Company Accounts
Cost and Management Accounting
Part - A

Questions 1.

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

(i) The term 'distributable profits' means profits which would otherwise be available for dividends.

(ii) The logic behind the creation of the capital redemption reserve is to maintain the capital structure of the company intact after redemption.

(iii) Underwriting commission and brokerage both cannot be provided to any individual underwriter.

(iv) A debenture issued at a discount cannot be redeemed at a premium.

(v) International Accounting Standard - 1 deals with valuation of inventories.

(2 marks each)

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

(i) The balance of sinking fund account is transferred to -
  (a) Share capital account
  (b) General reserve account
  (c) Profit and loss account
  (d) Sinking fund investment account.

(ii) When interest on own debentures becomes due, it will be credited to -
  (a) Profit and loss account
  (b) Own debentures account
  (c) Debenture interest account
  (d) Interest on own debentures account.

(iii) Expenses incidental to the creation and floatation of a company are called -
  (a) Underwriting expenses
  (b) Preliminary expenses
  (c) Trade expenses
  (d) Establishment expenses.

(iv) The item 'unpaid dividend' appears in the balance sheet of a company under the heading -
  (a) Current assets, loans and advances
  (b) Reserves and surplus
  (c) Secured loans
  (d) Current liabilities and provisions.

(v) Premium on issue of shares can be used for -

(a) Issue of bonus shares
(b) Distribution of profit
(c) Meeting loss on sale of a fixed asset
(d) None 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) Shares forfeited account is to be shown in the balance sheet by way of________to the paid-up share capital on the liabilities side until the concerned shares are re-issued.
(ii) International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) are issued by the_________________.
(iii) Unless loss prior to incorporation is completely written off, it must be shown as an asset in the assets side of the balance sheet under the heading______________.
(iv) According to section 209(4A) of the Companies Act, 1956, a company must preserve its books of account and its relevant vouchers for a minimum period of___________.
(v) A company cannot issue redeemable preference shares for a period exceeding___________. **(1 mark each)**

Answer 1(a)

(i) **True:** Profits which are available legally for distribution of dividends are called distributable profits. The term dividend refers to that part of the profits of a company which is distributed by the company among its shareholders. In other words, dividend is nothing but the distribution of divisible or distributable profits of a company among its shareholders.
(ii) **True:** The most important purpose for the creation of capital redemption reserve is to maintain the capital intact. The capital structure of the company will remain unaffected even after the redemption of redeemable preference shares. It is because capital redemption reserve can be used only for issue of bonus shares; otherwise its amount has to be kept intact.
(iii) **False:** Underwriting commission may be paid in addition to brokerage. Underwriting commission is the consideration payable to the underwriters for underwriting the issue of shares or debentures of a company. Whereas brokerage is paid to the brokers who try to procure subscriptions to the shares or debentures issued but they do not take any responsibility of subscribing to the shares or debentures of the company.
(iv) **False:** The debentures issued at a discount can be redeemed at a premium. The loss to be recognized at the time of the issue of such debentures will be equal

to the total of the amount of discount on issue and the amount of premium on redemption.

(v) **False:** International Accounting Standard 1 deals with the Presentation of Financial Statements. The standard prescribes the minimum structure and content of the basic financial statements.

Answer 1(b)(i)

(b) General Reserve Account

Answer 1(b) (ii)

(d) Interest on Own Debentures account

Answer 1(b) (iii)

(b) Preliminary Expenses

Answer 1(b) (iv)

(d) Current Liabilities and Provisions

Answer 1(b) (v)

(a) Issue of bonus shares

Answer 1(c)

(i) Shares forfeited account is to be shown in the balance sheet by way of **addition** to the paid-up share capital on the liabilities side until the concerned shares are re-issued.

(ii) International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) are issued by the **International Accounting Standards Board**.

(iii) Unless loss prior to incorporation is completely written off, it must be shown as an asset in the assets side of the balance sheet under the heading **miscellaneous expenditure**.

(iv) According to section 209(4A) of the Companies Act, 1956, a company must preserve its books of account and its relevant vouchers for a minimum period of **eight years**.

(v) A company cannot issue redeemable preference shares for a period exceeding **twenty years**.

Questions 2.

(a) The balance sheets of H Ltd. and its subsidiary S Ltd. as on 31st March, 2011 are as follows:

Liabilities	**H Ltd (₹)**	**S Ltd. (₹)**
Equity shares of ₹ 100 each	30,00,000	15,00,000
General reserve (1st April, 2010)	8,00,000	4,00,000
Profit and loss account (1st April, 2010)	2,00,000	2,50,000
Net profit for the year	6,00,000	4,00,000

15% Debentures	10,00,000	-
Creditors	4,00,000	2,70,000
Bills payable	60,000	30,000
	60,60,000	28,50,000
Liabilities	**H Ltd. (₹)**	**S Ltd. (₹)**
Premises	14,00,000	9,00,000
Machinery	12,00,0000	7,00,000
Investment in shares of S Ltd.	17,00,000	-
Inventories	7,00,000	4,50,000
Debtors	5,00,000	4,20,000
Bills receivable	1,80,000	80,000
Cash and bank	3,80,000	2,00,000
Misc. expenditure	-	1,00,000
	60,60,000	28,50,000

The following are the additional information:

(i) H Ltd. acquired 12,000 equity shares in S Ltd. on 1st April, 2010.

(ii) Bills receivable of H Ltd. include ₹ 30,000 accepted by S Ltd.

(iii) Accounts receivable of H Ltd. include ₹ 1,00,000 due from S Ltd.

(iv) Inventories of S Ltd. include goods purchased from H Ltd. for ₹ 1,25,000 which were invoiced by H Ltd. at a profit of 25% on cost.

(v) Both H Ltd. and S Ltd. have proposed 10% dividend for the year 2010-11 but no effect has been given in the balance sheets.

Prepare a consolidated balance sheet giving proper working notes.

(11 marks)

(b) What do you mean by 'profits prior to incorporation' ? How such profits are apportioned and utilised ? **(4 marks)**

Answer 2(a)

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd. as on 31st March 2011

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Share capital			**Fixed Assets**		60,000
30,000 Equity			Goodwill		
shares @					
₹ 100 each					
Minority Interest		30,00,000	Premises		
Reserves and		4,60,000	H. Ltd.	14,00,000	
Surplus			S Ltd.	9,00,000	23,00,000
General Reserve		8,00,000			
Profit & Loss A/c		8,00,000	Machinery		
Secured Loans			H Ltd.	12,00,000	
15% Debentures		10,00,000	S Ltd.	7,00,000	19,00,000
Current Liabilities			**Current Assets**		
and Provisions			**Loans and**		
Creditors:			**Advances**		
H Ltd.	4,00,000		Inventories		
S Ltd.	2,70,000		H Ltd.	7,00,000	
	6,70,000		S Ltd.	4,50,000	
				11,50,000	
			Less: Profit on		
			Unrealized Stock	20,000	11,30,000
Less: Mutual Owings	1,00,000	5,70,000	Debtors		
Bills Payable:					
H Ltd.	60,000		H Ltd.	5,00,000	
S Ltd.	30,000		S Ltd.	4,20,000	
	90,000			9,20,000	
Less: Mutual Owings	30,000	60,000	*Less:* Mutual Owings	1,00,000	8,20,000
Proposed Dividend		3,30,000	Bills Receivable:		
			H Ltd.	1,80,000	
			S Ltd.	80,000	
			Less: Mutual Owings	2,60,000	
				30,000	2,30,000
			Cash and Bank		
			H Ltd.	3,80,000	
			S Ltd.	2,00,000	5,80,000
	70,20,000				70,20,000

Working Notes:

(1) Pre-acquisition profits and reserves of S Ltd.

	₹
Profit & Loss A/c as on 1st April 2010	2,50,000
Add: General Reserves as on 1st April 2010	4,00,000
Total	6,50,000
H Ltd.'s share (4/5th of 6,50,000)	5,20,000
Minority Interest (1/5th of 6,50,000)	1,30,000

(2) Post-acquisition profits of S Ltd.

	₹
Profit for the year ending 31st March 2011	4,00,000
Less: Proposed Dividend (10% of 15,00,000)	1,50,000
	2,50,000
H Ltd.'s share (4/5th of 2,50,000)	2,00,000
Minority Interest (1/5th of 2,50,000)	50,000

(3) Calculation of Cost Control or Goodwill

	₹
Paid up value of 12,000 equity shares held by H Ltd. (12,000 × 100)	12,00,000
Add: 4/5th share in Pre-acquisition profits and reserves	5,20,000
	17, 20,000
Less: 4/5th share of Miscellaneous Expenditure	80,000
Intrinsic value of shares on the date of acquisition	16,40,000
Investments by H Ltd. in S Ltd. for 12,000 shares	17,00,000
Less: Intrinsic value of shares on the date of acquisition	16,40,000
Goodwill	60,000

(4) Calculation of Minority Interest

	₹
paid up value of 3,000 equity shares (3,000 × 100) held by outsiders	3,00,000
Add: 1/5th share in Pre-acquisition profits and reserves	1,30,000
1/5th share in Post-acquisition profits	50,000
	4,80,000
Less: 1/5th share of Miscellaneous Expenditure	20,000
	4,60,000

(5) Unrealised profit on Stock

	₹
Value of Unsold Stock	1,25,000
Profit on unsold stock (20% of Selling Price) = (20% of 1,25,000)	25,000
H Ltd.'s share (4/5th of 25,000)	20,000

(6) Profit & Loss A/c of H Ltd.

	₹
Profits for the year ending 1st April 2010 of H Ltd.	2,00,000
Add: Profits of the year ending 31st March 2011 of H Ltd.	6,00,000
	8,00,000

	Less: Proposed Dividend (10% of 30,00,000)	3,00,000
		5,00,000
	Less: Unrealised Profit on Stock	20,000
		4,80,000
	Add: H Ltd.'s share in Post-acquisition profits of S Ltd.	2,00,000
	Add: H Ltd.'s share in Proposed Dividend of S Ltd. (4/5th of 1,50,000)	1,20,000
		8,00,000
(7)	**Proposed Dividend**	₹
	Dividend Proposed by H Ltd.	3,00,000
	Minority shareholders' share in Proposed Dividend of S Ltd. (1/5th of 1,50,000)	30,000
	Total	3,30,000

Answer 2(b)

Profits Prior to Incorporation

Sometimes a newly formed company takes over/acquires an existing business. The profit of the company prior to the date of incorporation of the company thus acquired i.e. the period from the date of purchase till the date of incorporation is called Profits Prior to Incorporation. Such a profit belongs to the company. But profit prior to incorporation should not be regarded as trading profit of the company since the company cannot earn profit before it comes into existence. In fact, such profit increases the net assets acquired by the company on its formation and comes to it as capital. Thus, profit prior to incorporation is of capital nature and cannot be credited to the Profit and Loss Account. It cannot ordinarily be used for the purpose of payment of dividend.

Hence, such a profit should be credited to Capital reserve Account which can be utilized in writing off capital losses like preliminary expenses, discount on issue of shares or debentures or in writing down the value of fixed assets including goodwill. Until it is fully utilized, Capital Reserve Account has to be shown in the liabilities side of the Balance Sheet under the heading "Reserve and Surplus".

The apportionment of profits between the pre-incorporation and post-incorporation period can be done on any one of the following basis:

Time basis: The profit or loss for the whole accounting period is apportioned between the periods prior to and after incorporation on the basis of time i.e., in proportion of the time of the respective periods.

Turnover basis: The profit or loss for the whole accounting period is apportioned between the periods prior to and after incorporation on the basis of turnover, i.e., in proportion of the turnover of the respective periods.

Equitable basis: In equitable method, the gross profit or gross loss of the whole accounting period is apportioned on the basis of the turnover. The expenses varying with turnover are apportioned on the basis of turnover and those which depend upon time are apportioned on the basis of time.

Questions 3.

(a) On 1st April, 2010, Rosy Ltd. issued 20,000, 13% debentures of ₹ 100 each at 5% discount. Debentureholders have an option to convert their holdings in 14% preference shares of ₹ 100 each at a premium of ₹ 25 per share. On 31st March, 2011, one years' interest has accrued on these debentures and has remained unpaid. A holder of 100 debentures notified his intention to convert his holdings in 14% preference shares. Journalise these transactions. Also show workings for number of preference shares to be issued in exchange. **(7 marks)**

(b) Reliable Ltd. furnishes you with following balance sheet as on 31st March, 2011:

Balance Sheet

Liabilities		**₹ in Crores**
Share capital:		
12% Redeemable preference shares @ ₹ 100 each, fully paid-up		75
Equity shares of ₹ 10 each, fully paid-up		25
Reserves and surplus:		
Capital reserve		15
Securities premium		25
Revenue reserve		260
Current liabilities and providions:		
Current liabilities		40
		440
Assets		**₹ in Crores**
Fixed assets	100	
Less provision for depreciation	100	Nil
Investments (Market value ₹ 400 crore)		100
Current assets		340
		440

The company redeemed preference shares on 1st April, 2011. It also bought back 50 lakh equity shares of ₹ 10 each at ₹ 50 per share. The payment for the above are made out of hug bank balance, which appeared as a part of current assets.

Make journal entries to record the above and prepare balance sheet as on 1st April, 2011 after redemption of preference shares and buy-back of equity shares.

(8 marks)

Answer 3(a)

In the books of Rosy Ltd.
Journal Entries

Date	particulars		Debit Amount (₹)	Credit Amount (₹)
1/04/2010	Bank	Dr.	19,00,000	
	To Debentures Application & Allotment A/c			19,00,000
	(Being application money received on 20,000 debentures @ ₹ 95 each)			
1/04/2010	Debentures Application & Allotment A/c	Dr.	19,00,000	
	Discount on Issue of Debentures A/c	Dr.	1,00,000	
	To 13% Debentures A/c			20,00,000
	(Being the issue of 20,000, 13% Debentures of ₹ 100 each at 5% discount)			
31/03/2011	Debenture Interest A/c	Dr.	2,60,000	
	To Debentureholders A/c			2,60,000
	(Being interest due on 2,000 debentures of ₹ 100 @ 13%)			
31/03/2011	Profit and Loss A/c	Dr.	2,60,000	
	To Debentures Interest A/c			2,60,000
	(Being transfer of debenture interest account to Profit and Loss A/c)			
31/03/2011	13% Debentures A/c	Dr.	10,000	
	To 14% preference Share Capital A/c			7,600
	To Premium on issue of Preference shares A/c			1,900
	To Discount on Issue of Debentures A/c			500
	(Being conversion of 100, Debentures of ₹ 100 each at 5% discount to Preference Shares of ₹ 100 each issued at 5% premium)			

Working Notes:

Calculation of Number of Preference shares to be issued:

Nominal Value of 100, 13% Debentures (₹ 100 × 100)	₹ 10,000
Less: 5% Discount	₹ 500
Amount Received for 100 Debentures	₹ 9,500
Issue Price of Preference Shares (₹ 100 + 25)	₹ 125
Number of Preference Shares to be issued (₹ 9,500/125)	76

Face Value of Preference Shares (100 × 76)	₹ 7,600
Premium on issue of Preference shares	₹ 1,900

Answer 3(b)

In the books of Reliable Ltd.
Journal Entries

₹ in crores

Date	Particulars		Debit Amount (₹)	Credit Amount (₹)
	12% Redeemable Preference Share Capital A/c	Dr.	75	
	To Preference Shareholders A/c			75
	(Being preference shares redeemed)			
	Revenue Reserves A/c	Dr.	75	
	To Capital Redemption Reserve A/c			75
	(Being amount equal to par value of preference shares redeemed out of profits, transferred to capital redemption reserve)			
	Preference Shareholders A/c	Dr.	75	
	To Bank A/c			75
	Being amount paid to preference shareholders)			
	Equity Share Capital A/c	Dr.	5	
	Securities Premium a/c	Dr.	20	
	To Equity shareholders A/c			25
	(Being cancellation of 5% lakh equity shares of ₹ 10 each @ ₹ 50 each , premium paid out of securities premium)			
	Securities Premium A/c	Dr.	5	
	To Capital Redemption Reserve A/c			5
	(Being transfer made to Capital Redemption Reserve on buy back as required by section 77AA)			
	Equity Shareholders A/c	Dr.	25	
	To Bank			25
	(Being amount paid to equity shareholders)			

Balance Sheet of Reliable Ltd.
as on 1st April 2011

Liabilities	₹	Assets	₹
Share Capital		**Fixed Assets**	NIL
Equity Shares of ₹ 10 each fully paid up	20	Investments (Market value ₹ 400 crores)	100
Reserves and Surplus		Current Assets	240
Capital Reserve	15		
Capital Redemption Reserve	80		
Current Liabilities and Provisions			
Current Liabilities 40			
	340		340

Questions 4.

(a) The balance sheet of Ashoka Ltd. as on 31st March, 2011 was as follows:

Liabilities	₹	Assets	₹
Share capital:		Sundry assets	17,00,000
Authorised:			
1,50,000 Equity shares of ₹ 10 each	15,00,000		
Issued, subscribed, called-up and paid-up:			
80,000 Equity shares of ₹ 7.50 per share called and paid-up	6,00,000		
Reserves and surplus:			
Capital redemption reserve	1,50,000		
Plant revaluation reserve	20,000		
Securities premium	1,50,000		
Development rebate reserve	2,30,000		
Investment allowance reserve	2,50,000		
General reserve	3,00,000		
	17,00,000		17,00,000

The company wanted to issue bonus shares to its shareholders at the rate of one share for every two shares held. Necessary resolution was passed.
Give necessary journal entries and prepare amended balance sheet.

(6 marks)

(b) Write short notes on any of the following :

(i) Provision for taxation and advance payment of tax

(ii) Purposes of valuation of shares

(iii) Fair value of shares

(iv) Capitalisation of profits and reserves. **(3 marks each)**

Answer 4(a)

In the books of Ashoka Ltd.

Journal Entries

Date	particulars	Debit Amount (₹)	Credit Amount (₹)
	Equity Share Final Call A/c Dr. To Equity Share Capital A/c (Being the final call money due on 80,000 shares @ ₹ 2.50 per share as per Board's resolution no. dated_________________)	2,00,000	 2,00,000
	General Reserve A/c Dr. To Equity Share Final Call A/c (Being bonus issue made to make partly paid up shares full paid.)	2,00,000	 2,00,000
	Capital Redemption Reserve A/c Dr. Securities Premium A/c Dr. General Reserve A/c Dr. To bonus to shareholders A/c (Being one bonus share payable for two shares held as per shareholders resolution no. dated______)	1,50,000 1,50,000 1,00,000	 4,00,000
	Bonus to shareholders A/c Dr. To Equity Share Capital A/c (Being issue of 4,00,000 shares of ₹ 10 each as per Board's resolution no. dated____________)	4,00,000	 4,00,000

Amended Balance Sheet of Ashoka Ltd.
as on 31st March 2011

Liabilities	₹	**Assets**	₹
Authorised Capital 1,50,000 Equity Shares of ₹ 10 each	 15,00,000	Sundry Assets	17,00,000
Issued, Subscribed and Profit Up 1,20,000 Equity Shares of ₹ 10 each (including 40,000 bonus shares)	12,00,000		
Reserves and Surplus:			
Plant Revaluation Reserve	20,000		
Development Rebate Reserve	2,30,000		
Investment Allowance Reserve	2,50,000		
	17,00,000		17,00,000

Answer 4(b) (i)

Provision for taxation and advance payment of tax

Provision for taxation: A company is liable to pay tax on profits under the Income-tax Act, 1961 and such tax is treated as charge against the profits of the accounting year, although the profits are assessed and actual liability for tax is determined in the following year. As such, the liability for tax is estimated and provided for while preparing the final accounts. The estimated amount of tax is debited to the Profit and Loss Account and is credited to "provision for Taxation Account". This shown on the liabilities side of the Balance Sheet under the head "Current Liabilities and Provisions".

Advance payment of tax: All the companies are required to make advance payment of tax in the accounting year itself subject to adjustment against the actual liability as and when determined. Until and unless the actual tax liability is determined and adjusted against advance payment of tax, "Advance Payment of Tax Account" will show a debit balance which is shown in the Balance Sheet on the assets side under the head "Current Assets, Loans and Advances".

Answer 4(b)(ii)

Purposes for valuation of shares

The purposes for valuation of shares are as follows:

- Assessments under the Wealth Tax or Gift Tax Acts.
- Purchase of a shares which may or may not give the holder thereof a controlling interest in the company.
- Purchases of shares by employees of the company.

- Formulation of schemes of amalgamation, absorption, etc.
- Acquisition of interest of dissenting shareholders under a scheme of reconstruction.
- Compensating shareholders on the acquisition of their shares by the Government under a scheme of rationalization.
- Conversion of shares, say, preference into equity.
- Advancing a loan on the security of shares.

Answer 4(b)(iii)

Fair value of shares

The fair value of a share is the average of the value of shares obtained by the net assets method and the one obtained by yield method. Under net assets method, the value of an equity share is arrived at by valuing the assets of a company and deducting therefrom all the liabilities and claims of preference shareholders and dividing the resultant figure by the total number of equity shares with the same paid up value. Under yield method, the value of an equity share is arrived at by comparing the expected rate of return with the normal rate of return. If the expected rate of return is more than normal rate of return, the market value of the share is increased proportionately. This method is also known as dual method of share valuation. This method attempts to minimize the demerits of both the methods.

The fair value of shares can be calculated by using the following formula:

$$\text{Fair value of share} = \frac{\text{Value by net asset method} + \text{Value by yield method}}{2}$$

Answer 4(b)(iv)

Capitalisation of profits and reserves

When a company accumulates huge reserves out of its profits which are much in excess of the needs of the company, the excess amount can be distributed by way of bonus shares among the existing shareholders of the company. Thus, the accumulated profits and reserves of the company are converted into its share capital which is permanently used in the business. This process of issue of bonus shares is known as "capitalisation of profits and reserves". Capitalisation of accumulated profits and reserves of a company is possible only if the Articles of the company contain such a provision. Bonus shares are issued by the company free of charge to its existing shareholders on a pro-rata basis.

PART B

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

Questions 5

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

(i) Semi-variable costs are ignored in marginal costing.

(ii) 'Cost volume profit relationship' is a more comprehensive term than 'break-even analysis'.
(iii) Sunk costs are not relevant for decision-making.
(iv) 'Costing' and 'cost accounting' are the same.
(v) High wages means high cost of production.

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

(i) Opportunity cost helps in -
 (a) Ascertainment cost
 (b) Controlling cost
 (c) Making managerial decisions
 (d) None of the above.

(ii) Fixed cost per unit increases when -
 (a) production volume decreases
 (b) Production volume increases
 (c) Variable cost per unit decreases
 (d) Variable cost per unit increases.

(iii) The costing method in which fixed factory overheads are added to inventory is -
 (a) Direct costing
 (b) Marginal costing
 (c) Absorption costing
 (d) Activity based costing.

(iv) Cash flow statement is required for the financial planning of -
 (a) Short range
 (b) Long range
 (c) Medium range
 (d) Very long range.

(v) The type of spoilage that does not affect the cost of inventories is -
 (a) Normal spoilage
 (b) Standard spoilage
 (c) Abnormal spoilage
 (d) Seasonal spoilage. **(1 mark each)**

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

(i) At break-even point, the contribution will be equal to___________.
(ii) ____________ is a budget designed to furnish budgeted costs for any level of activity actually attained.
(iii) A current ratio of less than one implies that the working capital is known as__________.

(iv) The process of physical verification of stories throughout the year is known as__________.

(v) In contract costing, the cost unit is a___________. **(1 mark each)**

Answer 5(a)

(i) **False:** Semi variable costs are not ignored in the marginal costing. They are further segregated into fixed and variable costs keeping in view the variable proportion by the appropriation method.

(ii) **True:** Cost volume profit relationship is more comprehensive term because the determination of cost volume profit relationship includes marginal cost approach, break even analysis, profit volume ratio, key factor etc.

(iii) **True:** A sunk cost is one that has already been incurred and cannot be avoided by decisions taken in the future. As it refers to past costs, it is called unavoidable cost. This cost is not useful for decision making as all past costs are irrelevant. It is the past not taken into account for decision making.

(iv) **False:** Costing is different from cost accounting in the sense that the costing provides only the basis and information for ascertainment of costs. Whereas the cost accounting is classifying, recording and allocating expenditure for determination of costs of products or services and for the presentation of data for the purposes of control and guidance of management.

(v) **False:** The high or low cost of production depends upon the efficiency and effectiveness of workers. High wages provide incentives to workers to become efficient and effective as such high wages does not mean high cost of production.

Answer 5(b)(i)

(c) making managerial decisions

Answer 5(b)(ii)

(a) production volume decreases

Answer 5(b)(iii)

(c) absorption costing

Answer 5(b)(iv)

(a) Short range

Answer 5(b)(v)

(a) normal spoilage

Answer 5(c)

(i) At break-even point, the contribution will be equal to **<u>fixed costs.</u>**

(ii) **<u>Flexible budget</u>** is a budget designed to furnish budgeted costs for any level of activity actually attained.

(iii) A current ratio of less than one implies that the working capital is **<u>negative.</u>**

(iv) The process of physical verification of stores throughout the year is known as

Perpetual Inventory system.

(v) In contract costing, the cost unit is a **contract.**

Questions 6

(a) The balance sheets of X Ltd. as on 31st March, 2010 and 31st March, 2011 were as follows:

Liabilities	**As on 31st March, 2010 (₹)**	**As on 31st March, 2011 (₹)**
Share capital	5,00,000	7,00,000
General reserve	50,000	70,000
Profit and loss account	1,00,000	1,60,000
Sundry creditors	1,53,000	1,90,000
Bills payable	40,000	50,000
Outstanding expenses	7,000	5,000
	8,50,000	11,75,000
Assets		
Land and building	80,000	1,20,000
Plant and machinery	5,00,000	8,00,000
Stock	1,00,000	75,000
Sundry debtors	1,50,000	1,60,000
Cash	20,000	20,000
	8,50,000	11,75,000

Additional information:

(i) ₹ 50,000 depreciation has been charged to plant and machinery during the year 2011.

(ii) A piece of machinery costing ₹ 12,000 (depreciation provided thereon ₹ 7,000) was sold at 60% profit on book value.

You are required to prepare cash flow statement. **(8 marks)**

(b) From the following information, calculate economic order quantity (EOQ) and the number of orders to be placed in one quarter of the year:

(i) Quarterly consumption of material : 2,000 kg.

(ii) Cost of placing one order : ₹ 50

(iii) Cost per unit : ₹ 40

(iv) Storage and carrying cost : 8% on average inventory. **(3 marks)**

(c) What are the components of total shown in the cost sheet ? Give the uses of the cost sheet. **(4 marks)**

Answer 6(a)

Cash Flow Statement of X Ltd.
for the year ended 31.3.2011

	Particulars	₹	₹
I.	**Cash Flows from Operating Activities:**		
	Closing balance as per Profit & Loss A/c	1,60,000	
	Less: Opening balance as per Profit & Loss A/c	(1,00,000)	
	Add: Transfer to reserve	20,000	
	Net profit before taxation and extra ordinary items		80,000
	Add: Adjustment for Depreciation	50,000	
	Less: Profit on Sale of Machinery	(3,000)	47,000
	Operating profit before Working Capital Changes		1,27,000
	Add: Decrease in current assets & increase in current liabilities:		
	Decrease in stock	25,000	
	Increase in creditors	37,000	
	Increase in Bills payable	10,000	72,000
	Less: Increase in current Assets & decrease in current liabilities		
	Increase in sundry debtors	10,000	
	Decrease in Outstanding Expenses	2,000	(12,000)
	Net cash from operating activities	1,87,000	
II.	**Cash Flow from Investing Activities:**		
	Purchase of Land and Building	(40,000)	
	Purchase of Plant & machinery	(3,55,000)	
	Proceeds from sale of machine	8,000	
	Net cash used in investing activities		(3,87,000)
III.	**Cash Flow from Financing Activities:**		
	Proceeds from issue of share capital	2,00,000	
	Net cash from financing activities		2,00,000
IV.	**Net increase in cash and cash equivalents** [I + II + III]		NIL
V.	*Add:* Cash and cash equivalents at the beginning of the period		20,000
VI.	Cash and cash equivalents at the end of the period (IV + V)		20,000

Working Notes:

Dr. **Plant & Machinery A/c** **Cr.**

Particulars	₹	Particulars	₹
To Balance b/fd	5,00,000	By Depreciation A/c	50,000
To Profit & Loss A/c (Profit on sale)	3,000	By Bank	8,000
To Bank (Purchases) (Balancing figure)	3,55,000	By Balance c/fd	8,00,000
	8,58,000		8,58,000

Book Value of machinery sold = Original Cost - depreciation
= ₹ 12,000 - ₹ 7,000
= ₹ 5,000

Profit on sale of machinery = 60% of ₹ 5,000 = ₹ 3,000

Sale proceeds of machinery = Book Value + Profits
= ₹ 5,000 + 3,000
= ₹ 8,000

Answer 6(b)

Economic Order Quantity (EOQ) $= \sqrt{\frac{2 \times A \times O}{C}} = \sqrt{\frac{2 \times 8{,}000 \times 50}{3.2}}$

= 500 kgs

Number of orders per Quarter $= \frac{\text{Quarterly Consumption}}{\text{EOQ}}$

$= \frac{2{,}000}{500}$

= 4 orders

Working Notes:

A = Annual Demand = 2,000 × 4 = 8,000 kgs

O = Ordering Cost = ₹ 50 per order

C = Carrying Cost = Cost per unit × Cost of Storage = 40 × 8% = ₹ 3.2

Answer 6(c)

Components of the total cost shown in the cost sheet are as follows:

Prime Cost = Direct Materials + Direct Labour + Direct (or Chargeable) Expenses

Factory/Works Cost = Prime Cost + Factory Overheads

Cost of Production = Factory/Works Cost + Administrative Overheads

Total Cost or Cost of Sales = Cost of Production + Selling and Distribution Overheads

Uses of Cost Sheet

- It gives total cost and cost per unit for a particulars period.

- It gives information to management for cost control.
- It provides comparative study of actual current costs with the cost of corresponding periods, thus causes of inefficiencies and wastage can be known and suitably corrected by management.
- It acts as a guide to manufacture in formulation of suitable and definite policies and in fixing up the selling price.

Questions 7

(a) The cost accountant of Raman Ltd. has computed labour turnover rates for the quarter ended 31st March, 2011 as 10%, 5% and 3% under flux method, replacement method and separation method respectively.

If the number of workers replaced during the quarter is 30, find out the number of-

(i) Workers recruited and jointed; and

(ii) Workers left and discharged. **(6 marks)**

(c) The monthly budgets for the manufacturing overheads of a concern for two levels of activity were as follows:

Capacity	60%	100%
Budgeted production (units)	600	1,000
	₹	₹
Wages	1,200	2,000
Consumable stores	900	1,500
Maintenance	1,100	1,500
Power and fuel	1,600	2,000
Depreciation	4,000	4,000
Insurance	1,000	1,000
	9,800	12,000

You are required to -

(i) Indicate which of the items are fixed, variable and semi-variable;

(ii) Prepare a budget for 80% capacity; and

(iii) Find total cost, both fixed and variable costs per unit of output at 60%, 80% and 100% capacity. **(6 marks)**

(c) Briefly point out the process of budgetary control. **(3 marks)**

Answer 7(a)

(i) **Replacement Method**

$$\text{Labour Turnover Rate} = \frac{\text{No. of workers replaced} \times 100}{\text{average no. of workers on roll}}$$

$$\text{Or, } 5 = \frac{30 \times 100}{\text{average no. of workers on roll}}$$

Or, average no. of workers on roll = 3,000/5
= 600

(ii) **Separation Method**

Labour Turnover Rate = $\frac{\text{No. of workers left and discharged} \times 100}{\text{average no. of workers on roll}}$

Or, 3 = $\frac{\text{No. of workers left and discharged} \times 100}{600}$

Or, no. of workers left and discharged = 18

(iii) **Flux Method**

Labour Turnover Rate

= $\frac{(\text{No. of workers left and discharged} + \text{No. of workers recruited and joined}) \times 100}{\text{Average no. of workers on roll}}$

Or, 10 = $\frac{(18 + \text{No. of workers recruited} \wedge \text{joined}) \times 100}{600}$

Or, no. of workers recruited and joined = 60 - 18 = 42

Answer 7(b)

(i) **Fixed Costs:** Depreciation and Insurance

Variable Costs: Wages (₹ per unit)

Consumable Stores (₹ 1.5 per unit)

Semi-Variable Costs:

Maintenance

Variable = ₹ $\frac{1,500 - 1,100}{1,000 - 600}$

= ₹ 1 per unit

Fixed = ₹ 1,100 - ₹ 600 = ₹ 500

Power and Fuel

Variable = ₹ $\frac{2,000 - 1,600}{1,000 - 600}$

= ₹ 1 per unit

Fixed = ₹ 1,600 - ₹ 600 = ₹ 1,000

(ii) **Budget for 80% capacity (800 units)**

	₹
Wages (₹ 2 per unit)	1,600
Consumable Stores (₹ 1.5 per unit)	1,200
Maintenance (₹ 1 per unit + 500)	1,300
Power and Fuel (₹ 1 per unit + 1,000)	1,800
Depreciation	4,000
Insurance	1,000
Total Cost	10,900

(iii) **Flexible budget**

Capacity ***Units***	***60%*** ***600***		***80%*** ***800***		***100%*** ***1,000***	
	Total Cost ₹	*Per unit*	*Total Cost ₹*	*Per unit*	*Total Cost ₹*	*Per unit*
Fixed Costs						
Depreciation	4,000		4,000		4,000	
Insurance	1,000		1,000		1,000	
Maintenance	500		500		500	
Power and Fuel	1,000		1,000		1,000	
(A) Total	6,500	10.83	6,500	8.125	6,500	6.5
Variable Costs						
Wages (₹ 2 per unit)	1,200		1,600		2,000	
Consumable Stores (₹ 1.5 per unit)	900		1,200		1,500	
Maintenance (₹ 1 per unit)	600		800		1,000	
Power and Fuel (₹ 1 per unit)	600		800		1,000	
(B) Total	3,300	5.5	4,400	5.5	5,500	5.5
Total Cost (A + B)	9,800	16.33	10,900	13.625	12,000	12

Answer 7(c)

Process of Budgetary Control

Budgetary control involves continuous comparison of actual results with the budgets and taking appropriate remedial action promptly. The budgetary control system involves fixing of targets (in the form of specific tasks), collection of information regarding actuals and continuous comparison of actuals with the targets with a view to reporting for action. The process of budgetary control is as follows:

(i) ***Organisation Chart:*** An organisation chart is prepared defining functional representatives of executives responsible for accomplishment of organisational objectives.

(ii) ***Budget Centre:*** Budget centre is established for cost control and all the budgets should be related to cost centres.

(iii) ***Budget Manual:*** A budget manual is prepared which sets outstanding instructions governing the responsibilities of persons and the procedures, forms and records relating to the preparation and use of budgets.

(iv) ***Budget Controller:*** A budget controller is appointed to line up the various functions of Budget Committee and compiling information of all types for the purposes of efficient preparation of budgets and proper reporting.

(v) ***Budget Committee:*** The budget committee is set up comprising of group of representatives of various functions in an organisation.

(vi) ***Budget Period:*** The budget period is determined. It refers to the period of time covered by a budget. It can be "long-term budget" or "short-term budget".

(vii) ***Budget Reports:*** Finally budget reports are prepared showing the comparison between the actual and budgeted expenditure.

Questions 8

(a) From the following information pertaining to ABC Ltd., prepare its trading, profit and loss account for the year ended 31st March, 2011 and summarised balance sheet as at that date.

Current ratio = 2.5

Quick ratio (quick assets/quick liabilities) = 1.3

Proprietary ratio (fixed assets/proprietary funds) = 0.6

Gross profit to sales ratio = 10%

Debtors velocity = 40 days

Sales = ₹ 7,30,000

Working capital = ₹ 1,20,000

Bank overdraft = ₹ 15,000

Share capital = ₹ 2,50,000

Closing stock = 10% more than opening stock

Net profit = 10% of proprietary funds. **(9 marks)**

(b) A company has annual fixed cost of ₹ 1,68,00,000. In the year 2010-11, sales amounted to ₹ 6,00,00,000 as compared with ₹ 4,50,00,000 in the preceding year 2009-10. The profit in th year 2010-11 is ₹ 42,00,000 more than that in 2009-10. On the basis of the above information, answer the following:

(i) What is the break-even level of sales of the company ?

(ii) Determine profit/loss on the forecast of a volume of ₹ 8,00,00,000.

(iii) If there is a reduction in selling price by 10% in the financial year 2011-12 and company desires to earn the same amount of profit as in 2010-11, what would be the required sales volume ? **(6 marks)**

Answer 8(a)

In the books of ABC Ltd.

Dr. Trading and Profit & Loss Account for the year ended 31st March, 2011 Cr.

Particulars	₹	Particulars	₹
To Opening Stock	1,05,000	By Sales	7,30,000
To Purchases (Balancing figure)	6,67,500	By Closing Stock	1,15,500
To Gross Profit c/d	73,000		
	8,45,500		8,45,500
To Opening Expenses (Balancing figure)	43,000	By Gross Profit b/d	73,000
To Net Profit c/d	30,000		
	73,000		73,000
To Balance c/d	50,000	By Balance b/d	20,000
		By Net Profit	30,000
	50,000		50,000

Summarised Balance Sheet as at 31st March, 2011

Particulars	₹	Particulars	₹
Share Capital	2,50,000	Fixed Assets	1,80,000
Reserves and Surplus :		**Current Assets:**	
Profit & Loss A/c	50,000	Stock	1,15,500
Current Liabilities:		Debtors	80,000
Bank overdraft	15,000	Other Current Assets	4,500
Other Current Liabilities	65,000		
	3,80,000		3,80,000

Working Notes:

(i) Current Liabilities and Current Assets:

Let Current Liabilities be x

Given Current Ratio = 2.5

Current Assets = 2.5x

Working Capital = 2.5x - x = 1.5x

Or, x $= \frac{1,20,000}{1.5}$

= ₹ 80,000

So, Current Liabilities = ₹ 80,000

Current Assets = ₹ 80,000 × 2.5 = ₹ 2,00,000

(ii) Closing Stock:

Given Quick Ratio = 1.3

Or, $\frac{\text{Current Assets} - \text{Closing Stock}}{\text{Quick Liabilities}} = 1.3$

Or, $\frac{2,00,000 - \text{Closing Stock}}{65,000} = 1.3$

Or, Closing Stock = 2,00,000 - 84,500 = ₹ 1,15,500

(iii) Opening Stock = ₹ 1,15,000 x 100/110 = ₹ 1,05,000

(iv) Debtors = ₹ 7,30,000 x 40/365 = ₹ 80,000

(v) Other current assets = Current Assets - Closing Stock - Debtors
= ₹ 2,00,000 1,15,000 - 80,000
= ₹ 4,500

(vi) Gross Profit = ₹ 7,30,000 x 10/100
= ₹ 73,000

(vii) Proprietors' Funds

Proprietary Ratio = 0.6

Or, $\frac{\text{Fixed Assets}}{\text{Proprietary Fund}} = 0.6$

Or, Working Capital = 0.4

Proprietary Fund = $\frac{1,20,000}{0.4}$

= ₹ 3,00,000

(vi) Fixed Assets = 3,00,000 x 0.6 = ₹ 1,80,000

(vii) Net Profit = 10% of proprietary funds = ₹ 30,000

(viii) Opening Balance of Profit and Loss Account:

	₹	₹
Proprietary Fund		3,00,000
Less: Share Capital	2,50,000	
Net Profit	30,000	(2,80,000)
		20,000

(xi) It is assumed that there was no general reserve or other reserves

Answer 8(b)

(i) P/V Ratio = $\frac{\text{Change in Profits}}{\text{Change in Sales}}$

$= \frac{42,00,000 \times 100}{6,00,00,000 - 4,50,00,000}$

= 28%

Break Even Sales = $\frac{\text{Fixed Costs}}{\text{P/V Ratio}}$

$$= \frac{1,68,00,000}{28\%}$$

= ₹ 6,00,00,000

(ii) Contribution for Sales Volume of ₹ 8,00,00,000 = P/V Ratio × Sales

= 28% × 8,00,00,000

= ₹ 2,24,00,000

Profits = Contribution - Fixed costs

= ₹ 2,24,00,000 - ₹ 1,68,00,000

= ₹ 56,00,000

(iii)

If Selling Price is	100
Variable Cost is (100 - 28)	72
New Selling Price (100 -10%)	90
New Contribution (90 - 72)	18
New P/V Ratio = $\frac{18 \times 100}{90}$	20%

Contribution for Sales Volume of ₹ 6,00,00,000 for the year 2010-11

= P/V Ratio × Sales

= 28% × ₹ 6,00,00,000

= ₹ 1,68,00,000

Desired Profits = Contribution - Fixed Costs

= ₹ 1,68,00,000 - ₹ 1,68,00,000

= Nil

$$\text{Required Sales Volume} = \frac{\text{Fixed Costs} + \text{Desired Profits}}{\text{P/V Ratio}}$$

$$= ₹\ \frac{1,68,00,000}{20\%}$$

= ₹ 8,40,00,000