CBSE Class 12 Accountancy Question Paper 2018 with Solution PDF-Set 67-2 - Compartment

Question Paper with Solutions

Conducted by the Central Board of Secondary Education (CBSE)

Time Allowed: 3 hours **Maximum Marks: 80**

General Instructions

(i) This question paper contains **two** parts **A** and **B**.

(ii) Part **A** is **compulsory** for all.

(iii) Part **B** has **two** options : Option – **I** Analysis of Financial Statements and Option – **II** Computerized Accounting.

(iv) Attempt only **one** option of Part **B**.

(v) All parts of a question should be attempted at one place.

Part A (60 marks)

(Accounting for Partnership Firms and Companies)

1. What is meant by 'Private Placement of Shares' ? [1 mark]

Solution:

Concept:

- Private placement is an issue of securities to a selected group of persons identified by the company.
- The offer is made privately to identified investors instead of inviting subscriptions from the public.

Step 1: Identify the investors The company selects particular investors, such as financial institutions or other identified persons, to whom it offers its shares.

Step 2: Describe the method of issue Shares are offered and allotted to this selected group through a private offer. A general invitation to the public to subscribe is not made; that feature distinguishes this method from a public issue.

Step 3: Conclusion Private placement of shares means offering and allotting shares to a selected group of identified persons instead of offering them to the public.

Quick Tip to Solve: Link the word private with selected investors and mention the absence of a public invitation.

2. Aman, Yatin and Uma were partners and were sharing profits and losses in the ratio of 5 : 3 : 2. Uma retired and her share was taken over by Aman and Yatin 5 : 3 in ratio. Calculate the gaining ratio of Aman and Yatin. [1 mark]

Solution:

Concept:

- Gaining share is the increase in an existing partner's share: New share − Old share.
- The gaining ratio is the ratio in which continuing partners acquire the retiring partner's profit share.

Step 1: Find the shares acquired Uma's old share is $2/10 = 1/5$. Aman and Yatin acquire this share in the stated ratio $5 : 3$. Thus Aman gains $\frac{1}{5} \times \frac{5}{8} = \frac{1}{8}$, while Yatin gains $\frac{1}{5} \times \frac{3}{8} = \frac{3}{40}$.

Step 2: Compare their gains The gaining ratio is therefore

$$\frac{1}{8} : \frac{3}{40} = 5 : 3.$$

The stated ratio describes the acquisition of Uma's share, so it directly gives the gaining ratio; it is not a further fraction of their old shares.

Step 3: Conclusion The gaining ratio of Aman and Yatin is $\boxed{5 : 3}$.

Quick Tip to Solve: When the question states how the retiring share is acquired, that ratio is already the gaining ratio.

3. Give two items which may appear on the debit side of a Partner's Current Account. [1 mark]

Solution:

Concept:

- Under the fixed capital method, recurring adjustments are recorded in the partner's Current Account.
- Amounts withdrawn by or charged to a partner are debited to that partner's Current Account.

Step 1: Identify the withdrawal Drawings are debited to the partner's Current Account because the partner has withdrawn cash or goods from the business for personal use.

Step 2: Identify the related charge Interest on drawings is also debited to the partner's Current Account. It is a charge against the partner for using the firm's funds and reduces the amount due to the partner. These two items both appear on the debit side.

Step 3: Conclusion Two items are (i) Drawings and (ii) Interest on drawings.

Quick Tip to Solve: Debit the Current Account for a partner's personal withdrawals and charges payable by that partner.

4. Vinay and Naman are partners sharing profit in the ratio of 4:1. Their capitals were Rs 90,000 and Rs 70,000 respectively. They admitted Prateek for 1/3 share in the profits. Prateek brought Rs 1,00,000 as his capital. Calculate the value of firm's goodwill. [1 mark]

Solution:

Concept:

- Hidden goodwill equals the implied capitalised value of the firm less the actual combined capital.
- An incoming partner's capital divided by the incoming profit share gives the implied total capital.

Step 1: Calculate the implied capital Prateek brings Rs 1,00,000 for a $1/3$ share. Therefore the implied capital of the firm is

$$\text{Rs } 1,00,000 \div \frac{1}{3} = \text{Rs } 3,00,000.$$

Step 2: Deduct actual combined capitals The actual capital after admission is

$$\text{Rs } (90,000 + 70,000 + 1,00,000) = \text{Rs } 2,60,000.$$

The excess of the implied value over actual combined capital represents hidden goodwill:

$$\text{Rs } (3,00,000 - 2,60,000) = \text{Rs } 40,000.$$

The old profit ratio does not affect this valuation.

Step 3: Conclusion The value of the firm's goodwill is $\boxed{\text{Rs } 40,000}$.

Quick Tip to Solve: Include the incoming partner's capital in actual total capital before subtracting it from implied capital.

5. Give the journal entry for the treatment of partner's loan appearing on the asset side of the Balance Sheet, on dissolution of a partnership firm. [1 mark]

Solution:

Concept:

- A partner's loan on the asset side is money receivable from that partner.
- On dissolution, it is transferred to the debit of the concerned partner's Capital Account for settlement.

Step 1: Identify the nature of the balance The asset-side loan means that the partner owes money to the firm. Adjust this receivable against that partner's capital balance; it is not treated as a loan payable to an outside creditor.

Step 2: Record the adjustment Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Concerned Partner's Capital A/c Dr. To Partner's Loan A/c (Being partner's loan receivable adjusted against capital on dissolution)		Amount	Amount

The debit reduces the capital payable to the partner, and the credit closes the loan receivable.

Step 3: Conclusion Debit the concerned Partner's Capital Account and credit the Partner's Loan Account with the amount of the loan.

Quick Tip to Solve: First check which side of the Balance Sheet carries the loan: an asset means the partner owes the firm.

6. In which ratio do the remaining partners acquire the share of the deceased partner ? [1 mark]

Solution:

Concept:

- The continuing partners acquire the deceased partner's share in their gaining ratio.
- For each continuing partner, gain equals new profit share less old profit share.

Step 1: Identify the change in entitlement After a partner's death, that partner's share of future profits is acquired by the remaining partners. Their additional entitlement is called their gain.

Step 2: Name the applicable ratio The ratio of these additional shares is the gaining ratio. Hence the deceased partner's share is distributed among the continuing partners in that ratio. Where no new arrangement is specified and their relative shares remain unchanged, the gains follow their old ratio among themselves.

Step 3: Conclusion The remaining partners acquire the deceased partner's share in their gaining ratio.

Quick Tip to Solve: A departing partner sacrifices a share; the partners who continue acquire it in the gaining ratio.

7. Navnirman Ltd. issued 4,00,000 equity shares of Rs 10 each at par. The amount per share was payable as follows :

Rs 3 on application; Rs 2 on allotment; Rs 2 on first call and Rs 3 on final call. The issue was fully subscribed and the shares were allotted fully to all the applicants. All calls were made. Mahi, a shareholder holding 6,000 shares paid the final call money along with the first call. Shrey holding 700 shares did not pay the first call on the due date. Shrey paid the first call along with the final call. The accountant of the company had correctly passed the entries till receipt of allotment money. After that the following entries were left incomplete by him. Complete these entries.

Journal of Navnirman Ltd.

Date	Particulars	F	Dr. Amount (Rs)	Cr. Amount (Rs)
	Equity Share first call A/c. Dr. To ..... (Being first call due on 4,00,000 shares @ Rs 2 per share)		8,00,000	8,00,000
	Bank A/c Dr. ..... Dr. To Equity Share first call A/c To ..... (.....)		....	....
	Equity Share second and final call A/c. Dr. To Equity Share Capital A/c (Being final call due on 4,00,000 shares @ Rs 3 per share)		.....	.....
	Bank A/c. Dr. ..... Dr. To Equity Share second and final call A/c. To ..... (.....)		....	....

[3 marks]

Solution:

Concept:

- Call money becomes share capital when due. The call account is debited and Equity Share Capital Account is credited with the amount called on all allotted shares.
- Calls in Arrears represents money due but unpaid; Calls in Advance represents money received before it becomes due. Advance receipts are liabilities until the relevant call is made.

Step 1: Calculate first-call receipts First call due is $4,00,000 \times \text{Rs } 2 = \text{Rs } 8,00,000$. Shrey's unpaid first call is $700 \times \text{Rs } 2 = \text{Rs } 1,400$. Mahi's final call received in advance is $6,000 \times \text{Rs } 3 = \text{Rs } 18,000$. Hence bank receives $8,00,000 - 1,400 + 18,000 = \text{Rs } 8,16,600$. The arrears are debited separately so that the entire first-call account is cleared.

Step 2: Calculate final-call receipts Final call due is $4,00,000 \times \text{Rs } 3 = \text{Rs } 12,00,000$. Adjust Mahi's

advance against this call; do not collect it twice. Shrey now pays his earlier arrears in addition to the final call.

$$\text{Final bank receipt} = 12,00,000 - 18,000 + 1,400 = \text{Rs } 11,83,400.$$

Step 3: Complete the journal entries **Journal of Navnirman Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Equity Share First Call A/c Dr. To Equity Share Capital A/c (Being first call due on 4,00,000 shares at Rs 2 each)		8,00,000	 8,00,000

	Bank A/c Dr.
	Calls in Arrears A/c Dr.
	  To Equity Share First Call A/c
	  To Calls in Advance A/c
	(Being first call received except Shrey's arrears and Mahi's final call received in advance)
			8,16,600
			1,400
				
				8,00,000
				18,000

	Equity Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Being final call due on 4,00,000 shares at Rs 3 each)		12,00,000	 12,00,000

	Bank A/c Dr.
	Calls in Advance A/c Dr.
	  To Equity Share Second and Final Call A/c
	  To Calls in Arrears A/c
	(Being final call received after adjusting Mahi's advance and receiving Shrey's first-call arrears)
			11,83,400
			18,000
				
				12,00,000
				1,400

Step 4: Conclusion The first-call bank receipt is Rs 8,16,600 and the final-call bank receipt is Rs 11,83,400. Calls in Advance and Calls in Arrears are both cleared on final receipt.

Quick Tip to Solve: For bank receipts, subtract unpaid calls and add advance money; at the final call reverse both adjustments.

8. Janta Ltd. had an authorized capital of 2,00,000 equity shares of Rs 10 each. The company offered to the public for subscription 1,00,000 shares. Applications were received for 97,000 shares. The amount was payable as follows on application was Rs 2 per share, Rs 4 was payable each on allotment and first and final call. A shareholder holding 600 shares failed to pay the allotment money. His shares were forfeited. The company did not make the first and final call.

Present the share capital in the Balance Sheet of the company as per Schedule III of the Companies Act, 2013. Also prepare Notes to accounts. [3 marks]

Solution:

Concept:

- Authorised capital is the maximum nominal capital permitted; issued capital is the nominal value offered for subscription. Neither is reduced by forfeiture.
- Subscribed capital excludes forfeited shares. Amounts already paid on forfeited shares are added separately under Share Capital until reissue; uncalled capital is not calls in arrears.

Step 1: Determine subscribed and called-up capital Of the 97,000 shares subscribed, 600 are forfeited. Thus $97,000 - 600 = 96,400$ shares remain subscribed. Only application and allotment have been called, so called-up value is Rs 2 + Rs 4 = Rs 6 per share, leaving Rs 4 per share uncalled. The remaining shares are partly paid, not fully paid.

$$96,400 \times \text{Rs } 6 = \text{Rs } 5,78,400.$$

The unpaid allotment on the forfeited shares is no longer shown as calls in arrears after forfeiture. The application amount retained on those shares is $600 \times$ Rs $2 =$ Rs $1,200$.

Step 2: Present the balance-sheet extract **Janta Ltd. — Balance Sheet (Extract)**

Particulars	Note	Amount (Rs)
I. EQUITY AND LIABILITIES		
1. Shareholders' Funds		
(a) Share Capital	1	5,79,600

Step 3: Prepare the note to accounts **Notes to Accounts: Note 1 — Share Capital**

Particulars	Amount (Rs)
Authorised Capital	
2,00,000 equity shares of Rs 10 each	20,00,000
Issued Capital	
1,00,000 equity shares of Rs 10 each	10,00,000
Subscribed but not fully paid-up Capital	
96,400 equity shares of Rs 10 each, Rs 6 called-up and paid-up	5,78,400
Add: Forfeited shares (amount originally paid on 600 shares)	1,200
Total Share Capital	5,79,600

The Rs 4 first and final call has not been made; hence it is excluded from called-up capital. No amount is deducted as calls in arrears on the 96,400 continuing shares.

Step 4: Conclusion Share Capital shown under Shareholders' Funds is Rs 5,79,600, comprising Rs 5,78,400 on continuing shares and Rs 1,200 received on forfeited shares.

Quick Tip to Solve: After forfeiture, remove the 600 shares from subscribed capital but add back the Rs 2 per share already received.

9. Ajay, Bhawna and Shreya were partners sharing profits in the ratio 2:2:1. On July 1, 2017 Shreya died. The books of accounts are closed on March 31 every year. Sales for the year 2016-17 amounted to Rs 5,00,000 and that from 1st April to 30th June 2017 were Rs 1,40,000. The rate of profit during the past three years had been 10% on sales. Since Shreya's legal representative was her only son, who is specially abled, it was decided that the profit for the purpose of settling Shreya's account is to be calculated as 20% on sales.

(a) Calculate Shreya's share of profits till the date of her death and pass necessary a journal entry for the same.

(b) Also, state the value highlighted in the above para. [3 marks]

Solution:

Concept:

- Where profit to the date of death is estimated on sales, multiply actual sales up to death by the agreed profit percentage, then multiply by the deceased partner's profit share.
- The deceased partner's capital is credited for her estimated profit through Profit and Loss Suspense Account when final accounts have not yet been prepared.

Step 1: (a) Estimate profit for the relevant period Shreya died on July 1, 2017, so the relevant completed trading period runs from April 1 to June 30, 2017. Actual sales for this period are Rs 1,40,000. The partners specifically agreed to apply 20% on sales for settling her account; this replaces the earlier 10% rate for this calculation.

$$\text{Estimated profit} = 1,40,000 \times \frac{20}{100} = \text{Rs } 28,000.$$

The previous year's sales of Rs 5,00,000 are not used because actual sales for the current period are supplied. No further three-month fraction is necessary: the sales figure already covers those three months.

Step 2: Find Shreya's share and record it The profit-sharing ratio is $2:2:1$, so Shreya's fraction is $1/(2+2+1) = 1/5$.

$$\text{Shreya's profit share} = 28,000 \times \frac{1}{5} = \text{Rs } 5,600.$$

Journal of the Partnership Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
July 1, 2017	Profit and Loss Suspense A/c Dr.		5,600	
	To Shreya's Capital A/c			5,600
	(Being Shreya's share of estimated profit up to her death credited to her capital account)			

Step 3: (b) State the value highlighted The partners show compassion, social responsibility and concern for a specially abled person. By agreeing to a higher rate for calculating Shreya's entitlement, they extend financial support to her dependent son and demonstrate empathy towards his needs.

Step 4: Conclusion Shreya's share of profit up to death is Rs 5,600, credited to her Capital Account by debiting Profit and Loss Suspense Account. The value highlighted is compassion and social responsibility.

Quick Tip to Solve: Use the agreed 20% rate on the actual April–June sales; do not apply an additional 3/12 time fraction.

10. Amit and Kartik are partners sharing profits and losses equally. They decided to admit Saurabh for an equal share in the profits. For this purpose the goodwill of the firm was to be valued at four years' purchase of super profits.
The Balance Sheet of the firm on Saurabh's admission was as follows :

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capitals :		Machinery	75,000
Amit 90,000		Furniture	15,000
Kartik 50,000	1,40,000	Stock	30,000
Reserve	20,000	Sundry Debtors	20,000
Loan	25,000	Cash	50,000
Sundry Creditors	5,000		
	1,90,000		1,90,000

The normal rate of return is 12% per annum. Average profit of the firm for the last four years was Rs 30,000. Calculate Saurabh's share of goodwill. [3 marks]

Solution:

Concept:

- Capital employed is total assets less outside liabilities. Partners' capitals and accumulated reserves together finance these net assets.
- Normal profit is capital employed multiplied by the normal rate of return. Super profit is average profit less normal profit; goodwill is super profit multiplied by years' purchase.

Step 1: Calculate capital employed The loan of Rs 25,000 and sundry creditors of Rs 5,000 are outside liabilities. The reserve belongs to the partners and must not be deducted as an outside liability.

$$\begin{aligned}\text{Capital employed} &= \text{Total assets} - \text{Outside liabilities}\\ &= 1,90,000 - (25,000 + 5,000)\\ &= \text{Rs } 1,60,000.\end{aligned}$$

As a cross-check, the partners' capitals plus reserve are Rs $90,000 + 50,000 + 20,000 = 1,60,000$, the same amount.

Step 2: Calculate normal profit, super profit and goodwill Normal profit represents the return expected on the investment at the given normal rate. Only the excess over this return is capitalised under the super profit method.

$$\begin{aligned}\text{Normal profit} &= 1,60,000 \times \frac{12}{100} = \text{Rs } 19,200,\\ \text{Super profit} &= 30,000 - 19,200 = \text{Rs } 10,800,\\ \text{Firm's goodwill} &= 10,800 \times 4 = \text{Rs } 43,200.\end{aligned}$$

Four years' purchase applies to the annual super profit, rather than the entire average profit of Rs 30,000.

Step 3: Find Saurabh's share Admission for an equal share means that Amit, Kartik and Saurabh will

each have one-third of future profits. Therefore Saurabh's share of the firm's goodwill is

$$43,200 \times \frac{1}{3} = \text{Rs } 14,400.$$

Step 4: Conclusion Saurabh's share of goodwill is $\boxed{\text{Rs } 14,400}$.

Quick Tip to Solve: Include the reserve in capital employed, then take one-third of the goodwill for the incoming equal partner.

11. Venus Ltd., is a real estate company. To discharge its corporate Social Responsibility, it decided to construct a night shelter for the homeless. The company took over assets of Rs 10,00,000 and liabilities of Rs 1,80,000 of Cayns Ltd. for Rs 7,60,000. Venus Ltd.. issued 9% Debentures of Rs 100 each at a discount of 5% in full satisfaction of the purchase consideration in favour of Cayns Ltd.

Pass necessary journal entries in the books of Venus Ltd. for the above transactions. Also identify the value observed by Venus Ltd. [4 marks]

Solution:

Concept:

- Assets and liabilities taken over are recorded at the agreed amounts. When net assets exceed the purchase consideration, the difference is credited to Capital Reserve Account.
- Debentures issued at a discount settle the vendor's claim at their issue price. The Debentures Account is credited with face value and the discount is debited separately.

Step 1: Calculate capital reserve and the number of debentures The net assets taken over exceed the agreed purchase consideration:

$$\text{Net assets} = 10,00,000 - 1,80,000 = \text{Rs } 8,20,000,$$
$$\text{Capital reserve} = 8,20,000 - 7,60,000 = \text{Rs } 60,000.$$

Each debenture of face value Rs 100 is issued at Rs $100 - 5 = 95$. Accordingly,

$$\text{Number issued} = 7,60,000 \div 95 = 8,000,$$
$$\text{Total face value} = 8,000 \times 100 = \text{Rs } 8,00,000,$$
$$\text{Discount on issue} = 8,000 \times 5 = \text{Rs } 40,000.$$

The 9% rate describes interest on the debentures and does not determine the issue price.

Step 2: Record the purchase and settlement Journal of Venus Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Business Purchase A/c Dr. To Cayns Ltd. (Being business purchased for the agreed consideration)		7,60,000	7,60,000

	Sundry Assets A/c Dr. To Sundry Liabilities A/c To Business Purchase A/c To Capital Reserve A/c (Being assets and liabilities taken over and excess net assets credited to capital reserve)		10,00,000	 1,80,000 7,60,000 60,000
	Cayns Ltd. Dr. Discount on Issue of Debentures A/c Dr. To 9% Debentures A/c (Being 8,000 debentures of Rs 100 each issued at a discount of 5% in full settlement of purchase consideration)		7,60,000 40,000	 8,00,000

The vendor's credit of Rs 7,60,000 in the first entry is fully cleared by its debit in the settlement entry. No bank entry arises because the consideration is paid entirely in debentures.

Step 3: Identify the value observed By deciding to construct a night shelter for homeless people, Venus Ltd. demonstrates social responsibility and compassion towards the underprivileged. It recognises the community's need for shelter and seeks to improve the welfare and dignity of vulnerable people.

Step 4: Conclusion Venus Ltd. issues 8,000 debentures, credits capital reserve with Rs 60,000 and records discount of Rs 40,000. The value observed is social responsibility and concern for homeless people.

Quick Tip to Solve: Divide purchase consideration by Rs 95, the issue price, then credit debentures at their Rs 100 face value.

12. Rajiv and Sanjeev were partners in a firm. Their partnership deed provided that the profits shall be divided as follows :

First Rs 20,000 to Rajeev and the balance in the ratio of 4 : 1. The profits for the year ended 31st March, 2017 were Rs 60,000 which had been distributed among the partners. On 1-4-2016 their capitals were Rajeev Rs 90,000 and Sanjeev Rs 80,000. Interest on capital was to be provided @ 6% p.a. While preparing the profit and loss appropriation interest on capital was omitted.

Pass necessary rectifying entry for the same. Show your workings clearly. [4 marks]

Solution:

Concept:

- Interest on capital is an appropriation of profit. Compute interest before allocating the preferential profit and the residual profit under the deed.
- The adjustment equals each partner's correct total entitlement minus the amount already credited. Debit a partner who received excess credit and credit the partner who received too little.

Step 1: Find the distribution already made Since interest was omitted, Rs 20,000 was first credited

to Rajiv and the remaining Rs 40,000 was shared in the ratio $4:1$.

$$\text{Rajiv's original credit} = 20,000 + 40,000 \times 4/5 = \text{Rs } 52,000,$$
$$\text{Sanjeev's original credit} = 40,000 \times 1/5 = \text{Rs } 8,000.$$

These credits total the reported profit of Rs 60,000.

Step 2: Calculate interest and the corrected distribution The opening capitals earn interest for the full year:

$$\text{Rajiv's interest} = 90,000 \times 6/100 = \text{Rs } 5,400,$$
$$\text{Sanjeev's interest} = 80,000 \times 6/100 = \text{Rs } 4,800,$$
$$\text{Profit after interest} = 60,000 - 10,200 = \text{Rs } 49,800.$$

After Rajiv's preferential Rs 20,000, the balance for division in $4:1$ is Rs 29,800. Thus Rajiv should receive $5,400 + 20,000 + 23,840 = \text{Rs } 49,240$, and Sanjeev should receive $4,800 + 5,960 = \text{Rs } 10,760$. Their corrected entitlements still total Rs 60,000.

Step 3: Determine and record the net adjustment Rajiv was overcredited by $52,000 - 49,240 = \text{Rs } 2,760$; Sanjeev was undercredited by $10,760 - 8,000 = \text{Rs } 2,760$. Consequently the omission is rectified by transferring that amount from Rajiv's capital to Sanjeev's capital.

Journal of Rajiv and Sanjeev (31 March 2017)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2017	Rajiv's Capital A/c Dr.		2,760	
	To Sanjeev's Capital A/c			2,760
	(Being adjustment for omitted interest on capital)			

Step 4: Conclusion Debit Rajivś Capital Account and credit Sanjeevś Capital Account by Rs 2,760.

Quick Tip to Solve: Keep the first Rs 20,000 intact; apply 4:1 only to the residual profit after interest and that preference.

13. Parth, Raman and Zaisha are partners in a firm manufacturing furniture. They have been sharing profits and losses in the ratio of 5 : 3 : 2. From 1st April, 2017 they decided to share future profits and losses in the ratio of 2 : 5 : 3. Their Balance Sheet showed a debit balance of Rs 4,000 in Profit & Loss Account; balance of Rs 36,000 in General Reserve and a Balance of Rs 12,000 in Workmen's Compensation Reserve. It was agreed that :

(i) The goodwill of the firm be valued at Rs 76,000.

(ii) The Stock (book value of Rs 40,000) was to be depreciated by 8%.

(iii) Creditors amounting to Rs 900 were not likely to be claimed.

(iv) Claim on account of Workmen's Compensation amounted to Rs 20,000.

(v) Investments (book value Rs 38,000) were revalued at Rs 40,000.

The firm manufactures comfortable rocking chairs for donating to 'Kareforyou' an Old Age Home every year. Taking cognizance of the rising pollution levels in the country, the firm has decided to transfer 10% of the profits every year to 'Green Fund' primarily used for environment friendly activities starting from the year 2017-18.

Pass necessary Journal entries for the above.

Also state any two values highlighted in the above case. [6 marks]

Solution:

Concept:

- Distribute accumulated balances and revaluation results in the old ratio of 5:3:2.
- Gaining partners compensate the sacrificing partner for goodwill in proportion to their gains.
- Use the compensation reserve against the claim; charge the excess to revaluation.

Step 1: Calculate goodwill compensation Old shares are $5/10, 3/10, 2/10$, and new shares are $2/10, 5/10, 3/10$. Parth sacrifices $3/10$; Raman gains $2/10$; Zaisha gains $1/10$. Therefore Raman owes $76,000 \times 2/10 =$ Rs $15,200$ and Zaisha owes $76,000 \times 1/10 =$ Rs $7,600$ to Parth, whose compensation is Rs 22,800. Goodwill need not be raised in the books.

Journal of the firm (1 April 2017)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Raman's Capital A/c Dr.		15,200	
	Zaisha's Capital A/c Dr.		7,600	
	To Parth's Capital A/c			22,800
	(Being goodwill adjusted for the change in shares)			

Step 2: Distribute accumulated reserve and accumulated loss General reserve of Rs 36,000 belongs to the partners in their old ratio, giving Rs 18,000, Rs 10,800 and Rs 7,200 respectively. The debit Profit and Loss balance of Rs 4,000 is an accumulated loss, charged as Rs 2,000, Rs 1,200 and Rs 800.

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	General Reserve A/c Dr.		36,000	
	To Parth's Capital A/c			18,000
	To Raman's Capital A/c			10,800
	To Zaisha's Capital A/c			7,200
	(Being reserve distributed in the old ratio)			
	Parth's Capital A/c Dr.		2,000	
	Raman's Capital A/c Dr.		1,200	
	Zaisha's Capital A/c Dr.		800	
	To Profit and Loss A/c			4,000
	(Being accumulated loss written off in the old ratio)			

Step 3: Record changes in assets and liabilities Stock falls by $40,000 \times 8/100 =$ Rs $3,200$. The unclaimed creditors yield a gain of Rs 900, while investments increase by $40,000 - 38,000 =$ Rs $2,000$. The compensation liability exceeds its reserve by $20,000 - 12,000 =$ Rs $8,000$, charged to revaluation.

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Revaluation A/c Dr.		3,200	
	To Stock A/c			3,200
	(Being stock reduced by 8 percent)			
	Creditors A/c Dr.		900	
	To Revaluation A/c			900
	(Being unclaimed creditors written back)			
	Workmen's Compensation Reserve A/c Dr.		12,000	
	Revaluation A/c Dr.		8,000	
	To Workmen's Compensation Claim A/c			20,000
	(Being claim provided using reserve and excess loss)			
	Investments A/c Dr.		2,000	
	To Revaluation A/c			2,000
	(Being investments appreciated to Rs 40,000)			

Step 4: Transfer the revaluation loss Net revaluation loss is $(3,200+8,000)-(900+2,000) =$ Rs $8,300$. In the old ratio of $5:3:2$, Parth bears Rs 4,150, Raman Rs 2,490 and Zaisha Rs 1,660.

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Parth's Capital A/c Dr.		4,150	
	Raman's Capital A/c Dr.		2,490	
	Zaisha's Capital A/c Dr.		1,660	
	To Revaluation A/c			8,300
	(Being revaluation loss transferred in the old ratio)			

Step 5: Identify the two values and treatment of Green Fund The donation of rocking chairs highlights care and respect for elderly people. The Green Fund highlights environmental protection.

The Green Fund transfer begins with 2017-18 profits, which are not given. At year end, debit Profit and Loss Appropriation Account and credit Green Fund with 10 percent of profit.

Step 6: Conclusion Parth receives goodwill compensation of Rs 22,800. Revaluation loss of Rs 8,300 is borne in 5:3:2.

Quick Tip to Solve: For the compensation claim, charge only the Rs 8,000 excess over its reserve to revaluation; do not distribute that reserve.

14. Boots Ltd. issued Rs 6,00,000, 8% Debentures at a discount of 6%. The debentures were redeemable in four equal annual instalments. Pass necessary journal entries for issue of debentures and prepare 'Discount on issue of debentures Account' for four years. Show your workings clearly.

[6 marks]

Solution:

Concept:

- Discount on issue is a capital loss: discount equals face value multiplied by the discount rate. Bank receives the net proceeds, while Debentures Account is credited with the full nominal amount.
- When debentures are redeemed in equal annual instalments, discount is written off in the ratio of the debentures outstanding during each year. The outstanding balances, rather than the annual redemption amounts, determine this ratio.

Step 1: Calculate issue proceeds and the annual write-off The discount is $6,00,000 \times 6/100 =$ Rs $36,000$. Hence cash received is $6,00,000 - 36,000 =$ Rs $5,64,000$. Each annual redemption is $6,00,000/4 =$ Rs $1,50,000$. The balances outstanding during the four years are respectively Rs 6,00,000, Rs 4,50,000, Rs 3,00,000 and Rs 1,50,000. Their ratio is $4 : 3 : 2 : 1$, whose total is 10. Therefore the discount charged to the Statement of Profit and Loss is:

$$\text{Year 1: } 36,000 \times 4/10 = 14,400,$$
$$\text{Year 2: } 36,000 \times 3/10 = 10,800,$$
$$\text{Year 3: } 36,000 \times 2/10 = 7,200,$$
$$\text{Year 4: } 36,000 \times 1/10 = 3,600.$$

All amounts are in Rs. The total written off is Rs 36,000.

Step 2: Record the issue of debentures Journal of Boots Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		5,64,000	
	Discount on Issue of Debentures A/c Dr.		36,000	
	To 8% Debentures A/c			6,00,000
	(Being debentures issued at a discount of 6%.)			

The credit records the contractual principal repayable; the discount is separately debited and subsequently written off. The coupon rate of 8% determines interest and does not enter the computation of issue discount.

Step 3: Prepare the discount account for all four years Discount on Issue of Debentures Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
Year 1	To 8% Debentures	36,000	By Statement of P&L	14,400	
			By Balance c/d	21,600	
	Total	36,000	Total	36,000	
Year 2	To Balance b/d	21,600	By Statement of P&L	10,800	
			By Balance c/d	10,800	
	Total	21,600	Total	21,600	
Year 3	To Balance b/d	10,800	By Statement of P&L	7,200	
			By Balance c/d	3,600	
	Total	10,800	Total	10,800	
Year 4	To Balance b/d	3,600	By Statement of P&L	3,600	
	Total	3,600	Total	3,600	

The final balance is nil because the entire discount has been charged over the period for which the debentures remain outstanding.

Step 4: Conclusion Issue proceeds are Rs 5,64,000; discount of Rs 36,000 is written off as Rs 14,400, Rs 10,800, Rs 7,200 and Rs 3,600 in the four years.

Quick Tip to Solve: For four equal year-end redemptions, write off discount in the outstanding-principal ratio 4:3:2:1, not equally.

15. Girija and Ganesh were partners in a firm sharing, profits and losses in the ratio of 2 : 3. On 31st March, 2017 their Balance Sheet was as follows :

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	80,000	Cash at Bank	20,000
Bank Overdraft	50,000	Debtors 55,000	
Girija's Brother's loan	77,000	Less: Provision for doubtful debts 2,000	53,000
Ganesh's loan	28,000	Stock	78,000
Investment Fluctuation Fund	15,000	Investments	89,000
Capitals :		Buildings	2,50,000
Girija 1,50,000		Profit and Loss A/c.	10,000
Ganesh 1,00,000	2,50,000		
	5,00,000		5,00,000

On the above date the firm was dissolved. The assets were realized and the liabilities were paid off as follows :

(a) Debtors of Rs 6,000 were proved bad.

(b) Girija agreed to pay off her brother's Loan.

(c) One of the creditors for Rs 10,000 was paid only Rs 3,000 in full settlement of his account.

(d) Buildings were auctioned for Rs 1,80,000 and the auctioneer's commission amounted to Rs 8,000.

(e) Ganesh took over part of stock at Rs 4,000 (being 20% less than the book value). Balance of the Stock was handed over to the remaining creditors in full settlement of their account.

(f) Investments realized Rs 9,000 less.

(g) Realisation expenses amounted to Rs 17,000 and were paid by Ganesh.

Prepare Realisation Account, Partners' Capital Accounts and Bank Account. [6 marks]

Solution:

Concept:

- Transfer non-cash assets at gross book values and outside liabilities to Realisation Account. Transfer the provision for doubtful debts and investment fluctuation fund to its credit; keep partnersĺoans separate.
- Allocate realisation loss and the debit balance of Profit and Loss Account in the profit-sharing ratio $2:3$. An outside liability assumed by a partner credits that partnerś capital; an asset taken over debits capital.

Step 1: Compute realisations and identify non-cash settlements Debtors realise $55,000-6,000=$ Rs $49,000$; the existing provision of Rs 2,000 is transferred separately to the credit of Realisation Account. Investments realise $89,000-9,000=$ Rs $80,000$. Buildings realise Rs 1,80,000, with auctioneer's commission of Rs 8,000 recorded separately as an expense.

Ganesh takes stock at Rs 4,000. Its book value is $4,000/0.80=$ Rs $5,000$, leaving stock with book value $78,000-5,000=$ Rs $73,000$. This remaining stock settles the remaining creditors of $80,000-10,000=$ Rs $70,000$. No additional entry is made for this direct asset-for-liability settlement because both stock and creditors have already been transferred to Realisation Account. The creditor of Rs 10,000 is paid Rs 3,000 through bank. Girija assumes her brother's loan of Rs 77,000, and Ganesh receives capital credit for the Rs 17,000 expenses he pays.

Step 2: Prepare Realisation Account Realisation Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Debtors	55,000	By Provision for doubtful debts	2,000	
	To Stock	78,000	By Creditors	80,000	
	To Investments	89,000	By Girija's brother's loan	77,000	
	To Buildings	2,50,000	By Investment fluctuation fund	15,000	
	To Girija's capital (loan)	77,000	By Bank: Debtors	49,000	
	To Bank: Creditors	3,000	By Bank: Buildings	1,80,000	
	To Bank: Commission	8,000	By Bank: Investments	80,000	
	To Ganesh's capital (expenses)	17,000	By Ganesh's capital (stock)	4,000	
			By Girija's capital (loss)	36,000	
			By Ganesh's capital (loss)	54,000	
	Total	5,77,000	Total	5,77,000	

Before allocating the loss, total debits are Rs 5,77,000 and credits are Rs 4,87,000. Therefore realisation loss is Rs 90,000, allocated as $90,000\times 2/5=$ Rs $36,000$ to Girija and $90,000\times 3/5=$ Rs $54,000$ to Ganesh. The account closes after this transfer; no balance remains.

Step 3: Prepare the partners capital accounts The debit balance of Profit and Loss Account, Rs 10,000, is allocated as Rs 4,000 to Girija and Rs 6,000 to Ganesh. The investment fluctuation fund has already been transferred to Realisation Account and must not also be credited to capitals.

Partners' Capital Accounts (amounts in Rs)

Dr.	Particulars	Girija	Ganesh	Particulars	Girija	Ganesh	Cr.
	To P&L A/c	4,000	6,000	By Balance b/d	1,50,000	1,00,000	
	To Realisation: loss	36,000	54,000	By Realisation: loan	77,000	–	
	To Realisation: stock	–	4,000	By Realisation: expenses	–	17,000	
	To Bank	1,87,000	53,000				
	Total	2,27,000	1,17,000	Total	2,27,000	1,17,000	

Both capital accounts close after the final payments. Ganesh's separate loan of Rs 28,000 is paid independently of his capital balance, after outside liabilities and before capital settlement.

Step 4: Prepare Bank Account Bank Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Balance b/d	20,000	By Realisation: Creditors	3,000	
	To Realisation: Debtors	49,000	By Realisation: Commission	8,000	
	To Realisation: Buildings	1,80,000	By Bank overdraft	50,000	
	To Realisation: Investments	80,000	By Ganesh's loan	28,000	
			By Girija's capital	1,87,000	
			By Ganesh's capital	53,000	
	Total	3,29,000	Total	3,29,000	

There is no bank entry for the stock taken over, stock given to creditors, brother's loan assumed by Girija, or expenses paid by Ganesh. These settlements are recorded through Realisation and the relevant capital accounts. The bank balance is nil on completion of dissolution.

Step 5: Conclusion Realisation loss is Rs 90,000. Final capital payments are Rs 1,87,000 to Girija and Rs 53,000 to Ganesh; Bank Account closes at Rs 3,29,000 on each side.

Quick Tip to Solve: Keep non-cash settlements out of Bank Account and settle Ganeshś loan separately from his capital.

16. On 31st March 2017, the Balance Sheet of Abhir and Divya, who were sharing profits in the ratio of 3 : 1 was as follows :
Balance Sheet of Abhir and Divya as on 31st March 2017

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	2,20,000	Cash at Bank	1,40,000
Employees' Provident Fund	1,00,000	Debtors 6,50,000	
Investment Fluctuation Fund	1,00,000	Less Provision for bad debts 50,000	6,00,000
General Reserve	1,20,000	Stock	3,00,000
Capitals :		Investments (market value Rs 4,40,000)	5,00,000
Abhir : 6,00,000			
Divya : 4,00,000	10,00,000		
	15,40,000		15,40,000

They decided to admit Vibhor on April 1, 2017 for 1/5th share.

(a) Vibhor shall bring Rs 80,000 as his share of goodwill premium.

(b) Stock was overvalued by Rs 20,000.

(c) A debtors whose dues of Rs 5,000 were written off as bad debts, paid Rs 4,000 in full settlement.

(d) Two months salary @ Rs 6,000 per month was outstanding.

(e) Vibhor was to bring in Capital to the extent of 1/5th of the total capital of the new firm.

Prepare Revaluation A/c, Partners' Capital A/c and the Balance Sheet of the reconstituted firm.

[8 marks]

Solution:

Concept:

- Revaluation records changes in assets and liabilities at admission; its profit or loss belongs to the old partners in their old ratio, $3:1$.
- The investment fluctuation fund first absorbs the fall in investment value; only its excess is distributed to old partners. General reserve is also distributed in the old ratio.
- Goodwill premium is credited to sacrificing partners. With no different sacrifice specified, Abhir and Divya sacrifice in $3:1$; their new shares are $3/5$ and $1/5$.

Step 1: Adjust the investment fund, reserve and goodwill Investments fall by $5,00,000 - 4,40,000 =$ Rs $60,000$. This is absorbed by the investment fluctuation fund of Rs 1,00,000, so Rs 40,000 remains for distribution: Abhir Rs 30,000 and Divya Rs 10,000. There is no investment loss left for the Revaluation Account. General reserve Rs 1,20,000 gives Abhir Rs 90,000 and Divya Rs 30,000. Vibhor brings goodwill premium Rs 80,000 in cash; credit Abhir Rs 60,000 and Divya Rs 20,000. The new profit-sharing ratio is $3:1:1$.

Step 2: Prepare the Revaluation Account The recovered debt was already written off, so credit the Rs 4,000 recovery to revaluation and add it to bank; do not reduce existing debtors. Outstanding salary is $2 \times 6,000 =$ Rs $12,000$. Revaluation loss is $20,000 + 12,000 - 4,000 =$ Rs $28,000$, borne by Abhir and Divya as Rs 21,000 and Rs 7,000 respectively.

Revaluation Account

Dr. Particulars	Amount (Rs)	Particulars	Amount (Rs) Cr.
To Stock	20,000	By Bank (bad debts recovered)	4,000
To Outstanding salary	12,000	By Abhir's Capital	21,000
		By Divya's Capital	7,000
Total	32,000	Total	32,000

Step 3: Determine incoming capital and prepare capital accounts Abhir's adjusted capital is $6,00,000 + 90,000 + 30,000 + 60,000 - 21,000 =$ Rs $7,59,000$. Divya's is $4,00,000 + 30,000 + 10,000 + 20,000 - 7,000 =$ Rs $4,53,000$. Their combined capital Rs 12,12,000 represents four-fifths of the new firm's total. Thus Vibhor's capital is $12,12,000 \times 1/4 =$ Rs $3,03,000$, and total capital is Rs 15,15,000.

Partners' Capital Accounts (amounts in Rs)

Dr. Particulars	Abhir	Divya	Vibhor	Particulars	Abhir	Divya	Vibhor Cr.
To Revaluation	21,000	7,000	–	By Balance b/d	6,00,000	4,00,000	–
To Balance c/d	7,59,000	4,53,000	3,03,000	By General reserve	90,000	30,000	–
				By Inv. fluct. fund	30,000	10,000	–
				By Goodwill premium	60,000	20,000	–
				By Bank	–	–	3,03,000
Total	7,80,000	4,60,000	3,03,000	Total	7,80,000	4,60,000	3,03,000

Step 4: Prepare the reconstituted Balance Sheet Bank balance is $1,40,000 + 4,000 + 80,000 + 3,03,000 =$ Rs $5,27,000$. Stock is reduced to Rs 2,80,000 and investments to Rs 4,40,000. Existing provision for bad debts remains Rs 50,000; net debtors remain Rs 6,00,000. The employees' provident fund is an outside liability and remains payable.

Balance Sheet of Abhir, Divya and Vibhor as at 1st April 2017

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	2,20,000	Cash at bank	5,27,000
Employees' provident fund	1,00,000	Debtors	6,50,000
Outstanding salary	12,000	Less: provision	(50,000)
Partners' capitals:		Net debtors	6,00,000
Abhir	7,59,000	Stock	2,80,000
Divya	4,53,000	Investments	4,40,000
Vibhor	3,03,000		
Total	18,47,000	Total	18,47,000

Step 5: Conclusion Revaluation loss is Rs 28,000. Closing capitals are Abhir Rs 7,59,000, Divya Rs 4,53,000 and Vibhor Rs 3,03,000; the Balance Sheet totals Rs 18,47,000.

Quick Tip to Solve: Use the investment fluctuation fund against the investment fall first; calculate incoming capital as one-fourth of the adjusted old partners' total.

OR

16. Kavya, Manya and Navita were partners sharing profits as 50%, 30% and 20% respectively. On march 31, 2016, their Balance Sheet stood as follows :
Balance Sheet of Kavya, Manya and Navita as at March 31, 2016.

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	1,40,000	Fixed Assets	8,90,000
General Reserve	1,00,000	Investments	2,00,000
Capitals :		Stock	1,30,000
Kavya 6,00,000		Debtors 4,00,000	
Manya 5,00,000		Less - Provision for bad debts 30,000	3,70,000
Navita 4,00,000	15,00,000	Bank	1,50,000
	17,40,000		17,40,000

On the above date, Kavya retired and Manya and Navita agreed to continue the business on the following terms :

(a) Firm's goodwill was valued at Rs 60,000 and it was decided to adjust Kavya's share of goodwill in the capital accounts of continuing partners.

(b) There was a claim for workmen's compensation to the extent of Rs 4,000.

(c) Investments were revalued at Rs 2,13,000.

(d) Fixed Assets were to be depreciated by 10%.

(e) Kavya was to be paid Rs 20,000 through a bank draft and the balance was transferred to her loan account which will be paid in two equal annual instalments together with interest @ 10% p.a.

Prepare Revaluation A/c, Partner's Capital accounts and Kavya's Loan Account till it is finally paid.

[8 marks]

Solution:

Concept:

- Revaluation profit or loss and accumulated reserves are shared by all old partners in the old ratio, $5:3:2$.
- The retiring partner is credited with her share of goodwill; continuing partners are debited in their gaining ratio. Here the continuing ratio and gaining ratio are both $3:2$.
- Interest on the retiring partner's loan is calculated on the principal outstanding at the beginning of each annual period; equal principal instalments carry declining interest.

Step 1: Calculate revaluation adjustments The claim for workmen's compensation creates a liability of Rs 4,000, with no reserve provided against it. Investments increase by $2,13,000 - 2,00,000 =$ Rs $13,000$. Depreciation on fixed assets is $8,90,000 \times 10\% =$ Rs $89,000$, leaving Rs 8,01,000. Hence revaluation loss is $4,000 + 89,000 - 13,000 =$ Rs $80,000$. Kavya, Manya and Navita bear Rs 40,000, Rs 24,000 and Rs 16,000 respectively.

Revaluation Account

Dr. Particulars	Amount (Rs)	Particulars	Amount (Rs) Cr.
To Workmen compensation claim	4,000	By Investments	13,000
To Fixed assets	89,000	By Kavya's Capital	40,000
		By Manya's Capital	24,000
		By Navita's Capital	16,000
Total	93,000	Total	93,000

Step 2: Distribute reserve and adjust goodwill General reserve Rs 1,00,000 is credited to Kavya, Manya and Navita as Rs 50,000, Rs 30,000 and Rs 20,000. Kavya's share of goodwill is $60,000 \times 50\% =$ Rs $30,000$. In the absence of any different agreement, Manya and Navita continue in $3:2$. Their gains are $3/5 - 3/10 = 3/10$ and $2/5 - 2/10 = 2/10$. Debit Manya Rs 18,000 and Navita Rs 12,000, and credit Kavya Rs 30,000. Goodwill is adjusted through capitals, so no goodwill asset is raised.

Step 3: Prepare the partners' capital accounts Kavya's amount due is $6,00,000 + 50,000 + 30,000 - 40,000 =$ Rs $6,40,000$. Pay Rs 20,000 by bank draft and transfer Rs 6,20,000 to her loan account. Manya's closing capital is $5,00,000 + 30,000 - 24,000 - 18,000 =$ Rs $4,88,000$. Navita's is $4,00,000 + 20,000 - 16,000 - 12,000 =$ Rs $3,92,000$.

Partners' Capital Accounts (amounts in Rs)

Dr. Particulars	Kavya	Manya	Navita	Particulars	Kavya	Manya	Navita Cr.
To Revaluation	40,000	24,000	16,000	By Balance b/d	6,00,000	5,00,000	4,00,000
To Kavya (goodwill)	–	18,000	12,000	By General reserve	50,000	30,000	20,000
To Bank	20,000	–	–	By Manya (goodwill)	18,000	–	–
To Kavya's Loan	6,20,000	–	–	By Navita (goodwill)	12,000	–	–
To Balance c/d	–	4,88,000	3,92,000				
Total	6,80,000	5,30,000	4,20,000	Total	6,80,000	5,30,000	4,20,000

Step 4: Prepare Kavya's Loan Account until settlement Two equal annual principal instalments are $6,20,000/2 =$ Rs $3,10,000$ each. First-year interest is $6,20,000 \times 10\% =$ Rs $62,000$; the first payment on 31st March 2017 is Rs 3,72,000. The remaining principal is Rs 3,10,000, giving second-year interest Rs 31,000 and final payment Rs 3,41,000 on 31st March 2018. Interest is credited to the loan account before recording each payment.

Kavya's Loan Account

Dr. Date and particulars	Amount (Rs)	Date and particulars	Amount (Rs) Cr.
31-3-2017 To Bank	3,72,000	31-3-2016 By Capital	6,20,000
31-3-2017 To Balance c/d	3,10,000	31-3-2017 By Interest	62,000
Total	6,82,000	Total	6,82,000
31-3-2018 To Bank	3,41,000	1-4-2017 By Balance b/d	3,10,000
		31-3-2018 By Interest	31,000
Total	3,41,000	Total	3,41,000

Step 5: Conclusion Revaluation loss is Rs 80,000. Kavya receives Rs 20,000 immediately and has a loan of Rs 6,20,000, settled by Rs 3,72,000 and Rs 3,41,000 on the next two annual dates. Manya and Navita close with capitals Rs 4,88,000 and Rs 3,92,000.

Quick Tip to Solve: Separate equal principal repayments from interest: interest falls from Rs 62,000 to Rs 31,000 after the first principal instalment.

17. Manvet Ltd. invited applications for issuing 10,00,000 equity shares of Rs 10 each payable as follows :

On application and allotment Rs 4 per share (including premium Rs 1)

On first call Rs 4 per share,

On second and final call Rs 3 per share.

Applications for 15,00,000 shares were received and pro-rata allotment was made to all the applicants. Excess application money was adjusted on the sums due on calls. A shareholder who had applied for 6,000 shares did not pay the first, and the second and final call. His shares were forfeited. 90% of the forfeited shares were reissued at Rs 8 per share fully paid up.

Pass necessary journal entries for the above transactions in the books of the company. [8 marks]

Solution:

Concept:

- On pro-rata allotment, excess application money is adjusted against the earliest call due. Premium is credited separately from share capital.
- On forfeiture, debit fully called-up capital and credit unpaid calls and Share Forfeiture. Securities premium already received is retained.
- The discount on reissue is debited to Share Forfeiture. Transfer only the surplus relating to shares actually reissued to Capital Reserve.

Step 1: Determine allotment and unpaid calls The allotment ratio is $10,00,000 : 15,00,000 = 2 : 3$. Total application and allotment receipts are $15,00,000 \times 4 =$ Rs $60,00,000$. Of this, Rs 30,00,000 is share capital, Rs 10,00,000 is premium, and Rs 20,00,000 is excess available for the first call.

The defaulting shareholder receives $6,000 \times 2/3 = 4,000$ shares. He pays Rs 24,000 initially; Rs 16,000 is due on application and allotment, leaving Rs 8,000 for adjustment against his first call of Rs 16,000. Thus his unpaid first call is Rs 8,000 and unpaid final call is $4,000 \times 3 =$ Rs $12,000$. Capital received on these shares is Rs 20,000; the Rs 4,000 premium was received in full.

Step 2: Record issue and calls Journal of Manvet Ltd. (issue and calls)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Share Application and Allotment A/c (Being application and allotment money received)		60,00,000	 60,00,000
	Share Application and Allotment A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve A/c To Share First Call A/c (Being amount due transferred and excess adjusted towards first call)		60,00,000	 30,00,000 10,00,000 20,00,000
	Share First Call A/c Dr. To Equity Share Capital A/c (Being first call of Rs 4 per share made)		40,00,000	 40,00,000
	Bank A/c Dr. To Share First Call A/c (Being first call received after adjusting excess, except Rs 8,000 unpaid)		19,92,000	 19,92,000
	Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Being final call of Rs 3 per share made)		30,00,000	 30,00,000
	Bank A/c Dr. To Share Second and Final Call A/c (Being final call received except Rs 12,000 unpaid)		29,88,000	 29,88,000

Step 3: Record forfeiture, reissue and reserve Journal of Manvet Ltd. (forfeiture and reissue)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Equity Share Capital A/c Dr. To Share First Call A/c To Share Second and Final Call A/c To Share Forfeiture A/c (Being 4,000 fully called shares forfeited for unpaid calls)		40,000	 8,000 12,000 20,000
	Bank A/c Dr. Share Forfeiture A/c Dr. To Equity Share Capital A/c (Being 3,600 shares reissued at Rs 8 as fully paid)		28,800 7,200	 36,000
	Share Forfeiture A/c Dr. To Capital Reserve A/c (Being surplus on reissued shares transferred to capital reserve)		10,800	 10,800

Reissued shares are $4,000 \times 90\% = 3,600$. The forfeited amount attributable to them is $20,000 \times 3,600/4,000 =$ Rs $18,000$. Deduct reissue discount $3,600 \times 2 =$ Rs $7,200$, giving reserve Rs 10,800. The balance Rs 2,000 relates to the 400 shares still forfeited.

Step 4: Conclusion The journal entries record forfeiture of 4,000 shares and reissue of 3,600 shares. Capital Reserve is Rs 10,800; Share Forfeiture retains Rs 2,000.

Quick Tip to Solve: Include excess application money adjusted to calls when calculating the capital already paid on forfeited shares.

OR

17. X Ltd. invited applications for issuing 5,00,000 equity shares of Rs 10 each at par. The amount per share was payable as follows :

On Application Rs 1 per share

On Allotment Rs 2 per share

On First call Rs 3 per share

On Second and Final call - Balance.

Applications for 8,00,000 shares were received. Applications for 1,00,000 shares were rejected and pro-rata allotment was made to the remaining applicants. Excess money received with applications was adjusted towards sums due on allotment. All calls were made. Ashok a shareholder holding 5000 shares failed to pay the allotment and the call money. Mohan, a shareholder who had applied for 7000 shares, failed to pay the first and second and final call. Shares of Ashok and Mohan were forfeited after the second and final call. Of the forfeited shares 8000 shares were re-issued at Rs 12 per share fully paid up. The re-issued shares included all the forfeited shares of Ashok.

Pass necessary journal entries for the above transactions in the books of X Ltd. [8 marks]

Solution:

Concept:

- Application receipts on rejected shares are refunded; excess on accepted applications reduces allotment receivable.
- Forfeiture cancels called-up capital and credits the unpaid instalments and capital already received.
- Reissue above face value creates securities premium. Only forfeiture surplus on the reissued shares becomes capital reserve.

Step 1: Calculate pro-rata adjustments and defaults After rejecting 1,00,000 applications, 7,00,000 applications share 5,00,000 allotments, a ratio of $5:7$. Application receipts are Rs 8,00,000, refund Rs 1,00,000, capital Rs 5,00,000 and excess Rs 2,00,000. Allotment due is Rs 10,00,000; the excess reduces the amount collectible to Rs 8,00,000.

Ashok holds 5,000 shares and therefore applied for 7,000. His excess application money is Rs 2,000, leaving allotment unpaid $10,000 - 2,000 =$ Rs $8,000$. First and final calls unpaid are Rs 15,000 and Rs 20,000. Capital paid by him is Rs 7,000.

Mohan applied for 7,000 shares and receives 5,000. His allotment is fully paid including the Rs 2,000 adjustment. Capital paid is $5,000 \times (1+2) =$ Rs $15,000$; unpaid calls are Rs 15,000 and Rs 20,000. The final call rate is $10 - 1 - 2 - 3 =$ Rs 4.

Step 2: Record application and allotment Journal of X Ltd. (application and allotment)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Share Application A/c (Being application money received)		8,00,000	 8,00,000

	Share Application A/c Dr. To Equity Share Capital A/c To Share Allotment A/c To Bank A/c (Being application money transferred, excess adjusted and rejected money refunded)		8,00,000	 5,00,000 2,00,000 1,00,000
	Share Allotment A/c Dr. To Equity Share Capital A/c (Being allotment of Rs 2 per share due)		10,00,000	 10,00,000
	Bank A/c Dr. To Share Allotment A/c (Being allotment received after adjustment except Ashok arrears)		7,92,000	 7,92,000

Step 3: Record first and final calls Journal of X Ltd. (calls)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share First Call A/c Dr. To Equity Share Capital A/c (Being first call of Rs 3 per share due)		15,00,000	 15,00,000
	Bank A/c Dr. To Share First Call A/c (Being first call received except Rs 30,000 from Ashok and Mohan)		14,70,000	 14,70,000
	Share Second and Final Call A/c Dr. To Equity Share Capital A/c (Being final call of Rs 4 per share due)		20,00,000	 20,00,000
	Bank A/c Dr. To Share Second and Final Call A/c (Being final call received except Rs 40,000 from Ashok and Mohan)		19,60,000	 19,60,000

Step 4: Record forfeiture and reissue Journal of X Ltd. (forfeiture and reissue)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Equity Share Capital A/c Dr. To Share Allotment A/c To Share First Call A/c To Share Second and Final Call A/c To Share Forfeiture A/c (Being 10,000 shares of Ashok and Mohan forfeited)		1,00,000	 8,000 30,000 40,000 22,000
	Bank A/c Dr. To Equity Share Capital A/c To Securities Premium Reserve A/c (Being 8,000 shares reissued at Rs 12 fully paid)		96,000	 80,000 16,000
	Share Forfeiture A/c Dr. To Capital Reserve A/c (Being surplus on reissued shares transferred to capital reserve)		16,000	 16,000

All 5,000 Ashok shares and 3,000 Mohan shares are reissued. The related forfeiture credit is $7,000 + 15,000 \times 3,000/5,000 =$ Rs $16,000$. No discount is allowed on reissue, so this entire amount

is capital reserve. Rs 6,000 remains for Mohan's 2,000 unreissued shares.

Step 5: Conclusion The forfeiture credit is Rs 22,000. Reissue creates securities premium of Rs 16,000 and capital reserve of Rs 16,000; the remaining forfeiture balance is Rs 6,000.

Quick Tip to Solve: Track each defaulter separately: Ashok paid Rs 7,000 through application, while Mohan paid Rs 15,000 through allotment.

Part B (20 marks)

OPTION – I
Analysis of Financial Statements

18. State the primary objective of preparing the Cash Flow Statement. [1 mark]

Solution:

Concept:

- A Cash Flow Statement reports changes in cash and cash equivalents during an accounting period.
- Cash flows are grouped into operating, investing and financing activities to explain their sources and uses.

Step 1: Identify what the statement measures The statement records actual inflows and outflows of cash and cash equivalents. It therefore explains how the opening cash balance changes into the closing cash balance during the period.

Step 2: State the purpose Its primary objective is to provide useful information about cash receipts and cash payments, classified by operating, investing and financing activities. This information helps users assess the enterprise's ability to generate cash and its cash requirements.

Step 3: Conclusion The primary objective is to provide information about the inflows and outflows of cash and cash equivalents during a period, classified into operating, investing and financing activities.

Quick Tip to Solve: Link the objective to cash receipts and payments during the period, rather than to the calculation of accounting profit.

19. 'Loans and advances granted' by a company will be considered, as which type of activity while preparing Cash Flow Statement. [1 mark]

Solution:

Concept:

- Investing activities include acquiring and disposing of long-term assets and investments, including loans made to other parties.
- The classification is based on the nature of the cash flow: granting a loan places funds with another party.

Step 1: Identify the transaction Loans and advances granted mean that the company pays money to a

borrower. The cash movement is therefore an outflow. The word granted distinguishes this transaction from a loan borrowed by the company.

Step 2: Classify the cash flow For an ordinary non-financial company, loans and advances granted to other parties are investing activities. A financial enterprise, whose principal business is lending, treats such lending as an operating activity; the ordinary-company classification applies here.

Step 3: Conclusion Loans and advances granted are classified as an investing activity (cash outflow).

Quick Tip to Solve: Read granted as money lent to others; loans raised by the company would instead be financing inflows.

20. From the following information, prepare a Comparative Statement of Profit and Loss :

Particulars	31st March, 2017	31st March, 2016
Revenue from operations	Rs 24,00,000	Rs 18,00,000
Other incomes (% of revenue from operations)	15%	25%
Expenses (% of revenue from operations)	60%	50%
Tax rate	40%	40%

[4 marks]

Solution:

Concept:

- A comparative statement presents the previous year, the current year, the absolute change and the percentage change for every item.
- Absolute change = current-year amount minus previous-year amount. Percentage change = $\frac{\text{Absolute change}}{\text{Previous-year amount}} \times 100$.
- Other incomes and expenses are calculated on revenue from operations; tax is calculated on profit before tax.

Step 1: Calculate other incomes, expenses and profits For the year ended 31st March, 2016:

$$\begin{aligned}
\text{Other incomes} &= 18,00,000 \times 25\% = \text{Rs } 4,50,000,\\
\text{Expenses} &= 18,00,000 \times 50\% = \text{Rs } 9,00,000,\\
\text{Profit before tax} &= 18,00,000 + 4,50,000 - 9,00,000\\
&= \text{Rs } 13,50,000,\\
\text{Tax} &= 13,50,000 \times 40\% = \text{Rs } 5,40,000,\\
\text{Profit after tax} &= 13,50,000 - 5,40,000 = \text{Rs } 8,10,000.
\end{aligned}$$

For the year ended 31st March, 2017:

$$\begin{aligned}
\text{Other incomes} &= 24,00,000 \times 15\% = \text{Rs } 3,60,000,\\
\text{Expenses} &= 24,00,000 \times 60\% = \text{Rs } 14,40,000,\\
\text{Profit before tax} &= 24,00,000 + 3,60,000 - 14,40,000\\
&= \text{Rs } 13,20,000,\\
\text{Tax} &= 13,20,000 \times 40\% = \text{Rs } 5,28,000,\\
\text{Profit after tax} &= 13,20,000 - 5,28,000 = \text{Rs } 7,92,000.
\end{aligned}$$

Step 2: Prepare the comparative statement **Comparative Statement of Profit and Loss**
For the years ended 31st March, 2016 and 2017

Particulars	2016 Rs	2017 Rs	Change Rs	Change (%)
Revenue from operations	18,00,000	24,00,000	6,00,000	33.33
Other incomes	4,50,000	3,60,000	-90,000	-20.00
Total revenue	22,50,000	27,60,000	5,10,000	22.67
Less: Expenses	9,00,000	14,40,000	5,40,000	60.00
Profit before tax	13,50,000	13,20,000	-30,000	-2.22
Less: Tax expense	5,40,000	5,28,000	-12,000	-2.22
Profit after tax	8,10,000	7,92,000	-18,000	-2.22

Changes are measured from 2016 to 2017. A negative change denotes a decrease, and percentages are rounded to two decimal places. For example, the percentage increase in total revenue is $5,10,000/22,50,000 \times 100 = 22.67\%$.

Step 3: Conclusion Profit after tax decreased from Rs 8,10,000 in 2016 to Rs 7,92,000 in 2017, a decrease of Rs 18,000 or 2.22%.

Quick Tip to Solve: Use 2016 as the base year throughout; apply the expense and other-income percentages to operating revenue, then apply tax to profit before tax.

21. (a) Under which major headings and sub-heading will the following items be shown in the Balance Sheet of a company as per Schedule III of Companies Act, 2013 ?

(i) Provision for employee benefits.

(ii) Calls in advance.

(b) State any two limitations of 'Analysis of Financial Statements'. [4 marks]

Solution:

Concept:

- Schedule III classifies a liability by its nature and its expected settlement. A provision is an estimated liability, whereas calls in advance are amounts received from shareholders before the company has called them.
- Analysis of financial statements interprets accounting figures to assess performance and financial position. Its conclusions inherit the limitations of the statements and of the accounting policies

used to prepare them.

Step 1: (a) Classify the two liabilities The relevant portion is the Equity and Liabilities side of the company's Balance Sheet. The classifications are:

Item	Major heading	Sub-heading
Provision for employee benefits	Non-current liabilities	Long-term provisions
Calls in advance	Current liabilities	Other current liabilities

Provision for employee benefits represents an estimated obligation towards employees. In the usual long-term classification of this item, it is included in long-term provisions. Any portion specifically payable within the current period would instead be a short-term provision. Calls in advance are not added to subscribed share capital because the related call has not yet become due; they remain a liability until the call is made.

Step 2: (b) State two limitations of analysis **1. It ignores changes in the price level.** Financial statements generally record assets and transactions at historical amounts. Analysis of such figures does not adjust automatically for inflation. Consequently, comparisons across years may suggest growth in sales, profits or assets even when part of that increase merely reflects higher prices rather than an improvement in real performance.

2. It ignores qualitative factors. Financial statements mainly contain information measurable in money. Factors such as the competence of management, employees' skills and morale, customer loyalty and the quality of products are not adequately reflected in the numerical statements. Analysis based only on those figures therefore cannot give a complete assessment of the company's prospects.

Step 3: Conclusion (a) Provision for employee benefits: Non-current liabilities—Long-term provisions. Calls in advance: Current liabilities—Other current liabilities. (b) Two limitations are the failure to reflect price-level changes and the omission of qualitative factors.

Quick Tip to Solve: Keep calls in advance out of share capital until the call is actually made; classify them as other current liabilities.

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22. (a) A company earns Gross profit of 25% on cost. For the year ended 31st March, 2017 its Gross Profit was Rs 5,00,000; Equity Share Capital of the company was Rs 10,00,000; Reserves and Surplus Rs 2,00,000; Long Term Loan Rs 3,00,000 and Non Current Assets were Rs 10,00,000.

Compute the 'Working capital turnover ratio' of the company.

(b) Y Ltd's profits after interest and tax was Rs 1,00,000. Its Current Assets were Rs 4,00,000; Current Liabilities Rs 2,00,000; Fixed Assets Rs 6,00,000 and 10% Long term debt Rs 4,00,000. The rate of tax was 20%.

Calculate 'Return on Investment' of Y Ltd. [4 marks]

Solution:

Concept:

- Working capital turnover ratio equals revenue from operations divided by working capital. Working capital is current assets less current liabilities, or capital employed less non-current assets.

- Return on investment is $\dfrac{\text{Profit before interest and tax}}{\text{Capital employed}} \times 100$. Capital employed equals fixed assets plus working capital; profit after tax must first be converted to profit before tax, and then interest is added back.

Step 1: (a) Calculate cost of revenue and revenue from operations Gross profit is 25% of cost, so the base of the percentage is cost of revenue from operations, not sales. Therefore,

$$\begin{aligned}\text{Cost of revenue from operations} &= \frac{\text{Gross profit} \times 100}{25} \\ &= \frac{5,00,000 \times 100}{25} = \text{Rs } 20,00,000. \\ \text{Revenue from operations} &= 20,00,000 + 5,00,000 \\ &= \text{Rs } 25,00,000.\end{aligned}$$

As a check, gross profit is one-fifth of sales here: $5,00,000/25,00,000 = 20\%$. Using 25% of sales would incorrectly change the base stated in the question.

Step 2: (a) Find working capital and its turnover ratio Long-term funds comprise shareholders' funds and long-term loan. After financing non-current assets, the remaining long-term funds finance working capital:

$$\begin{aligned}\text{Capital employed} &= 10,00,000 + 2,00,000 + 3,00,000 \\ &= \text{Rs } 15,00,000. \\ \text{Working capital} &= 15,00,000 - 10,00,000 \\ &= \text{Rs } 5,00,000. \\ \text{Working capital turnover ratio} &= \frac{25,00,000}{5,00,000} = 5 \text{ times}.\end{aligned}$$

Step 3: (b) Calculate Y Ltd.'s profit before interest and tax Profit after interest and tax of Rs 1,00,000 represents 80% of profit before tax, since the tax rate is 20%. Interest is then added back to obtain the return earned for all long-term providers of funds:

$$\begin{aligned}\text{Profit before tax} &= \frac{1,00,000 \times 100}{100 - 20} = \text{Rs } 1,25,000. \\ \text{Interest on long-term debt} &= 4,00,000 \times \frac{10}{100} = \text{Rs } 40,000. \\ \text{Profit before interest and tax} &= 1,25,000 + 40,000 = \text{Rs } 1,65,000.\end{aligned}$$

Step 4: (b) Calculate capital employed and return on investment The net current assets are available along with fixed assets to generate operating profit. Thus,

$$\begin{aligned}\text{Working capital} &= 4,00,000 - 2,00,000 = \text{Rs } 2,00,000, \\ \text{Capital employed} &= 6,00,000 + 2,00,000 = \text{Rs } 8,00,000, \\ \text{Return on investment} &= \frac{1,65,000}{8,00,000} \times 100 = 20.625\%.\end{aligned}$$

The long-term debt is already included in capital employed through the net-assets approach; adding it again would double-count that financing.

Step 5: Conclusion (a) Working capital turnover ratio is $\boxed{5 \text{ times}}$. (b) Y Ltd.'s return on investment is $\boxed{20.625\%}$, or approximately 20.63%.

Quick Tip to Solve: For ROI, remove tax from profit first and add interest afterwards; calculate capital employed as fixed assets plus net current assets.

23. Following is the Balance Sheet of Mevanca Limited as at 31st March, 2017

Mevanca Ltd.

Balance Sheet as at 31st March, 2017

Particulars	Note No.	31st March, 2017 (Rs)	31st March, 2016 (Rs)
I Equity and Liabilities			
1. Shareholder's Funds			
(a) Share Capital		3,00,000	1,00,000
(b) Reserves and Surplus	1	25,000	1,20,000
2. Non-Current Liabilities Long-term Borrowings	2	80,000	60,000
3. Current Liabilities			
(a) Trade Payables		6,000	20,000
(b) Short-term Provisions	3	68,000	70,000
Total :		4,79,000	3,70,000
II. Assets			
1. Non-Current Assets Fixed Assets	4	3,36,000	1,92,000
2. Current Assets			
(a) Inventories		67,000	60,000
(b) Trade Receivables		51,000	65,000
(c) Cash and Cash Equivalents		25,000	49,000
(d) Other Current Assets		-	4,000
Total :		4,79,000	3,70,000

Notes to Accounts

Particulars	31 March, 2017 (Rs)	31 March, 2016 (Rs)
1. Reserves and Surplus Surplus i.e., Balance in Statement of Profit & Loss	25,000	1,20,000
	25,000	1,20,000
2. Long-term Borrowings 10% Long term Loan	80,000	60,000
	80,000	60,000
3. Short-term Provisions Provision for Tax	68,000	70,000
	68,000	70,000
4. Fixed Assets Machinery	3,84,000	2,15,000
Accumulated Depreciation	(48,000)	(23,000)
	3,36,000	1,92,000

Additional Information :

(i) Additional loan was taken on 1st July, 2016.

(ii) Tax of Rs 53,000 was paid during the year.

Prepare Cash Flow Statement. [6 marks]

Solution:

Concept:

- The indirect method adjusts profit before tax for non-cash and non-operating items and changes in operating working capital.
- Tax paid is an operating outflow; machinery purchases are investing outflows. Share and loan proceeds and interest paid are financing cash flows.

Step 1: Calculate tax provision and profit before tax The tax provision made during the year is:

$$68,000 + 53,000 - 70,000 = \text{Rs } 51,000.$$

The fall in the balance of the Statement of Profit and Loss gives the loss after tax, since no dividend or other appropriation is stated:

$$25,000 - 1,20,000 = -\text{Rs } 95,000.$$

Thus, loss before tax is $95,000 - 51,000 = \text{Rs } 44,000$. The tax expense is added back here; the actual tax paid is deducted separately in operating activities.

Step 2: Calculate depreciation, machinery purchases and interest No machinery sale is stated. Depreciation for the year is the increase in accumulated depreciation:

$$48,000 - 23,000 = \text{Rs } 25,000.$$

Machinery purchased is $3,84,000 - 2,15,000 = \text{Rs } 1,69,000$. The opening loan bears interest for the full year and the additional loan of Rs 20,000, taken on 1st July, bears interest for nine months:

$$60,000 \times \frac{10}{100} + 20,000 \times \frac{10}{100} \times \frac{9}{12} = \text{Rs } 7,500.$$

Interest is added back in operating activities and shown as paid under financing activities. No outstanding interest is given. The decrease in other current assets of Rs 4,000 releases operating cash.

Step 3: Prepare the Cash Flow Statement

Mevanca Ltd.
Cash Flow Statement for the year ended 31st March, 2017

Particulars	Amount (Rs)
A. Cash flows from operating activities	
Net loss before tax	(44,000)
Add: Depreciation	25,000
Add: Interest on long-term loan	7,500
Operating loss before working capital changes	(11,500)
Increase in inventories	(7,000)
Decrease in trade receivables	14,000
Decrease in other current assets	4,000
Decrease in trade payables	(14,000)
Cash used in operations	(14,500)
Less: Income tax paid	(53,000)
Net cash used in operating activities (A)	**(67,500)**
B. Cash flows from investing activities	
Purchase of machinery	(1,69,000)
Net cash used in investing activities (B)	**(1,69,000)**
C. Cash flows from financing activities	
Proceeds from issue of share capital	2,00,000
Proceeds from additional long-term loan	20,000
Interest paid	(7,500)
Net cash from financing activities (C)	**2,12,500**
Net decrease in cash and cash equivalents (A+B+C)	(24,000)
Add: Opening cash and cash equivalents	49,000
Closing cash and cash equivalents	**25,000**

Step 4: Verify the cash reconciliation The three activity totals give

$$-67,500 - 1,69,000 + 2,12,500 = -\text{Rs } 24,000.$$

Therefore, opening cash of Rs 49,000 decreases to Rs 25,000, exactly matching the closing Balance Sheet. The gross machinery balance is used for purchases so that depreciation is not counted as an investing payment.

Step 5: Conclusion Net cash used in operating activities is Rs 67,500; net cash used in investing activities is Rs 1,69,000; and net cash from financing activities is Rs 2,12,500. Cash decreases by Rs 24,000 to Rs 25,000.

Quick Tip to Solve: Work out the tax provision and time-weighted loan interest before adjusting the loss.

OPTION – II

18. Why is 'Report Wizard' a favourable tool for designers using MS Access ? [1 mark]

Solution:

Concept:

- Report Wizard provides a guided sequence for creating a report from selected tables or queries.
- A report organises database information into a readable, printable presentation.

Step 1: Use guided choices The designer selects the required fields, grouping levels, sorting order and report layout through successive dialogue boxes. Access then generates the report automatically.

Step 2: Explain the advantage This makes report creation quick and easy, reducing manual design effort while producing an organised report. The generated report can subsequently be modified in Design View to meet specific requirements.

Step 3: Conclusion Report Wizard is favourable because it helps designers create organised, formatted reports quickly and easily through guided steps.

Quick Tip to Solve: Remember the sequence: select fields, group, sort and choose the layout.

19. What is meant by the term 'Front End' database ? [1 mark]

Solution:

Concept:

- A database application separates the user interface from the underlying data storage.
- The front end is the part through which a user interacts with the database.

Step 1: Identify the user-facing part A front-end database contains the interface objects used to access and work with data, such as forms, queries and reports. It provides the screens and commands through which users perform their tasks.

Step 2: Distinguish storage from access In a split database, the front end links to tables held in the back-end database. Users enter, retrieve and display information through the front end, while the back end stores the actual records.

Step 3: Conclusion A front-end database is the user-interface part of a database application, containing forms, queries and reports through which users access and manipulate back-end data.

Quick Tip to Solve: Associate front end with user interaction and back end with stored tables.

20. Explain the terms 'Password Security' and 'Data Vault'. [4 marks]

Solution:

Concept:

- Accounting data must be protected against access, disclosure and alteration by unauthorised persons.
- Password security controls entry to a system or company data; a data vault protects the stored information through encryption.

Step 1: Password security Password security is a mechanism under which access to the accounting software or its data is allowed only after the user enters a valid secret password. It helps ensure that only authorised users can open the system and perform permitted operations. Where separate user accounts are maintained, each user can be assigned a password and access rights appropriate to that user's duties. For example, a data-entry operator may enter vouchers while the administrator controls

changes to user permissions. A password should be kept confidential, should not be easily guessed, and should be changed when its secrecy is in doubt. Thus, password security helps protect accounting records against unauthorised access and changes.

Step 2: Data vault A data vault is a facility that safeguards stored accounting data by encrypting it. Encryption converts the original readable information into a coded form which cannot be understood without the appropriate password or key. In accounting packages, a vault password may therefore be used to protect the company data itself, so that a person who obtains the data files cannot simply read their contents. An authorised user supplies the correct password to make the information readable for use. The password must be preserved carefully because losing it can prevent legitimate access to the protected information. A vault is a confidentiality measure; keeping a backup is a separate measure for recovering data after loss or damage.

Step 3: Conclusion Password security restricts access to accounting software and permitted operations, whereas a data vault encrypts stored accounting data to preserve its confidentiality.

Quick Tip to Solve: Associate password security with controlled access and a data vault with encryption of the stored data.

21. What is meant by composite attribute ? How is it different from simple attribute ? [4 marks]

Solution:

Concept:

- An attribute is a property or characteristic used to describe an entity in a database, such as an employee's name or employee number.
- A composite attribute contains meaningful component attributes; a simple attribute is treated as an indivisible unit in the database design.

Step 1: Meaning of a composite attribute A composite attribute is an attribute that can be divided into smaller attributes, each of which has a meaning of its own. For example, an employee's Address can be divided into House Number, Street, City, State and PIN Code. Each component describes a particular part of the address and can be stored or used separately. Similarly, Name can be represented by First Name, Middle Name and Last Name. The components together describe the original composite attribute. This arrangement is useful when the organisation needs to search, sort or report on an individual component, such as preparing a list of customers belonging to a particular city.

Step 2: Difference from a simple attribute A simple attribute is one that cannot be further divided into smaller meaningful attributes for the purpose of the database. An employee number or an employee's age, when recorded as a single value, is a simple attribute. The difference concerns meaningful structure: Address is composite because its components such as City and State have independent significance, whereas an Employee Number is simple because its individual digits are not separately treated as properties of the employee. A composite attribute is therefore represented through its component attributes when that detail is required, while a simple attribute is recorded directly as one indivisible value. Both are properties of an entity, but only a composite attribute has meaningful constituent attributes in the chosen design.

Step 3: Conclusion A composite attribute can be split into meaningful sub-attributes, such as Address into City, State and PIN Code; a simple attribute, such as Employee Number, is treated as indivisible.

Quick Tip to Solve: Test whether the parts have independent meaning: City within Address does, but a digit within an Employee Number does not.

22. State any four requirements which should be considered before making an investing decision to choose between 'Desktop database' or 'Server database'. [4 marks]

Solution:

Concept:

- A desktop database normally serves a single user or a small workgroup; a server database centrally manages a database accessed by several client computers.
- The investment decision should match the organisation's present requirements and expected growth, including users, data volume, protection and cost.

Step 1: Number of users and simultaneous access Determine how many users will use the database and how many must work on it at the same time. A desktop database can meet the needs of one user or a small group with limited concurrent work. A server database is suitable when many users need simultaneous access, since it can coordinate their transactions and control conflicting updates.

Step 2: Volume of data and expected growth Estimate the amount of data to be stored, the number of transactions and the likely growth of the business. A small database with modest processing requirements may be handled on a desktop. Large volumes of records, heavy transaction processing and future expansion favour a server database with greater storage, performance and scalability.

Step 3: Security, reliability and recovery requirements Consider the confidentiality of accounting data and the need for access restrictions, regular backups and recovery after failure. Where different users need different permissions and business operations require dependable continuous access, a server database generally offers more extensive central administration and recovery facilities. The chosen system must protect records from unauthorised access and loss.

Step 4: Investment and technical support available Compare the total cost of software licences, hardware, installation, maintenance and trained personnel. Desktop databases usually involve a smaller initial investment and simpler administration. Server databases require greater expenditure and skilled support; this investment should be justified by the organisation's workload and operational needs.

Step 5: Conclusion Four requirements are: the number of concurrent users, data volume and growth, security and recovery needs, and the budget together with technical support available.

Quick Tip to Solve: Organise the four requirements as users, data, protection and cost; explain how each affects the database choice.

23. Yamaha industries purchased an embossing machine for Rs 4,35,000. They paid Rs 45,000 as installation and transport expenses. Assuming that the salvage value of machine at the end of 5 years is Rs 2,00,000, calculate depreciation by Straight Line Method & its Rate, using formulas in MS excel. [6 marks]

Solution:

Concept:

- The cost of a fixed asset includes its purchase price and expenditure necessary to bring it to its working location and condition, including installation and transport.
- Straight line depreciation per year is $D = (C - S)/n$, where C is capitalised cost, S is salvage value and n is useful life in years.
- The annual depreciation rate on original cost is $r = (D/C) \times 100$. Excel's `SLN(cost,salvage,life)` function returns the constant depreciation per period.

Step 1: Calculate the capitalised cost Installation and transport expenses form part of the machine's cost because they are incurred to make it ready for use. Thus,

$$C = 4,35,000 + 45,000 = \text{Rs } 4,80,000.$$

The salvage value is $S = \text{Rs } 2,00,000$, and the useful life is $n = 5$ years. Salvage value is deducted to determine the depreciable amount; it is not an expense to add to cost.

Step 2: Work out annual depreciation The total depreciable amount is the cost less the estimated residual value:

$$C - S = 4,80,000 - 2,00,000 = \text{Rs } 2,80,000.$$

Distribute this amount equally over five years:

$$D = \frac{2,80,000}{5} = \text{Rs } 56,000 \text{ per year.}$$

The amount is the same in every year under the straight line method.

Step 3: Enter the data and depreciation formula in Excel Use the following worksheet layout. The formulas are entered in the cells shown; Excel displays the computed results.

Cell	Description	Entry or formula
B1	Purchase price (Rs)	435000
B2	Installation and transport (Rs)	45000
B3	Total cost (Rs)	`=B1+B2`
B4	Salvage value (Rs)	200000
B5	Life (years)	5
B6	Annual depreciation (Rs)	`=SLN(B3,B4,B5)`

Cell B3 returns $4,80,000$, and B6 returns $56,000$. An equivalent arithmetic formula for B6 is `=(B3-B4)/B5`. Direct entry `=SLN(480000,200000,5)` gives the same result.

Step 4: Calculate the rate and check the result Express annual depreciation as a percentage of the original capitalised cost:

$$r = \frac{56,000}{4,80,000} \times 100 = 11.6667\% \approx 11.67\% \text{ per annum.}$$

In Excel, enter `=B6/B3` in B7 and apply Percentage format with two decimal places. The underlying value is approximately 0.116667, displayed as 11.67%. Alternatively, `=B6/B3*100` gives the numerical percentage 11.6667; in that case leave the cell in Number format.

As a check, total depreciation over the useful life is $5 \times 56,000 = \text{Rs } 2,80,000$. The closing carrying amount is therefore $4,80,000 - 2,80,000 = \text{Rs } 2,00,000$, exactly the given salvage value.

Step 5: Conclusion Annual straight line depreciation is $\boxed{\text{Rs } 56,000}$, calculated in Excel by `=SLN(480000,200000,5)`. The annual rate on original cost is $\boxed{11.67\%}$ approximately.

Quick Tip to Solve: Add installation and transport before using SLN; divide annual depreciation by total cost, not by the depreciable amount, for the rate.