

- (i) P/V ratio = (Change in Profit / Change in Sales) x 100 or

$$= \text{Rs. } 42,00,000 / (\text{Rs. } 6,00,00,000 - \text{Rs. } 4,50,00,000) \times 100 = 28\%$$

 Break Even Sales = Fixed Cost / (P/V Ratio)

$$= \text{Rs. } 1,40,00,000 / 28\% = \text{Rs. } 5,00,00,000$$
- (ii) Contribution for sales volume of Rs. 8,00,00,000

$$= (\text{PV Ratio} \times \text{S}) \text{ or } 28\% \times \text{Rs. } 8,00,00,000 = \text{Rs. } 2,24,00,000$$

 Therefore, Profit

$$= (\text{Contribution} - \text{Fixed Cost}) = \text{Rs. } (2,24,00,000 - 1,40,00,000) = \text{Rs. } 84,00,000$$
- (iii) Contribution in 2007-08 = $28\% \times \text{Rs. } 6,00,00,000 = \text{Rs. } 1,68,00,000$
 Sales in 2008-09 after reduction in price by 10%

$$= (\text{Rs. } 6,00,00,000 - 10\% \text{ of Rs. } 6,00,00,000) = \text{Rs. } 5,40,00,000$$

 New PV Ratio = $[\text{Changed Contribution} / \text{Changed Sale}] \times 100$

$$= (\text{Rs. } 1,68,00,000 - \text{Rs. } 60,00,000) / \text{Rs. } 5,40,00,000 \times 100 = 20\%$$

 The required sales volume for earning contribution of Rs. 1,68,00,000

$$= (\text{Required Contribution} / \text{New PV Ratio})$$

$$= (\text{Rs. } 1,68,00,000 / 20\%) = \text{Rs. } 8,40,00,000$$

Question 8

- (a) Distinguish between any two of the following :
- 'Budget period' and 'control period'.
 - 'Cash' and 'cash equivalents'.
 - 'Cost sheet' and 'production account'. (3 marks each)
- (b) From the following information, prepare a cash flow statement showing net cash flows from operating activities, investing activities and financing activities as per Accounting Standard-3 (revised) :

	Rs. in Lakhs
Net profit	25,000
Dividend paid (including dividend tax)	8,535
Book value of assets sold	185
Amortisation of capital grant	6

<i>Carrying amounts of investments sold</i>	27,765
<i>Interest expenses</i>	10,000
<i>Increase in working capital (excluding cash and bank balances)</i>	56,075
<i>Expenditure on construction work-in-progress</i>	34,740
<i>Receipt of grant for capital projects</i>	12
<i>Proceeds from short term borrowings</i>	20,575
<i>Closing cash and bank balances</i>	6,988
<i>Provision for taxation</i>	5,000
<i>Income-tax paid</i>	4,248
<i>Loss on sale of assets</i>	40
<i>Depreciation charged</i>	20,000
<i>Profit on sale of investments</i>	100
<i>Interest on investments</i>	2,506
<i>Interest paid during the year</i>	10,520
<i>Purchase of fixed assets</i>	14,560
<i>Investment in joint venture</i>	3,850
<i>Proceeds from calls-in-arrears</i>	2
<i>Proceeds from long-term borrowings</i>	25,980
<i>Opening cash and bank balances</i>	5,003

(9 marks)

Answer 8(a)(i)**Budget period and control period**

A budget period should be distinguished from 'control period'. Budget period is the period for which a budget is prepared and used, which may then be sub-divided into control periods. It refers to the period of time covered by a budget. In determining the length of the budget period, the following factors should be considered :

- (i) The budget period should be long enough to complete production of the various products.
- (ii) For the business of a seasonal nature, the budget period should cover at least one entire seasonal cycle.
- (iii) The budget period should be long enough to allow for the financing of production well in advance of actual needs.
- (iv) Major operations and drastic changes in plant lay-out or manufacturing methods must be planned far in advance to determine financial requirements.
- (v) The budget period should coincide with the financial accounting period to compare actual results with budgeted estimates.

A budget period should be distinguished from 'control period'. The latter indicates the periodicity, with which reports are sent to the various levels of management. It need not be the same as the budget period. Reports are sent usually at shorter intervals so

that corrective action may be taken within the budget period. This would ensure that the overall variation between budget and actual is minimized. The periodicity of the reports is also dependent upon the urgency and significance of the matter under report.

Answer 8(a)(ii)

Cash and cash equivalent

Cash comprises cash in hand and demand deposits with banks. Cash equivalents are short term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value. An investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Examples of cash equivalents are : (a) treasury bills, (b) commercial paper, (c) money market funds, (d) investment in preference shares and redeemable within three months can also be taken as cash equivalents if there is no risk of failure of the company. Therefore, cash flows are inflows and outflows of cash and cash equivalents.

Answer 8(a)(iii)

Cost sheet and production account

Following are the points of distinction between cost sheet and production account:

<i>Cost Sheet</i>	<i>Production Account</i>
(1) It is prepared as a statement.	It is prepared as an account.
(2) Expenses are classified to ascertain prime cost, factory cost, total cost, etc.	Expenses are not classified.
(3) To enable comparison, figures of previous period are provided.	No figures of previous period are provided. Hence no comparison is possible.
(4) It is based on actual and estimated figures of expenses.	It is based on actual figures.
(5) It is prepared for each job and some-times for the whole factory.	It is prepared for each production department.

Answer 8(b)

Cash Flow Statement		<i>(Rs. In lakhs)</i>
(A) Cash Flows from Operating Activities :		
Net Profit before Provision for Taxation		
Rs. (25,000 + 5,000)		30,000
Add: Adjustments		
Depreciation	20,000	
Loss on Sale of Assets	40	
Interest Expenses	10,000	30,040
		<u>60,040</u>

Less : Amortisation of Capital Grant	6	
Profit on Sale of Investments	100	
Interest income on Investments	<u>2,506</u>	<u>2,612</u>
Operating Profit before change in Working Capital		57,428
Less : Increase in Working Capital		<u>56,075</u>
		1,353
Less : Income Tax Paid		<u>4,248</u>
Net Cash used in Operating Activities		(2,895)
It is prepared for each production		

(B) Cash Flows from Investing Activities :

Sale on Investments (Book Value + Profit on Sale)		27,865
Sale of Asset (Book Value – Loss on Sale)		145
Interest on Investments		<u>2,506</u>
		30,516
Less : Fixed Assets Purchased	14,560	
Investments in Joint Venture	3,850	
Expenses on construction W.I.P	<u>34,740</u>	<u>53,150</u>
Net Cash Used in Investing Activities		(22,634)

(C) Cash Flow from Financing Activities :

Calls in Arrears received	2	
Grant received for Capital Projects	12	
Proceeds from Long Term Borrowings	25,980	
Proceeds from Short Term Borrowings	<u>20,575</u>	<u>46,569</u>
Less : Interest Paid	10,520	
Dividend Paid (Including Tax)	<u>8,535</u>	<u>19,055</u>
Net Cash Generated from Financing Activities		<u>27,514</u>
Net increase in Cash and Cash Equivalents (A+B+C)		1,985
Cash and Cash Equivalents at the beginning		5,003
Cash and Cash Equivalents at the end		<u>6,988</u>