CBSE Class 12 Accountancy Question Paper 2020 with Solution PDF-Set 67-5-3

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 comprises **two PARTS – A and B**. There are 32 questions in the question paper. **All** questions are compulsory.

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

(iii) **Part - B has two** options i.e. (i) Analysis of Financial Statement and (ii) Computerized Accounting. You have to attempt **only one** of the given OPTIONS.

(iv) Heading of the option opted must be written on the Answer-Book before attempting the questions of that particular OPTION.

(v) Question number **1 to 13** and **23 to 29** are very short answer type questions carrying **1** mark each.

(vi) Question number **14** and **30** are short answer type-I questions carrying **3** marks each.

(vii) Question number **15 to 18** and **31** are short answer type-II questions carrying **4** marks each.

(viii) Question number **19 to 20** and **32** are also long answer type-I questions carrying **6** marks each.

(ix) Question number **21** and **22** are long answer type-II questions carrying **8** marks each.

(x) Answer should be brief and to the point. The answer of each part should be written at one place.

(xi) There is no overall choice. However, an internal choice has been provided in **2** questions of three marks, **2** questions of four marks, **1** question of six marks and **2** questions of eight marks. You have to **attempt only one of the choices** in such questions.

(xii) However, separate instructions are given with each section and question, wherever necessary.

Part A (60 marks)

(Accounting for Not-For-Profit-Organisations, Partnership Firms and Companies)

1. In case of retirement of a partner, profit or loss on revaluation of assets and re-assessment of liabilities is distributed among _____ partners in _____ ratio. [1 mark]

Solution:

Concept:

- Revaluation records the change in the value of assets and liabilities up to the retirement date.
- The resulting profit or loss belongs to all the existing partners in their old profit-sharing ratio.

Step 1: Identify the partners entitled Revaluation relates to the period before retirement. The retiring partner was a member of the firm during that period and therefore shares this adjustment along with the continuing partners.

Step 2: Apply the appropriate ratio Distribute a revaluation profit by crediting all partners' capital accounts, and distribute a loss by debiting them, in the old profit-sharing ratio. The new ratio applies to future profits after retirement.

Step 3: Conclusion All partners; old profit-sharing ratio.

Quick Tip to Solve: For revaluation on retirement, include the outgoing partner and use the ratio before retirement.

2. Vanya Ltd. forfeited 20,000 equity shares of ₹ 100 each for non-payment of first and final call of ₹ 40 per share. The maximum amount of discount at which these shares can be re-issued will be: [1 mark]

(A) ₹ 8,00,000

(B) ₹ 12,00,000

(C) ₹ 20,00,000

(D) ₹ 20,000

Correct Answer: (B) ₹ 12,00,000

Solution:

Concept:

- Discount allowed on reissue cannot exceed the amount forfeited on those shares.
- Amount forfeited per share is the called-up amount less the unpaid call.

Step 1: Calculate the amount already received The face value is Rs 100 and the unpaid first and final call is Rs 40. Thus the amount received and forfeited per share is $100 - 40 = \text{Rs } 60$.

Step 2: Find the permissible discount The maximum total discount is $20,000 \times 60 = \text{Rs } 12,00,000$. Rs 8,00,000 is the unpaid call, not the amount forfeited; Rs 20,00,000 is the total face value. Rs 20,000 has no basis as the maximum discount.

Step 3: Conclusion The maximum discount is Rs 12,00,000. Hence, the correct option is (B).

Quick Tip to Solve: Find the paid amount per forfeited share before multiplying by the number of shares.

3. What is meant by 'Subscribed Capital' ? [1 mark]

Solution:

Concept:

- Issued capital is the part of authorised capital offered for subscription.
- Subscribed capital is the part of issued capital subscribed for by the public.

Step 1: Locate subscribed capital within issued capital A company may offer a number of shares to investors. The portion of that offer taken up by applicants constitutes subscribed capital; shares offered but not subscribed for are excluded.

Step 2: Distinguish subscription from payment Subscription concerns the shares taken up, whereas called-up and paid-up capital concern the amounts called and actually received on those shares. Subscribed capital may include fully paid and not fully paid shares.

Step 3: Conclusion Subscribed capital is that part of issued capital which has been subscribed for by the public.

Quick Tip to Solve: Define subscribed capital through shares taken up, and do not confuse it with cash actually received.

4. Bishan and Sudha were partners in a firm sharing profits and losses in the ratio of 5:3. Alena was admitted as a new partner. It was decided that the new profit sharing ratio of Bishan, Sudha and Alena will be 10:6:5. The sacrificing ratio of Bishan and Sudha will be : [1 mark]

(A) 5 : 3

(B) 25 : 78

(C) 6 : 5

(D) 2 : 1

Correct Answer: (A) 5 : 3

Solution:

Concept:

- Sacrifice of a partner equals old share minus new share.
- The sacrificing ratio compares the sacrifices of the old partners only.

Step 1: Calculate each sacrifice Bishan' s sacrifice is $\frac{5}{8} - \frac{10}{21} = \frac{105 - 80}{168} = \frac{25}{168}$. Sudha' s sacrifice is $\frac{3}{8} - \frac{6}{21} = \frac{63 - 48}{168} = \frac{15}{168}$.

Step 2: Compare the sacrifices The ratio is $\frac{25}{168} : \frac{15}{168} = 25 : 15 = 5 : 3$. Their total sacrifice is $40/168 = 5/21$, exactly Alena' s new share. The ratios 25:78, 6:5 and 2:1 do not represent these sacrifices.

Step 3: Conclusion The sacrificing ratio of Bishan and Sudha is 5:3. Hence, the correct option is (A).

Quick Tip to Solve: Subtract old and new shares separately; compare the resulting sacrifices using a common denominator.

5. Which of the following is not a capital receipt? [1 mark]

(A) Donations for tournament

(B) Donations for building fund

(C) Life membership fee

(D) Entrance fees

Correct Answer: (D) Entrance fees

Solution:

Concept:

- Capital receipts include amounts received for a specific capital or restricted purpose and life membership fees.
- Ordinary entrance fees are generally revenue receipts unless special directions require capitalisation.

Step 1: Classify the first three receipts Donations for a tournament are credited to the specific tournament fund. Donations for a building fund are also specific-purpose receipts. Life membership fees are treated as a capital receipt rather than ordinary annual subscription income.

Step 2: Identify the ordinary revenue receipt Entrance fees are normally treated as revenue income in the absence of instructions to capitalise them. Among the four printed choices, this is the receipt that does not receive capital treatment; the two specific donations and life membership fee are excluded.

Step 3: Conclusion Entrance fees are not a capital receipt. Hence, the correct option is (D).

Quick Tip to Solve: For this classification, distinguish ordinary entrance income from specific funds and life membership fees.

6. Mohit and Rohit were partners in a firm with capitals of ₹ 80,000 and ₹ 40,000 respectively. The firm earned a profit of ₹ 30,000 during the year. Mohit's share in the profit will be: [1 mark]

(A) ₹ 20,000

(B) ₹ 10,000

(C) ₹ 15,000

(D) ₹ 18,000

Correct Answer: (C) ₹ 15,000

Solution:

Concept:

- In the absence of a profit-sharing agreement, partners share profits and losses equally.
- Unequal capital contributions do not themselves establish an unequal profit-sharing ratio.

Step 1: Choose the applicable ratio The question gives capital balances but no agreed profit-sharing ratio. Therefore Mohit and Rohit share equally, in the ratio 1:1; their capital ratio 2:1 is not the default profit-sharing ratio.

Step 2: Calculate and compare the choices Mohit' s share is Rs $30,000 \times \frac{1}{2} = \text{Rs } 15,000$. Rs 20,000

and Rs 10,000 result from using the capital ratio incorrectly. Rs 18,000 would require an agreement that the question does not provide.

Step 3: Conclusion Mohit receives Rs 15,000. Hence, the correct option is (C).

Quick Tip to Solve: When no profit-sharing agreement is stated, divide profit equally even if capitals are unequal.

7. _____ means any offer of securities to a select group of persons by a company other than by way of public offer. [1 mark]

Solution:

Concept:

- A private placement offers securities to a selected group of persons.
- A public offer invites subscription from the public generally, rather than a specifically selected group.

Step 1: Recognise the defining feature The sentence identifies an offer by a company to a select group of persons. This restriction of the intended subscribers is the key characteristic that distinguishes the transaction.

Step 2: Name the method of issue The method is called private placement. A public offer would involve an invitation to the public, while a rights issue would be described through an offer to existing shareholders. Neither description matches the stated definition as directly as private placement.

Step 3: Conclusion Private placement.

Quick Tip to Solve: Look for the phrase select group of persons to identify a private placement of securities.

8. On forfeiture of 100 shares of ₹ 50 each, ₹ 2,500 were credited to share forfeited account. These shares were re-issued at ₹ 25 per share fully paid up. The amount credited to 'Capital Reserve Account' will be : [1 mark]

(A) ₹ 2,500

(B) ₹ 5,000

(C) No amount

(D) ₹ 3,000

Correct Answer: (C) No amount

Solution:

Concept:

- Reissue discount is face value credited as paid-up less the reissue price.
- Capital reserve equals the forfeiture amount relating to reissued shares less the discount allowed on their reissue.

Step 1: Calculate the reissue discount The shares are reissued as fully paid at Rs 25 against a face value of Rs 50. Discount per share is $50 - 25 =$ Rs 25, so total discount is $100 \times 25 =$ Rs $2,500$.

Step 2: Find the remaining forfeiture balance The amount available in Share Forfeiture Account is Rs 2,500. After applying it against the discount, the surplus is $2,500 - 2,500 = 0$. Therefore neither Rs 2,500, Rs 5,000 nor Rs 3,000 can be transferred to capital reserve.

Step 3: Conclusion No amount is credited to Capital Reserve Account. Hence, the correct option is (C).

Quick Tip to Solve: Deduct reissue discount from the forfeiture balance; only the surplus goes to capital reserve.

9. Disha and Abha were partners in a firm. Farad was admitted as a new partner for 1/5th share in the profits of the firm. Farad brought proportionate capital. Capitals of Disha and Abha after all adjustments were ₹ 64,000 and ₹ 46,000 respectively. Capital brought by Farad was: [1 mark]

(A) ₹ 22,000

(B) ₹ 27,500

(C) ₹ 55,000

(D) ₹ 28,000

Correct Answer: (B) ₹ 27,500

Solution:

Concept:

- With proportionate capitals, capital bears the same ratio as the partners' profit shares.
- The old partners together retain four-fifths when the new partner receives one-fifth.

Step 1: Identify the capital representing the retained share The adjusted capitals of Disha and Abha total $64,000 + 46,000 =$ Rs $1,10,000$. This represents their combined share of $1 - \frac{1}{5} = \frac{4}{5}$, not the whole firm' s capital.

Step 2: Calculate Farad' s capital Farad' s capital is $1,10,000 \times \frac{1/5}{4/5} = 1,10,000/4 =$ Rs $27,500$. Rs 22,000 incorrectly takes one-fifth of the old partners' capital. Rs 55,000 and Rs 28,000 do not give the stated proportion.

Step 3: Conclusion Farad brings Rs 27,500 as capital. Hence, the correct option is (B).

Quick Tip to Solve: Treat the old partners' combined capital as four-fifths, then take one-fourth of it for the newcomer.

10. The business of a partnership firm may be carried on by all the partners or any one of them acting for all. One of the important implication of this statement is that every partner is entitled to participate in the conduct of the affairs of its business. State the second important implication of this statement. [1 mark]

Solution:

Concept:

- Mutual agency means that each partner is both an agent of the firm and a principal in relation to the other partners.
- An act done by a partner in the usual course of the partnership business binds the firm and the other partners.

Step 1: Identify the agency relationship When one partner carries on the business for all, that partner acts on behalf of the firm. The right to participate in management is one implication of this relationship.

Step 2: State the second implication Every partner can bind the firm and the other partners by acts performed in the ordinary course of the firm's business. Thus, a business act of one partner can create obligations for all the partners.

Step 3: Conclusion The second implication is that every partner can bind the firm and the other partners by acts done in the ordinary course of partnership business.

Quick Tip to Solve: Link "acting for all" with the power of one partner to bind the entire firm.

11. Jaipur Club has a prize fund of ₹ 6,00,000. It incurs expenses on prizes amounting to ₹ 5,20,000. The expenses should be: [1 mark]

(A) debited to income and expenditure account.

(B) presented on the asset side of the balance sheet.

(C) debited to income and expenditure account and presented on the asset side of the balance sheet.

(D) deducted from the prize fund on the liability side of the balance sheet.

Correct Answer: (D) deducted from the prize fund on the liability side of the balance sheet.

Solution:

Concept:

- A specific fund is restricted to the purpose for which it was created.
- Expenses relating to that purpose are charged against the corresponding fund while it has an adequate balance.

Step 1: Compare the fund and expenditure The prize fund is Rs 6,00,000 and prize expenditure is Rs 5,20,000. Since the fund exceeds the expenditure, the entire expense is chargeable against the prize fund.

Step 2: Determine the presentation The balance remaining is $6,00,000 - 5,20,000 = \text{Rs } 80,000$. It appears on the liabilities side as the remaining prize fund. There is no asset created by awarding prizes, and the expense is not charged to the Income and Expenditure Account when it is covered by

this specific fund.

Step 3: Conclusion Deduct Rs 5,20,000 from the prize fund on the liabilities side of the Balance Sheet. The correct option is (D).

Quick Tip to Solve: Before charging a specific-purpose expense to income, check whether its fund covers it.

12. No debenture redemption reserve is required for debentures issued by: [1 mark]

(A) manufacturing companies

(B) infrastructure companies

(C) banking companies

(D) trading companies

Correct Answer: (C) banking companies

Solution:

Concept:

- Debenture Redemption Reserve is an appropriation of profit associated with redemption of debentures.
- Under the rule applicable to this examination question, banking companies are exempt from creating this reserve.

Step 1: Identify the exempt category Banking companies fall within the exempt category for the creation of Debenture Redemption Reserve. Consequently, the issue of debentures by a banking company does not require creation of this reserve.

Step 2: Check the alternatives Manufacturing, infrastructure and trading describe ordinary business activities. Those descriptions alone do not establish the exemption asked for here. Among the four stated categories, banking companies are the specific exempt category.

Step 3: Conclusion The correct option is (C): banking companies.

Quick Tip to Solve: For this question, distinguish the specific banking exemption from ordinary business activities.

13. For recording the issue of debentures as a collateral security by a journal entry _____ account is debited. [1 mark]

Solution:

Concept:

- Collateral security is secondary security provided in addition to the principal security for a loan.
- Under the journal-entry method, Debenture Suspense Account is debited and Debentures Account is credited.

Step 1: Identify the debit account When an entry is passed for debentures issued as collateral security, the debit is made to Debenture Suspense Account. The corresponding credit is to Debentures Account.

Step 2: Explain the treatment The suspense debit offsets the collateral debentures recorded by the credit. The collateral issue itself brings in no additional cash; the separate loan transaction records the amount actually borrowed. Hence Bank Account is not the debit account for the collateral issue entry.

Step 3: Conclusion Debenture Suspense Account is debited.

Quick Tip to Solve: Separate the cash loan entry from the non-cash entry recording collateral debentures.

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14. Kabir and Farid are partners in a firm sharing profits in the ratio of 3:1 on 1-4-2019 they admitted Manik into partnership for 1/4th share in the profits of the firm. Manik brought his share of goodwill premium in cash. Goodwill of the firm was valued on the basis of 2 years purchase of last three years average profits. The profits of last three years were :

2016-17 ₹ 90,000

2017-18 ₹ 1,30,000

2018-19 ₹ 86,000

During the year 2018-19 there was a loss of ₹ 20,000 due to fire which was not accounted for while calculating the profit.

Calculate the value of goodwill and pass the necessary journal entries for the treatment of goodwill.

[3 marks]

Solution:

Concept:

- Average-profit goodwill equals normal average annual profit multiplied by the number of years purchase.
- The incoming partner brings premium equal to firm goodwill multiplied by his share. The old partners receive it in their sacrificing ratio.

Step 1: Determine normal average profit The question expressly says that the fire loss of Rs 20,000 was not accounted for while calculating the stated profit. Thus Rs 86,000 has not been reduced by that loss and already excludes its effect. No further addition is needed for the abnormal loss; adding it again would overstate normal profit. Therefore,

$$\text{Average profit} = \frac{90,000 + 1,30,000 + 86,000}{3} = \text{Rs } 1,02,000.$$

Step 2: Calculate goodwill and premium

$$\text{Goodwill} = 1,02,000 \times 2 = \text{Rs } 2,04,000,$$

$$\text{Manik's premium} = 2,04,000 \times \frac{1}{4} = \text{Rs } 51,000.$$

No different sacrifice is specified, so Kabir and Farid sacrifice in their old ratio, 3:1. Their shares of premium are Rs 38,250 and Rs 12,750 respectively. The new shares would be 9/16, 3/16 and 4/16, confirming the sacrifice ratio 3:1.

Step 3: Record receipt and distribution of premium Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	Cash A/c Dr.		51,000	
	To Premium for Goodwill A/c			51,000
	(Being Manik's goodwill premium received in cash)			
1-4-2019	Premium for Goodwill A/c Dr.		51,000	
	To Kabir's Capital A/c			38,250
	To Farid's Capital A/c			12,750
	(Being premium transferred to sacrificing partners in the ratio 3:1)			

Step 4: Conclusion Goodwill of the firm is Rs 2,04,000. Manik brings Rs 51,000 as premium, credited to Kabir and Farid in amounts of Rs 38,250 and Rs 12,750.

Quick Tip to Solve: Check whether an abnormal loss has already affected the quoted profit before adding it back.

OR

14. Raka, Seema and Mahesh were partners sharing profits and losses in the ratio of 5 : 3 : 2. With effect from 1st April, 2019, they mutually agreed to share profits and losses in the ratio of 2 : 2 : 1. On that date, there was a workmen's compensation fund of ₹ 90,000 in the books of the firm. It was agreed that:

(i) Goodwill of the firm be valued at ₹ 70,000.

(ii) Claim for workmen's compensation amounted to ₹ 40,000.

(iii) Profit on revaluation of assets and re-assessment of liabilities amounted to ₹ 40,000.

Pass necessary journal entries for the above transactions in the books of the firm. [3 marks]

Solution:

Concept:

- A gaining partner compensates a sacrificing partner for goodwill; gain equals new share less old share.
- Surplus workmen's compensation fund and revaluation profit belong to the partners in the old profit-sharing ratio.

Step 1: Calculate the change in shares Express the new ratio 2:2:1 as 4:4:2 on a denominator of 10. Raka sacrifices $5/10 - 4/10 = 1/10$; Seema gains $4/10 - 3/10 = 1/10$; Mahesh's share remains $2/10$. Seema therefore compensates Raka by $70,000 \times 1/10 =$ Rs $7,000$. Goodwill need not be raised in the books.

Step 2: Determine amounts belonging to old partners Of the workmen's compensation fund of Rs 90,000, Rs 40,000 is needed for the claim. Distribute only the surplus Rs 50,000 in 5:3:2: Raka Rs 25,000, Seema Rs 15,000 and Mahesh Rs 10,000. The claim remains a liability until paid. Distribute the revaluation profit Rs 40,000 in the same old ratio: Raka Rs 20,000, Seema Rs 12,000 and Mahesh

Rs 8,000.

Step 3: Pass the adjustment entries Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	Seema's Capital A/c Dr.		7,000	
	To Raka's Capital A/c			7,000
	(Being goodwill adjustment for Seema's gain and Raka's sacrifice)			
1-4-2019	Workmen's Compensation Fund A/c Dr.		90,000	
	To Workmen's Compensation Claim A/c			40,000
	To Raka's Capital A/c			25,000
	To Seema's Capital A/c			15,000
	To Mahesh's Capital A/c			10,000
	(Being claim provided and surplus fund distributed in the old ratio 5:3:2)			
1-4-2019	Revaluation A/c Dr.		40,000	
	To Raka's Capital A/c			20,000
	To Seema's Capital A/c			12,000
	To Mahesh's Capital A/c			8,000
	(Being revaluation profit distributed in the old ratio 5:3:2)			

Step 4: Conclusion Seema pays goodwill compensation of Rs 7,000 to Raka through capital accounts. The surplus fund of Rs 50,000 and revaluation profit of Rs 40,000 are distributed in 5:3:2; Rs 40,000 is retained as the compensation claim.

Quick Tip to Solve: Use the old ratio for accumulated fund surplus and revaluation profit, but the gain or sacrifice for goodwill.

15. How will the following items be treated while preparing the financial statements of a not-for-profit-organization for the year ended 31st March, 2019.

Particulars	As at 31-3-18 (₹)	As at 31-3-19 (₹)
Creditors for stationery	78,000	50,000
Stock of stationery	62,000	41,000

During 2018-19, payment made to creditors was ₹ 1,80,000. [4 marks]

Solution:

Concept:

- Income and Expenditure Account records stationery consumed during the year on the accrual basis, rather than the cash paid to suppliers.
- Purchases equal payment to creditors plus closing creditors less opening creditors. Consumption equals opening stock plus purchases less closing stock.

Step 1: Calculate stationery purchased during 2018-19 The payment of Rs 1,80,000 includes settlement of creditors brought forward from the previous year. Remove opening creditors of Rs 78,000 and add closing creditors of Rs 50,000, representing purchases not yet paid for:

$$\begin{aligned}\text{Purchases} &= 1,80,000 + 50,000 - 78,000 \\ &= \text{Rs } 1,52,000.\end{aligned}$$

The fall in creditors means that cash paid exceeds purchases by Rs 28,000.

Step 2: Determine stationery consumed and its revenue treatment Stationery available consists of opening stock and current purchases. Deduct unused closing stock:

$$\begin{aligned}\text{Stationery consumed} &= 62,000 + 1,52,000 - 41,000 \\ &= \text{Rs } 1,73,000.\end{aligned}$$

Debit stationery consumed of Rs 1,73,000 to the Income and Expenditure Account for the year ended 31st March, 2019. The reduction in stock of Rs 21,000 makes consumption exceed purchases by that amount.

Step 3: Show the closing balances in the Balance Sheet Balance Sheet extract as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors for stationery	50,000	Stock of stationery	41,000

The creditors and stock are separate liability and asset balances and are not set off. Opening creditors and opening stock belong to the opening Balance Sheet; their effect on the current year's expense has been included above. The cash payment appears on the payments side of the Receipts and Payments Account.

Step 4: Conclusion Debit stationery consumed of Rs 1,73,000 to the Income and Expenditure Account. Show stationery creditors of Rs 50,000 as a liability and stock of Rs 41,000 as an asset in the closing Balance Sheet.

Quick Tip to Solve: First convert cash paid into purchases using creditors; then adjust opening and closing stock to find consumption.

16. From the given Receipts and Payments Account and additional information of Shine Club for the year ended 31st March, 2019, prepare Income and Expenditure Account for the year ended 31st March, 2019.

Receipts and Payments Account of Shine Club for the year ended 31st March, 2019

Receipts	Amount (Rs)	Payments	Amount (Rs)
To balance b/d	50,000	By Furniture & equipments	1,22,000
To donations	45,000	By Salaries	32,000
To subscriptions:		By balance c/d	13,400
2017-18: 1,600			
2018-19: 60,000			
2019-20: 5,000	66,600		
To interest received	5,800		
Total	1,67,400		1,67,400

Additional Information:

(i) Furniture and equipments were purchased on 1-10-2018. Depreciation @ 10% p.a. was to be provided on furniture and equipments.

(ii) Subscriptions in arrears for the year 2018-19 were ₹ 2,000.

(iii) Outstanding salary ₹ 6,000. [4 marks]

Solution:

Concept:

- Income and Expenditure Account includes revenue income and expenses relating to the current year, whether received or paid or still outstanding.
- Furniture and equipment are capital assets. Their purchase is excluded from revenue expenditure, but depreciation for the period of use is charged.

Step 1: Calculate current-year subscription income Of total subscriptions received of Rs 66,600, Rs 1,600 belongs to 2017-18 and Rs 5,000 is an advance for 2019-20. Neither is income of 2018-19. Add the current year's subscriptions in arrears of Rs 2,000:

$$\text{Subscriptions} = 66,600 - 1,600 - 5,000 + 2,000 = \text{Rs } 62,000.$$

Thus, income comprises Rs 60,000 received for 2018-19 and Rs 2,000 still receivable for that year.

Step 2: Adjust salaries and calculate depreciation Salary expense includes cash paid of Rs 32,000 and the outstanding amount of Rs 6,000:

$$\text{Salaries} = 32,000 + 6,000 = \text{Rs } 38,000.$$

Furniture and equipment costing Rs 1,22,000 were purchased on 1st October, 2018, so depreciation is charged for six months up to 31st March, 2019:

$$\text{Depreciation} = 1,22,000 \times \frac{10}{100} \times \frac{6}{12} = \text{Rs } 6,100.$$

The purchase price itself is a capital payment. The opening and closing cash balances are also excluded

from this account. Donations have no stated specific purpose or capital restriction, so they are treated as revenue income.

Step 3: Prepare the Income and Expenditure Account Income and Expenditure Account of Shine Club for the year ended 31st March, 2019

Expenditure	Rs	Income	Rs
To Salaries	38,000	By Donations	45,000
To Depreciation on furniture and equipment	6,100	By Subscriptions	62,000
To Surplus (excess of income over expenditure)	68,700	By Interest received	5,800
Total	1,12,800	Total	1,12,800

Total revenue income is Rs 1,12,800 and total revenue expenditure is Rs 44,100. The balancing surplus is transferred to the capital fund. Outstanding salary remains a liability and subscriptions in arrears remain an asset in the closing Balance Sheet.

Step 4: Conclusion Shine Club's surplus for the year ended 31st March, 2019 is Rs 68,700, being income of Rs 1,12,800 less expenditure of Rs 44,100.

Quick Tip to Solve: Isolate subscriptions belonging to the current year and charge only six months' depreciation on assets bought on 1st October.

17. Nikita, Mankrit and Pulkit were partners in a firm sharing profits and losses in the ratio 4:3:2. Their balance sheet as on 31st March, 2019 was as follows :

Balance Sheet of Nikita, Mankrit and Pulkit as on 31st March 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capitals:		Plant and Machinery	6,40,000
Nikita	4,00,000	Stock	2,30,000
Mankrit	3,00,000	Sundry debtors	1,40,000
Pulkit	2,00,000	Cash at bank	40,000
General Reserve	90,000		
Creditors	60,000		
Total	10,50,000	Total	10,50,000

Mankrit died on 31st July, 2019. According to the partnership deed, the executors of the deceased partner were entitled to :

(a) Balance of partner's capital account

(b) Salary @ ₹ 6,000 per quarter.

(c) Share of goodwill calculated on the basis of twice the average of past three years' profits and share of profits from the closure of the last accounting year till the date of death calculated on the basis of average of three completed years' profits before death.

Profits for 2016-17, 2017-18 and 2018-19 were ₹ 80,000, ₹ 90,000 and ₹ 1,00,000 respectively.

(d) Mankrit withdrew ₹ 6,000 on 15th May, 2019.

Prepare Mankrit's capital account to be rendered to her executors. [4 marks]

Solution:

Concept:

- A deceased partner is credited with opening capital, the share of accumulated reserve, goodwill, salary and profit up to death; drawings reduce the amount due.
- Mankrit's profit share is $3/9 = 1/3$. Salary and estimated profit accrue for the four months from 1st April to 31st July, 2019.

Step 1: Calculate reserve, goodwill and profit Mankrit's share of general reserve is $90,000 \times 3/9 =$ Rs $30,000$.

$$\begin{aligned}
\text{Average annual profit} &= (80,000 + 90,000 + 1,00,000)/3 = \text{Rs } 90,000,\\
\text{Firm's goodwill} &= 2 \times 90,000 = \text{Rs } 1,80,000,\\
\text{Mankrit's goodwill share} &= 1,80,000 \times 3/9 = \text{Rs } 60,000,\\
\text{Profit up to death} &= 90,000 \times 4/12 \times 3/9 = \text{Rs } 10,000.
\end{aligned}$$

The goodwill adjustment is borne by Nikita and Pulkit in their gaining ratio, $4 : 2 = 2 : 1$, since no change in their relative shares is specified. Their capitals are debited by Rs 40,000 and Rs 20,000 respectively.

Step 2: Calculate salary and prepare the capital account Salary for four months is $6,000 \times 4/3 =$ Rs $8,000$. Drawings of Rs 6,000 are debited without interest because no interest on drawings is specified. The profit accrued after the last balance sheet date is credited through Profit and Loss Suspense Account.

Mankrit's Capital Account (up to 31st July, 2019)

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Drawings	6,000	By Balance b/d	3,00,000	
	To Executor's Loan A/c	4,02,000	By General Reserve	30,000	
			By Nikita's Capital A/c	40,000	
			By Pulkit's Capital A/c	20,000	
			By Salary A/c	8,000	
			By P&L Suspense A/c	10,000	
	Total	4,08,000	Total	4,08,000	

The balance is transferred to the executor's loan account because the amount is due to the executors and no immediate payment is stated.

Step 3: Conclusion Mankrit's executors are entitled to $\boxed{\text{Rs } 4,02,000}$.

Quick Tip to Solve: Count April through July as four months; convert the quarterly salary to a monthly amount before multiplying.

18. Puneet and Akshara were partners in a firm sharing profits and losses in the ratio of 2 : 3. The following was the balance sheet of the firm as on 31st March, 2019.

Liabilities	Amount (₹)	Assets	Amount (₹)
Capitals: Puneet 90,000 Akshara 1,10,000	2,00,000	Sundry Assets	2,00,000
Total	2,00,000	Total	2,00,000

The profits ₹ 40,000 for the year ended 31st March, 2019 were divided between the partners without allowing interest on capital @ 5% p.a. and commission to Akshara @ ₹ 1,000 per quarter. The drawings of the partners during the year were:

Puneet ₹ 2,500 per month

Akshara ₹ 10,000 per quarter

Showing your workings clearly, pass necessary adjustment entry in the books of the firm. [4 marks]

Solution:

Concept:

- Interest on capital is calculated on opening capitals. Recover opening capital by adding drawings to closing capital and subtracting profit already credited.
- Compare each partner's correct total appropriation with profit actually credited. A partner credited too much is debited; a partner credited too little is credited.

Step 1: Recover opening capitals and calculate omitted appropriations The balance sheet capitals already include the year's profit allocation and exclude drawings. Profit of Rs 40,000 was originally credited in the ratio $2 : 3$, giving Puneet Rs 16,000 and Akshara Rs 24,000. Annual drawings are $2,500 \times 12 = \text{Rs } 30,000$ and $10,000 \times 4 = \text{Rs } 40,000$ respectively.

$$\begin{aligned}
\text{Puneet's opening capital} &= 90,000 + 30,000 - 16,000 = \text{Rs } 1,04,000,\\
\text{Akshara's opening capital} &= 1,10,000 + 40,000 - 24,000 = \text{Rs } 1,26,000,\\
\text{Puneet's interest} &= 1,04,000 \times 5\% = \text{Rs } 5,200,\\
\text{Akshara's interest} &= 1,26,000 \times 5\% = \text{Rs } 6,300.
\end{aligned}$$

Akshara's annual commission is $1,000 \times 4 = \text{Rs } 4,000$. No interest on drawings is charged because the question does not provide for it.

Step 2: Compare correct and actual credits Residual profit after the omitted appropriations is

$$40,000 - 5,200 - 6,300 - 4,000 = \text{Rs } 24,500.$$

Puneet's share is $24,500 \times 2/5 = \text{Rs } 9,800$; Akshara's share is $24,500 \times 3/5 = \text{Rs } 14,700$.

Particulars	Puneet (Rs)	Akshara (Rs)
Interest on capital	5,200	6,300
Commission	–	4,000
Residual profit share	9,800	14,700
Correct total credit	15,000	25,000
Profit already credited	16,000	24,000
Adjustment	Debit 1,000	Credit 1,000

The correct total credits still add up to Rs 40,000, so the adjustment only reallocates the existing profit between the partners.

Step 3: Pass the adjustment entry **Journal of the Firm**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Puneet's Capital A/c Dr. To Akshara's Capital A/c (Being adjustment of omitted interest on capital and Akshara's commission.)		1,000	 1,000

Puneet received Rs 1,000 more than his proper entitlement, while Akshara received Rs 1,000 less. This single entry corrects both capital balances without reopening the profit and loss account.

Step 4: Conclusion Debit Puneet's Capital Account and credit Akshara's Capital Account by $\boxed{\text{Rs } 1,000}$ each.

Quick Tip to Solve: When closing capitals are supplied, undo the credited profit and restore drawings before calculating annual interest.

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19. Muskaan, Priya and Rohan were partners in a firm sharing profits and losses in the ratio of 2:3:1. The firm was dissolved on 31-3-2019. After transfer of assets (other than cash) and external liabilities to realisation account, the following transactions took place :

(a) Furniture of ₹ 70,000 was sold for ₹ 74,000 by auction and auctioneer's commission amounted to ₹ 3,000.

(b) There was an unrecorded computer which was taken over by Priya for ₹ 7,000.

(c) Creditors were paid ₹ 44,000 in full settlement of their account of ₹ 49,000.

(d) Rohan's sister's loan ₹ 20,000 was paid off by Muskaan.

(e) Expenses on dissolution were ₹ 15,000 and paid by Rohan.

(f) Loss on dissolution amounted to ₹ 24,000.

Pass necessary journal entries for the above transactions in the books of the firm. [6 marks]

Solution:

Concept:

- After assets and outside liabilities have been transferred to Realisation Account, their sale proceeds and settlement payments are recorded through that account. The earlier transfers must not be repeated.
- An unrecorded asset taken by a partner debits that partner's Capital Account and credits Realisation Account. Expenses or liabilities paid personally by a partner credit the paying partner's Capital

Account.

- The final realisation loss is debited to partners' Capital Accounts in their profit-sharing ratio of $2:3:1$.

Step 1: (a) Record furniture sale and auction commission separately Furniture has already been transferred at its book value, so credit Realisation Account with the actual sale proceeds of Rs 74,000. The auction commission is a separate realisation expense of Rs 3,000. The net cash receipt is therefore Rs 71,000.

Journal of the firm (31 March 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Bank A/c Dr. To Realisation A/c (Being furniture sold by auction)		74,000	74,000
	Realisation A/c Dr. To Bank A/c (Being auctioneer's commission paid)		3,000	3,000

Step 2: (b) and (c) Record the computer and payment to creditors Priya takes the unrecorded computer for Rs 7,000, reducing her capital entitlement. Creditors of Rs 49,000 have already been transferred to Realisation Account; only the actual payment of Rs 44,000 is now recorded. The resulting Rs 5,000 settlement gain is automatically included in Realisation Account.

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Priya's Capital A/c Dr. To Realisation A/c (Being unrecorded computer taken over by Priya)		7,000	7,000
	Realisation A/c Dr. To Bank A/c (Being creditors settled in full)		44,000	44,000

Step 3: (d) and (e) Record amounts personally paid by partners Rohan's sister is an outside lender, so her loan is an external liability already transferred to Realisation Account. Muskaan receives a capital credit for paying it. Rohan receives a capital credit for paying the firm's dissolution expenses. Neither payment passes through the firm's Bank Account.

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Realisation A/c Dr. To Muskaan's Capital A/c (Being Rohan's sister's loan paid by Muskaan)		20,000	20,000
	Realisation A/c Dr. To Rohan's Capital A/c (Being dissolution expenses paid by Rohan)		15,000	15,000

Step 4: (f) Distribute the dissolution loss

$$\text{Muskaan} = 24,000 \times \frac{2}{6} = 8,000,$$
$$\text{Priya} = 24,000 \times \frac{3}{6} = 12,000,$$
$$\text{Rohan} = 24,000 \times \frac{1}{6} = 4,000.$$

Journal of the firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Muskaan's Capital A/c Dr.		8,000	
	Priya's Capital A/c Dr.		12,000	
	Rohan's Capital A/c Dr.		4,000	
	To Realisation A/c			24,000
	(Being loss transferred in the ratio 2:3:1)			

Step 5: Conclusion The dissolution loss of Rs 24,000 is borne by Muskaan, Priya and Rohan as Rs 8,000, Rs 12,000 and Rs 4,000 respectively. The journal entries above record all six transactions.

Quick Tip to Solve: Credit the capital account of the partner who pays a firm liability personally; debit the capital account of the partner who takes an asset.

20. (a) On 1st April, 2015, Mayfair Ltd. issued 4,000 9% debentures of ₹ 100 each at a discount of 5% redeemable at a premium of 8%. The debentures were redeemable on 31st March, 2019. The company created the necessary minimum amount of debenture redemption reserve and purchased the required amount of debenture redemption investments as per the provisions of Companies Act, 2013. Pass the necessary journal entries for redemption of debentures.

(b) Hero Ltd. purchased plant and machinery for ₹ 18,00,000 from Pearl Machines Ltd. payable ₹ 3,00,000 by drawing a promissory note and the balance by issue of 9% debentures of ₹ 100 each at a premium of 20%. Pass the necessary journal entries in the books of Hero Ltd. for the above transactions. [6 marks]

Solution:

Concept:

- For this question, DRR is 25% and DRI is 15% of nominal debentures maturing in the year. Redemption payment includes the stipulated premium.
- Debentures issued to a vendor at a premium are credited to Debentures Account at nominal value and Securities Premium Reserve Account for the premium. A promissory note issued creates Bills Payable.

Step 1: (a) Calculate the redemption requirements of Mayfair Ltd.

$$\begin{aligned}\text{Nominal value} &= 4,000 \times 100 = \text{Rs } 4,00,000,\\ \text{DRR} &= 4,00,000 \times 25\% = \text{Rs } 1,00,000,\\ \text{DRI} &= 4,00,000 \times 15\% = \text{Rs } 60,000,\\ \text{Redemption premium} &= 4,00,000 \times 8\% = \text{Rs } 32,000,\\ \text{Amount due} &= 4,00,000 + 32,000 = \text{Rs } 4,32,000.\end{aligned}$$

DRI is purchased by 30 April 2018. The issue discount does not reduce the redemption payment; the redemption premium liability was created on issue.

Step 2: (a) Record reserve creation, investment and redemption Journal of Mayfair Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
Before redemption	Surplus in Statement of Profit and Loss A/c Dr. To Debenture Redemption Reserve A/c (Being minimum DRR created)		1,00,000	 1,00,000
30-4-2018	Debenture Redemption Investment A/c Dr. To Bank A/c (Being required investment made)		60,000	 60,000
31-3-2019	Bank A/c Dr. To Debenture Redemption Investment A/c (Being investment realised at book value)		60,000	 60,000
31-3-2019	9% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Debentureholders A/c (Being redemption amount made due)		4,00,000 32,000	 4,32,000
31-3-2019	Debentureholders A/c Dr. To Bank A/c (Being debentureholders paid)		4,32,000	 4,32,000
31-3-2019	Debenture Redemption Reserve A/c Dr. To General Reserve A/c (Being DRR transferred after redemption)		1,00,000	 1,00,000

No sale price or investment income is specified; the investment is realised at its carrying amount.

Step 3: (b) Calculate the debentures issued by Hero Ltd.

$$\begin{aligned}\text{Balance payable} &= 18,00,000 - 3,00,000 = \text{Rs } 15,00,000,\\ \text{Issue price per debenture} &= 100 + 20 = \text{Rs } 120,\\ \text{Number issued} &= 15,00,000 \div 120 = 12,500,\\ \text{Nominal value} &= 12,500 \times 100 = \text{Rs } 12,50,000,\\ \text{Securities premium} &= 12,500 \times 20 = \text{Rs } 2,50,000.\end{aligned}$$

Step 4: (b) Record the purchase and discharge of the vendor Journal of Hero Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Plant and Machinery A/c Dr. To Pearl Machines Ltd. A/c (Being plant and machinery purchased)		18,00,000	 18,00,000
	Pearl Machines Ltd. A/c Dr. To Bills Payable A/c To 9% Debentures A/c To Securities Premium Reserve A/c (Being vendor paid by promissory note and 12,500 debentures issued at 20% premium)		18,00,000	 3,00,000 12,50,000 2,50,000

Step 5: Conclusion Mayfair Ltd. redeems its debentures for Rs 4,32,000, having created DRR of Rs 1,00,000 and DRI of Rs 60,000. Hero Ltd. issues 12,500 debentures, credits Securities Premium Reserve by Rs 2,50,000 and issues a promissory note for Rs 3,00,000.

Quick Tip to Solve: Calculate Mayfair's reserve and investment on Rs 4,00,000 face value; divide Hero's balance purchase consideration by Rs 120, not Rs 100.

OR

20. (a) BGP Ltd. invited applications for issuing 15,000, 11% debentures of ₹ 100 each at a premium of ₹ 50 per debenture. The full amount was payable on application. Applications were received for 25,000 debentures. Applications for 5,000 debentures were rejected and the application money was refunded. Debentures were allotted to the remaining applicants on pro-rata basis. Pass the necessary journal entries for the above transactions in the books of BGP Ltd.

(b) Agam Ltd. issued 40,000 9% debentures of ₹ 100 each on April 1, 2018 at a discount of 10%, redeemable at a premium of 10%. Assuming that the interest was paid half yearly on September 30 and March 31 and the tax deducted at source was 10%, give journal entries relating to debenture interest for the half year ended March 31, 2019. [6 marks]

Solution:

Concept:

- Debentures issued at premium credit their face value to Debentures Account and the premium to Securities Premium Reserve. Unused application money is refunded when no further instalment is due.
- Debenture interest is computed on nominal value, irrespective of discount on issue or premium on redemption. Tax deducted at source (TDS) is a liability payable to the government.

Step 1: Part (a): Compute the application money and refunds The issue price is $100 + 50 = \text{Rs } 150$ per debenture. Total application money received is $25,000 \times 150 = \text{Rs } 37,50,000$. Rejected applicants receive $5,000 \times 150 = \text{Rs } 7,50,000$. The remaining 20,000 applications receive 15,000 debentures, a ratio of $3 : 4$. Their excess application money is $(20,000 - 15,000) \times 150 = \text{Rs } 7,50,000$; this must also be refunded because the full issue price was payable on application. The amount retained is therefore Rs 22,50,000, comprising nominal capital Rs 15,00,000 and premium Rs 7,50,000.

Step 2: Part (a): Record the issue in BGP Ltd.

Journal of BGP Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		37,50,000	
	To Debenture Application A/c			37,50,000
	(Being application money received for 25,000 debentures)			
	Debenture Application A/c Dr.		7,50,000	
	To Bank A/c			7,50,000
	(Being application money refunded on 5,000 rejected applications)			
	Debenture Application A/c Dr.		7,50,000	
	To Bank A/c			7,50,000
	(Being excess application money refunded to pro-rata applicants)			
	Debenture Application A/c Dr.		22,50,000	
	To 11% Debentures A/c			15,00,000
	To Securities Premium Reserve			7,50,000
	(Being 15,000 debentures allotted at a premium of Rs 50 each)			

Step 3: Part (b): Calculate interest and tax The nominal debenture liability is $40,000 \times 100 =$ Rs $40,00,000$. For the six months from October 1, 2018 to March 31, 2019,

$$I = 40,00,000 \times \frac{9}{100} \times \frac{6}{12} = \text{Rs } 1,80,000.$$

TDS is $1,80,000 \times 10\% =$ Rs $18,000$, leaving Rs 1,62,000 payable to debentureholders. The issue discount and redemption premium do not reduce or increase this contractual interest.

Step 4: Part (b): Record the half-year interest

Journal of Agam Ltd. (March 31, 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
Mar. 31	Debenture Interest A/c Dr.		1,80,000	
	To Debentureholders A/c			1,62,000
	To TDS Payable A/c			18,000
	(Being half-yearly interest accrued after deduction of tax at source)			
Mar. 31	Debentureholders A/c Dr.		1,62,000	
	To Bank A/c			1,62,000
	(Being net interest paid to debentureholders)			
Mar. 31	Statement of Profit and Loss Dr.		1,80,000	
	To Debenture Interest A/c			1,80,000
	(Being debenture interest transferred to profit and loss)			

If the tax is remitted to the government, debit TDS Payable A/c and credit Bank A/c with Rs 18,000 on the remittance date; no remittance date is specified in the question.

Step 5: Conclusion BGP Ltd. records debentures of Rs 15,00,000 and securities premium of Rs 7,50,000, refunding Rs 15,00,000 in total. Agam Ltd. incurs half-yearly interest of Rs 1,80,000, pays Rs 1,62,000 to holders and deducts TDS of Rs 18,000.

Quick Tip to Solve: When the entire issue price is due on application, refund the pro-rata surplus too; compute debenture interest on face value.

21. Premier Tools Ltd. invited applications for issuing 2,00,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share. The amount was payable as follows: On application – ₹ 5 per share (including premium); On allotment – ₹ 3 per share; On first & final call – Balance.

Applications were received for 2,50,000 shares. Applications for 10,000 shares were rejected and pro-rata allotment was made to the remaining applicants. Over payments received on application were adjusted towards sums due on allotment. All calls were made and duly received except allotment and first and final call from Naveen who applied for 7,200 shares. His shares were forfeited. Half of the forfeited shares were reissued for ₹ 48,000 as fully paid. Pass the necessary journal entries for the above transactions in the books of Premier Tools Ltd. Open calls-in-arrears account wherever required. [8 marks]

Solution:

Concept:

- Application premium is credited to Securities Premium Reserve when shares are allotted. Excess application money is adjusted against allotment dues.
- On forfeiture, debit called-up share capital, credit the actual unpaid calls-in-arrears and credit Share Forfeiture with capital already received. Only the forfeiture relating to reissued shares goes to Capital Reserve.

Step 1: Compute the pro-rata allotment and instalments The first and final call is $10+2-5-3=$ Rs 4 per share. Applications for 10,000 shares are rejected and Rs 50,000 refunded. The remaining 2,40,000 applications receive 2,00,000 shares in the ratio $5:6$. Application money retained is Rs 12,00,000, of which Rs 6,00,000 is application capital, Rs 4,00,000 is securities premium and Rs 2,00,000 is excess adjusted against allotment. Total allotment due is Rs 6,00,000 and first and final call due is Rs 8,00,000.

Step 2: Compute Naveen's arrears and forfeiture Naveen receives $7,200\times 5/6=6,000$ shares. He paid Rs 36,000 on application, including Rs 12,000 premium and Rs 18,000 capital for his allotted shares; the remaining Rs 6,000 is adjusted against allotment. His allotment due is Rs 18,000, so the unpaid balance is Rs 12,000. His unpaid call is $6,000\times 4=$ Rs $24,000$. Thus calls-in-arrears total Rs 36,000 and capital already received is $60,000-36,000=$ Rs $24,000$. The securities premium was received in full on application, so it is not reversed at forfeiture.

Step 3: Record application and allotment

Journal of Premier Tools Ltd. (application and allotment)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		12,50,000	
	To Equity Share Application A/c			12,50,000
	(Being application money received for 2,50,000 shares)			
	Equity Share Application A/c Dr.		50,000	
	To Bank A/c			50,000
	(Being money refunded on rejected applications)			
	Equity Share Application A/c Dr.		12,00,000	
	To Equity Share Capital A/c			6,00,000
	To Securities Premium Reserve			4,00,000
	To Equity Share Allotment A/c			2,00,000
	(Being application money transferred and surplus adjusted against allotment)			
	Equity Share Allotment A/c Dr.		6,00,000	
	To Equity Share Capital A/c			6,00,000
	(Being allotment money due on 2,00,000 shares)			
	Bank A/c Dr.		3,88,000	
	Calls-in-Arrears A/c Dr.		12,000	
	To Equity Share Allotment A/c			4,00,000
	(Being allotment balance received except Naveen's arrears)			

Step 4: Record call and forfeiture

Journal of Premier Tools Ltd. (call and forfeiture)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Equity Share First and Final Call A/c Dr.		8,00,000	
	To Equity Share Capital A/c			8,00,000
	(Being first and final call made due)			
	Bank A/c Dr.		7,76,000	
	Calls-in-Arrears A/c Dr.		24,000	
	To Equity Share First and Final Call A/c			8,00,000
	(Being call received except Naveen's unpaid amount)			
	Equity Share Capital A/c Dr.		60,000	
	To Calls-in-Arrears A/c			36,000
	To Share Forfeiture A/c			24,000
	(Being 6,000 fully called shares forfeited for non-payment)			

Step 5: Record reissue and transfer the realised capital profit Half of the forfeited shares, namely 3,000 shares, are reissued for Rs 48,000. Their nominal value is Rs 30,000, so the premium on reissue is Rs 18,000. There is no reissue discount. Forfeiture attributable to these shares is $24,000 \times 3,000/6,000 =$ Rs $12,000$, entirely transferred to Capital Reserve. The other Rs 12,000 remains in Share Forfeiture until the remaining shares are reissued.

Journal of Premier Tools Ltd. (reissue)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		48,000	
	To Equity Share Capital A/c			30,000
	To Securities Premium Reserve			18,000
	(Being 3,000 forfeited shares reissued as fully paid at Rs 16 per share)			
	Share Forfeiture A/c Dr.		12,000	
	To Capital Reserve A/c			12,000
	(Being forfeiture profit on the reissued shares transferred to capital reserve)			

Step 6: Conclusion Naveen is allotted 6,000 shares; calls-in-arrears are Rs 36,000 and forfeiture is Rs 24,000. Reissue of 3,000 shares creates securities premium of Rs 18,000 and Capital Reserve of Rs 12,000. Share Forfeiture retains Rs 12,000 for the unreissued shares.

Quick Tip to Solve: Include the excess application adjusted to allotment in capital received before calculating forfeiture; premium already collected is never forfeited.

OR

21. Concept Stationary Ltd. invited applications for issuing 3,00,000 shares of ₹ 10 each at a premium of ₹ 3 per share. The amounts were payable as follows: On application and allotment – ₹ 7 per share; On first & final call – balance (including premium of ₹ 3).

Applications were received for 4,00,000 shares & allotment was made as follows:

(i) To applicants for 80,000 shares – 80,000 shares.

(ii) To applicants for 40,000 shares – nil.

(iii) Balance of the applicants were allotted shares on pro-rata basis.

Excess money received with applications was adjusted towards sums due on first and final call. Amit, who belonged to category (i) and was allotted 4,000 shares and Veni, who belonged to category (iii) and was allotted 4,400 shares failed to pay the first and final call money. Their shares were forfeited. The forfeited shares were re-issued at ₹ 7 per share fully paid-up. Pass necessary journal entries for the above transactions in the books of the company. [8 marks]

Solution:

Concept:

- Application and allotment is Rs 7 per share, entirely capital; the final call is Rs 6, comprising capital Rs 3 and premium Rs 3.
- Excess application money on pro-rata allotment is adjusted against the call. On forfeiture, unpaid premium is reversed; share forfeiture records capital already received.
- Reissue discount is debited to Share Forfeiture; its remaining balance relating to reissued shares becomes capital reserve.

Step 1: Calculate allotment and excess application money Category (i) receives 80,000 shares in full; category (ii) receives none and its Rs 2,80,000 is refunded. Category (iii) applies for $4,00,000 - 80,000 - 40,000 = 2,80,000$ shares and receives $3,00,000 - 80,000 = 2,20,000$. Hence

application:allotment is $14 : 11$.

$$\text{Excess application money} = (2,80,000 - 2,20,000) \times 7 = \text{Rs } 4,20,000.$$

The application receipts are Rs 28,00,000, while application and allotment capital due is Rs 21,00,000.

Step 2: Calculate default and forfeiture Amit's call due is $4,000 \times 6 = \text{Rs } 24,000$. Veni applied for $4,400 \times 14/11 = 5,600$ shares. Her excess application money is $1,200 \times 7 = \text{Rs } 8,400$; thus unpaid call is $4,400 \times 6 - 8,400 = \text{Rs } 18,000$. Total unpaid call is Rs 42,000. Veni's advance of Rs 8,400 covers the premium on 2,800 shares at Rs 3; unpaid premium is therefore Rs 4,800. Amit's unpaid premium is Rs 12,000. Thus premium reversed is Rs 16,800, and capital forfeited is $84,000 + 16,800 - 42,000 = \text{Rs } 58,800$. The remaining Rs 8,400 premium has already been received and is retained.

Step 3: Record application, allotment and call Journal of Concept Stationary Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		28,00,000	
	To Share Application and Allotment A/c			28,00,000
	(Being application money received)			
	Share Application and Allotment A/c Dr.		28,00,000	
	To Share Capital A/c			21,00,000
	To Bank A/c			2,80,000
	To Share First and Final Call A/c			4,20,000
	(Being allotment, refund and excess adjustment)			
	Share First and Final Call A/c Dr.		18,00,000	
	To Share Capital A/c			9,00,000
	To Securities Premium A/c			9,00,000
	(Being final call due)			
	Bank A/c Dr.		13,38,000	
	To Share First and Final Call A/c			13,38,000
	(Being call received after adjustment and defaults)			

Step 4: Record forfeiture and reissue Journal of Concept Stationary Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Capital A/c Dr.		84,000	
	Securities Premium A/c Dr.		16,800	
	To Share First and Final Call A/c			42,000
	To Share Forfeiture A/c			58,800
	(Being 8,400 shares forfeited for unpaid call)			
	Bank A/c Dr.		58,800	
	Share Forfeiture A/c Dr.		25,200	
	To Share Capital A/c			84,000
	(Being shares reissued at Rs 7 fully paid)			
	Share Forfeiture A/c Dr.		33,600	
	To Capital Reserve A/c			33,600
	(Being surplus on reissue transferred)			

Step 5: Conclusion Capital reserve is Rs 33,600; all 8,400 forfeited shares are reissued fully paid.

Quick Tip to Solve: For Veni, apply excess application money to the premium component of the call before reversing unpaid premium.

22. Achla and Bobby were partners in a firm sharing profits and losses in the ratio of 3 : 1. On 31st March, 2019, their balance sheet was as follows:

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	1,10,000	Cash at bank	60,000
General Reserve	40,000	Debtors	40,000
Workmen's compensation reserve	50,000	Stock	45,000
Capitals: Achla 4,00,000 Bobby 2,00,000	6,00,000	Furniture	1,55,000
		Land & Building	5,00,000
Total	8,00,000	Total	8,00,000

On 1st April, 2019, they admitted Vihaan as a new partner for 1/5th share in the profits of the firm on the following terms:

(a) Vihaan brought ₹ 1,00,000 as his capital and the capitals of Achla and Bobby were to be adjusted on the basis of Vihaan's capital; any surplus or deficiency was to be adjusted by opening current accounts.

(b) Goodwill of the firm was valued at ₹ 4,00,000. Vihaan brought the necessary amount in cash for his share of goodwill premium, half of which was withdrawn by the old partners.

(c) Liability on account of workmen's compensation amounted to ₹ 80,000.

(d) Achla took over stock at ₹ 35,000.

(e) Land and building was to be appreciated by 20%.

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of the reconstituted firm on Vihaan's admission. [8 marks]

Solution:

Concept:

- Old profit ratio is $3:1$. Vihaan takes $1/5$, leaving $4/5$ for the old partners in their old ratio; the new ratio is $3:1:1$.
- Goodwill premium compensates sacrificing partners. Revaluation profit and general reserve belong only to the old partners in their old ratio.
- Capital based on the incoming partner fixes total capital at $1,00,000 \div (1/5) = \text{Rs } 5,00,000$; excess adjusted capitals become current account credit balances.

Step 1: Calculate goodwill and revaluation The sacrificing ratio is $3:1$; Vihaan brings goodwill premium $4,00,000/5 = \text{Rs } 80,000$. Achla receives Rs 60,000 and Bobby Rs 20,000; half is withdrawn, namely Rs 30,000 and Rs 10,000. General reserve Rs 40,000 is credited Rs 30,000 and Rs 10,000. The workmen's compensation reserve Rs 50,000 covers part of the actual Rs 80,000 liability; the deficiency Rs 30,000 is a revaluation loss. Stock taken over for Rs 35,000 has book value Rs 45,000, giving loss Rs 10,000. Land and building appreciates by Rs 1,00,000. Thus net revaluation profit is Rs 60,000, allocated Rs 45,000 and Rs 15,000.

Step 2: Prepare Revaluation Account Revaluation Account

Dr. Particulars	Rs	Cr. Particulars	Rs
To Workmen's compensation liability	30,000	By Land and Building	1,00,000
To Stock	10,000		
To Achla's Capital (profit)	45,000		
To Bobby's Capital (profit)	15,000		
Total	1,00,000	Total	1,00,000

Step 3: Prepare Partners Capital Accounts Partners' Capital Accounts (all amounts in Rs)

Dr. Particulars	Achla	Bobby	Vihaan	Cr. Particulars	Achla	Bobby	Vihaan
To Bank (withdrawal)	30,000	10,000	–	By Balance b/d	4,00,000	2,00,000	–
To Stock	35,000	–	–	By General Reserve	30,000	10,000	–
To Current A/c	1,70,000	1,35,000	–	By Goodwill Premium	60,000	20,000	–
To Balance c/d	3,00,000	1,00,000	1,00,000	By Revaluation	45,000	15,000	–
				By Bank (capital)	–	–	1,00,000
Total	5,35,000	2,45,000	1,00,000	Total	5,35,000	2,45,000	1,00,000

Before capital adjustment Achla has Rs 4,70,000 and Bobby Rs 2,35,000. Required fixed capitals in ratio $3:1:1$ are Rs 3,00,000, Rs 1,00,000 and Rs 1,00,000. Accordingly the old partners' excess Rs 1,70,000 and Rs 1,35,000 is transferred to their respective current accounts; it is not paid out.

Step 4: Prepare the balance sheet Bank balance is $60,000+1,00,000+80,000-40,000 =$ Rs $2,00,000$. Stock is removed because Achla takes it over. Goodwill is not retained as an asset since its premium is brought in cash. The full workmen's compensation liability is shown at Rs 80,000; no reserve remains.
Balance Sheet of Achla, Bobby and Vihaan as at 1st April, 2019

Liabilities	Rs	Assets	Rs
Creditors	1,10,000	Cash at bank	2,00,000
Workmen's compensation liability	80,000	Debtors	40,000
Partners' capitals:		Furniture	1,55,000
Achla	3,00,000	Land and Building	6,00,000
Bobby	1,00,000		
Vihaan	1,00,000		
Current accounts:			
Achla	1,70,000		
Bobby	1,35,000		
Total	9,95,000	Total	9,95,000

Step 5: Conclusion Revaluation profit is Rs 60,000. Fixed capitals are Rs 3,00,000, Rs 1,00,000 and Rs 1,00,000; the reconstituted balance sheet totals Rs 9,95,000.

Quick Tip to Solve: Use Vihaan's capital to fix total capital; transfer the old partners' surplus to current accounts rather than bank.

OR

22. Gita, Radha and Garv were partners in a firm sharing profits and losses in the ratio of 3 : 5 : 2. On 31st March, 2019, their balance sheet was as follows:

Liabilities	Amount (₹)	Assets	Amount (₹)
Sundry Creditors	60,000	Cash	50,000
General Reserve	40,000	Stock	80,000
Capitals: Gita 3,00,000 Radha 2,00,000 Garv 1,00,000	6,00,000	Debtors	40,000
		Investments	30,000
		Buildings	5,00,000
Total	7,00,000	Total	7,00,000

Radha retired on the above date and it was agreed that:

(a) Goodwill of the firm be valued at ₹ 3,00,000 and Radha's share be adjusted through the capital accounts of Gita and Garv.

(b) Stock was to be appreciated by 20%.

(c) Buildings were found undervalued by ₹ 1,00,000.

(d) Investments were sold for ₹ 34,000.

(e) Capital of the new firm was fixed at ₹ 5,00,000 which will be in the new profit sharing ratio of the partners; the necessary adjustments for this purpose were to be made by opening current accounts of the partners.

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of the reconstituted firm on Radha's retirement. [8 marks]

Solution:

Concept:

- In the absence of a stated new ratio, Gita and Garv continue in their old relative ratio, $3:2$. Their gaining ratio is also $3:2$.
- Revaluation profit and general reserve belong to all old partners in $3:5:2$. Radha receives her goodwill share through the gaining partners' capital accounts.
- The revised fixed capitals total Rs 5,00,000. Transfer any surplus or deficiency to current accounts; the retiring partner's unpaid balance becomes a loan.

Step 1: Calculate goodwill, reserve and revaluation Radha's share of goodwill is $3,00,000 \times 5/10 =$ Rs $1,50,000$. Debit Gita with Rs 90,000 and Garv with Rs 60,000, and credit Radha with Rs 1,50,000. Gita gains $3/5 - 3/10 = 3/10$, while Garv gains $2/5 - 2/10 = 2/10$.

General reserve of Rs 40,000 is credited to Gita, Radha and Garv as Rs 12,000, Rs 20,000 and Rs 8,000 respectively. Stock appreciation is $80,000 \times 20\% =$ Rs $16,000$; the building increase is Rs 1,00,000; investment sale profit is $34,000 - 30,000 =$ Rs $4,000$.

Revaluation Account

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Gita's Capital	36,000	By Stock	16,000
To Radha's Capital	60,000	By Buildings	1,00,000
To Garv's Capital	24,000	By Cash (sale profit)	4,000
Total	1,20,000	Total	1,20,000

Thus, the revaluation profit of Rs 1,20,000 is transferred in the old ratio.

Step 2: Prepare the capital accounts The balances before fixing the continuing capitals are:

$$\text{Gita: } 3,00,000 + 12,000 + 36,000 - 90,000 = 2,58,000,$$
$$\text{Radha: } 2,00,000 + 20,000 + 60,000 + 1,50,000 = 4,30,000,$$
$$\text{Garv: } 1,00,000 + 8,000 + 24,000 - 60,000 = 72,000.$$

The required capitals are $5,00,000 \times 3/5 =$ Rs $3,00,000$ for Gita and $5,00,000 \times 2/5 =$ Rs $2,00,000$ for Garv. The deficiencies, Rs 42,000 and Rs 1,28,000, are debited to their current accounts and credited to capitals. Radha's entire amount is transferred to her loan account since no payment is specified.

Partners' Capital Accounts (amounts in Rs)

Dr. Particulars	Gita	Radha	Garv	Cr. Particulars	Gita	Radha	Garv
To Goodwill	90,000	—	60,000	By Balance b/d	3,00,000	2,00,000	1,00,000
To Radha's Loan	—	4,30,000	—	By General Reserve	12,000	20,000	8,000
To Balance c/d	3,00,000	—	2,00,000	By Revaluation	36,000	60,000	24,000
				By Goodwill	—	1,50,000	—
				By Current A/cs	42,000	—	1,28,000
Total	3,90,000	4,30,000	2,60,000	Total	3,90,000	4,30,000	2,60,000

Step 3: Prepare the reconstituted balance sheet Cash becomes $50,000 + 34,000 =$ Rs $84,000$, stock becomes Rs 96,000, and buildings become Rs 6,00,000. Investments have been sold completely, and the general reserve has been fully distributed. Current-account debit balances appear as assets because no cash is introduced for the capital adjustment.

Balance Sheet of Gita and Garv as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Sundry Creditors	60,000	Cash	84,000
Radha's Loan	4,30,000	Stock	96,000
Capital Accounts:		Debtors	40,000
Gita	3,00,000	Buildings	6,00,000
Garv	2,00,000	Current Accounts (Dr.):	
		Gita	42,000
		Garv	1,28,000
Total	9,90,000	Total	9,90,000

Step 4: Conclusion Revaluation profit is Rs 1,20,000. Radha's loan is Rs 4,30,000; Gita's and Garv's fixed capitals are Rs 3,00,000 and Rs 2,00,000. The balance sheet totals Rs 9,90,000.

Quick Tip to Solve: Credit Radha with her goodwill share as well as her reserve and revaluation shares before transferring the unpaid balance to loan.

Part B (20 marks)

Option – I (Analysis of Financial Statements)

23. Short term highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value are called _____. [1 mark]

Solution:

Concept:

- Cash equivalents are short-term, highly liquid investments held to meet short-term cash commitments.
- Ready conversion into a known cash amount and insignificant value risk distinguish them from other investments.

Step 1: Identify the characteristics The investments described can be converted readily into a known amount of cash. Thus, the amount available for settling a short-term commitment is predictable.

Step 2: Apply the definition Their short maturity and insignificant risk of changes in value make them cash equivalents. A long-term investment or an investment exposed to substantial price changes would not satisfy these conditions.

Step 3: Conclusion The blank is filled by cash equivalents.

Quick Tip to Solve: Check both ready convertibility and insignificant value risk before calling an investment a cash equivalent.

24. What is meant by 'Cash Flow' ? [1 mark]

Solution:

Concept:

- Cash flow means inflows and outflows of cash and cash equivalents.
- An inflow increases cash resources; an outflow decreases them.

Step 1: Explain inflows Cash received from customers or from raising a cash loan is an inflow because cash and cash equivalents enter the business.

Step 2: Explain outflows Cash paid to suppliers or for purchasing equipment is an outflow because cash and cash equivalents leave the business. The term covers movements during a period, rather than the cash balance on one date.

Step 3: Conclusion Cash flow means the inflows and outflows of cash and cash equivalents.

Quick Tip to Solve: Use the words inflows and outflows, and include cash equivalents in the definition.

25. Which of the following is a limitation of financial analysis? [1 mark]

(a) It is just a study of reports of the company.

(b) It judges the ability of the firm to repay its debts.

(c) It identifies the reasons for change in financial position.

(d) It ascertains the relative importance of different components of the financial position of the firm.

Correct Answer: (a) It is just a study of reports of the company.

Solution:

Concept:

- Financial analysis interprets relationships and changes in financial statement figures.
- Its dependence on published reports limits the information available for analysis.

Step 1: Identify the limitation Financial analysis is just a study of reports of the company. It depends on the information and accounting figures in those reports and cannot by itself capture all qualitative factors affecting the business.

Step 2: Distinguish the other statements Judging debt repayment ability, identifying reasons for changes in financial position and assessing the relative importance of components describe purposes or benefits of analysis. They are not its limitations.

Step 3: Conclusion The correct option is (a): It is just a study of reports of the company.

Quick Tip to Solve: Separate a restriction on available information from the benefits financial analysis provides.

26. State giving reason, whether issue of shares for consideration other than cash will result into inflow, outflow or no flow of cash. [1 mark]

Solution:

Concept:

- Only movements of cash and cash equivalents constitute cash flows.
- A transaction settled through shares can change assets and equity without changing cash.

Step 1: Identify the consideration Issue of shares for consideration other than cash means that the company receives a non-cash asset or settles an obligation by issuing shares, rather than receiving cash from the allottee.

Step 2: Check the cash effect Neither cash nor cash equivalents enter or leave the business through this transaction. For example, shares issued directly to a vendor for machinery increase machinery and share capital but do not change the cash balance.

Step 3: Conclusion There is no flow of cash, because no cash or cash equivalents are received or paid.

Quick Tip to Solve: Trace the actual consideration: shares exchanged directly for an asset create no cash movement.

27. Which of the following is not a tool of financial analysis? [1 mark]

(a) Comparative income statement

(b) Comparative position statement

(c) Statement of profit and loss

(d) Cash flow statement

Correct Answer: (c) Statement of profit and loss

Solution:

Concept:

- Tools of financial analysis help compare, relate or interpret financial statement information.
- A statement of profit and loss is a basic financial statement on which analysis is performed.

Step 1: Identify the basic statement The statement of profit and loss reports income, expenses and the resulting profit or loss for a period. As the income statement, it supplies the underlying information for analysis and is not itself a tool of financial analysis.

Step 2: Check the other options Comparative income statements and comparative position statements compare financial information across periods. A cash flow statement analyses cash inflows and outflows by activity. These three are recognised tools of financial analysis.

Step 3: Conclusion The correct option is (c): Statement of profit and loss.

Quick Tip to Solve: Identify the original financial statement before choosing among the analytical statements.

28. As per Schedule III, Part I of the Companies Act, 2013 'Unpaid dividend' will be presented under which of the following head/sub-head, in the Balance Sheet of a company : [1 mark]

(A) Reserves and Surplus

(B) Current Liabilities

(C) Contingent Liabilities

(D) Shareholders Funds

Correct Answer: (B) Current Liabilities

Solution:

Concept:

- Unpaid dividend is a dividend declared by the company but still payable to shareholders.
- A present obligation payable in the short term is a current liability; unpaid dividend appears within other current liabilities.

Step 1: Identify the nature of the balance Once declared, a dividend creates an obligation to shareholders. The unpaid amount is therefore a liability, rather than part of the profit retained by the company.

Step 2: Select the prescribed classification Schedule III presents unpaid dividend under Other Current Liabilities within Current Liabilities. Reserves and Surplus and Shareholders Funds represent equity

balances, whereas Contingent Liabilities are possible obligations; a declared unpaid dividend is an existing payable.

Step 3: Conclusion Unpaid dividend is presented under Current Liabilities. Hence, the correct option is (B).

Quick Tip to Solve: A declared dividend still unpaid belongs with amounts payable, so look under current liabilities.

29. 'Interest accrued on investments' will be presented in the Balance Sheet of a company under the sub-head _____. [1 mark]

Solution:

Concept:

- Accrued interest is interest earned up to the reporting date but not yet received in cash.
- Interest accrued on investments is shown separately from the investment principal under Other Current Assets.

Step 1: Identify the asset The company has already earned the interest, so accrual accounting recognises a receivable even though cash has not yet been collected. It is an asset, not an expense or liability.

Step 2: Identify the sub-head The investment itself is classified as an investment, but the interest accrued on it is a separate receivable. Under the prescribed company balance-sheet presentation, this amount is included in the sub-head Other Current Assets.

Step 3: Conclusion The blank is: Other Current Assets.

Quick Tip to Solve: Distinguish the investment principal from interest earned on it: the latter is an other current asset.

30. The fixed assets of a company were ₹ 35,00,000. Its current assets were ₹ 4,30,000 and current liabilities were ₹ 3,30,000. During the year ended 31-03-2019 the company earned net profit before tax ₹ 18,00,000. The tax rate was 30%. Calculate return on investment. [3 marks]

Solution:

Concept:

- Return on investment measures profit before interest and tax as a percentage of capital employed: $\text{ROI} = \frac{\text{Profit before interest and tax}}{\text{Capital employed}} \times 100$.
- Capital employed equals fixed assets plus working capital, with working capital equal to current assets less current liabilities.

Step 1: Calculate working capital The current assets available to finance operations are reduced by

current liabilities to obtain net working capital:

$$\begin{aligned}\text{Working capital} &= \text{Current assets} - \text{Current liabilities}\\ &= \text{Rs } 4,30,000 - \text{Rs } 3,30,000\\ &= \text{Rs } 1,00,000.\end{aligned}$$

Current liabilities must be deducted rather than added because they finance part of the current assets.

Step 2: Calculate capital employed The investment in the business comprises its fixed assets and net working capital:

$$\begin{aligned}\text{Capital employed} &= \text{Fixed assets} + \text{Working capital}\\ &= \text{Rs } 35,00,000 + \text{Rs } 1,00,000\\ &= \text{Rs } 36,00,000.\end{aligned}$$

This is also total assets less current liabilities. No averaging of capital is needed because separate opening and closing capital figures are not supplied.

Step 3: Apply the return-on-investment formula The given net profit before tax is Rs 18,00,000. No interest expense is given, so there is no interest adjustment to add back; this amount is the numerator for the ratio. The 30% tax rate does not reduce this numerator, since return on investment uses profit before interest and tax.

$$\text{ROI} = \frac{18,00,000}{36,00,000} \times 100 = 50\%.$$

Thus every Rs 100 of capital employed generates Rs 50 of profit before interest and tax for the year.

Step 4: Conclusion Return on investment is $\boxed{50\%}$.

Quick Tip to Solve: Use profit before tax for ROI; do not deduct the given tax rate from the numerator.

OR

30. Inventory in the beginning ₹ 30,000
Inventory at the end ₹ 50,000
Net Purchases ₹ 5,00,000
Wages ₹ 25,000
Salaries ₹ 40,000
Revenue from operations ₹ 8,00,000
Carriage Inwards ₹ 5,000
Returns Outwards ₹ 30,000
Calculate Inventory Turnover Ratio. [3 marks]

Solution:

Concept:

- Inventory turnover ratio equals cost of revenue from operations divided by average inventory.

- Cost of revenue from operations equals opening inventory plus net purchases plus direct expenses minus closing inventory. Wages and carriage inwards are direct expenses; salaries are an indirect expense.

Step 1: Calculate average inventory Use both the beginning and ending inventory balances, because the ratio relates the annual cost of goods sold to the stock normally held during the year:

$$\begin{aligned}\text{Average inventory} &= \frac{\text{Opening inventory} + \text{Closing inventory}}{2} \\ &= \frac{30,000 + 50,000}{2} = \text{Rs } 40,000.\end{aligned}$$

Using only closing inventory would not represent average stock.

Step 2: Calculate cost of revenue from operations Net purchases are already given as Rs 5,00,000. Therefore, the separately stated returns outwards of Rs 30,000 must not be deducted again. Include wages and carriage inwards, which bring goods to their saleable condition and location. Exclude salaries, an indirect operating expense.

$$\begin{aligned}\text{Cost of revenue from operations} &= 30,000 + 5,00,000 + 25,000 \\ &\quad + 5,000 - 50,000 \\ &= \text{Rs } 5,10,000.\end{aligned}$$

Closing inventory is deducted because its cost relates to goods that remain unsold, rather than to goods sold during the year.

Step 3: Calculate the turnover ratio Apply the cost-based inventory turnover formula:

$$\begin{aligned}\text{Inventory turnover ratio} &= \frac{\text{Cost of revenue from operations}}{\text{Average inventory}} \\ &= \frac{5,10,000}{40,000} = 12.75 \text{ times}.\end{aligned}$$

Revenue from operations of Rs 8,00,000 is not the numerator: inventory is measured at cost, so the comparable flow is cost of goods sold. The computed figure means that average inventory was sold and replaced 12.75 times during the year.

Step 4: Conclusion Inventory turnover ratio is $\boxed{12.75 \text{ times}}$.

Quick Tip to Solve: When purchases are explicitly net purchases, do not subtract returns outwards a second time.

31. Prepare common size statement of profit and loss from the following information :

Particulars	Note No.	2017-18	2016-17
Revenue from operations		₹ 16,00,000	₹ 8,00,000
Cost of material consumed(% of revenue from operations)		60%	50%
Operating expenses		₹ 80,000	₹ 40,000
Income tax rate		40%	30%

[4 marks]

Solution:

Concept:

- In a common size statement of profit and loss, revenue from operations for each year is the base, taken as 100%. Each expense and profit is expressed as a percentage of that year's revenue.
- Profit before tax equals revenue less materials consumed and operating expenses. Tax is calculated on profit before tax, while its common size percentage is calculated on revenue.

Step 1: Calculate the expenses and profits for each year For 2017-18, materials consumed are $16,00,000 \times 60\% =$ Rs $9,60,000$. Thus profit before tax is $16,00,000 - 9,60,000 - 80,000 =$ Rs $5,60,000$. Tax is $5,60,000 \times 40\% =$ Rs $2,24,000$, leaving profit after tax of Rs $3,36,000$.

For 2016-17, materials consumed are $8,00,000 \times 50\% =$ Rs $4,00,000$. Profit before tax is $8,00,000 - 4,00,000 - 40,000 =$ Rs $3,60,000$. Tax is $3,60,000 \times 30\% =$ Rs $1,08,000$, leaving profit after tax of Rs $2,52,000$.

Step 2: Prepare the common size statement **Common Size Statement of Profit and Loss**

Particulars	2017-18 Rs	2016-17 Rs	2017-18 %	2016-17 %
Revenue from operations	16,00,000	8,00,000	100	100
Expenses:				
Cost of materials consumed	9,60,000	4,00,000	60	50
Operating expenses	80,000	40,000	5	5
Total expenses	10,40,000	4,40,000	65	55
Profit before tax	5,60,000	3,60,000	35	45
Less: Income tax	2,24,000	1,08,000	14	13.5
Profit after tax	3,36,000	2,52,000	21	31.5

For example, the common size tax percentage for 2017-18 is $2,24,000/16,00,000 \times 100 = 14\%$. The same procedure gives 13.5% for 2016-17; the tax rates themselves are not the revenue-based percentages.

Step 3: Conclusion Profit after tax is Rs 3,36,000 (21% of revenue) in 2017-18 and Rs 2,52,000 (31.5% of revenue) in 2016-17. Although absolute profit increased, the net profit margin fell by 10.5 percentage points.

Quick Tip to Solve: Calculate tax on profit before tax first; divide the resulting tax amount by revenue to obtain its common size percentage.

OR

31. From the following Balance Sheets of Vinayak Ltd. as at 31st March, 2019, prepare a comparative Balance Sheet.

Vinayak Ltd.

Balance Sheet as at 31st March, 2019

Particulars	Note No.	31-3-19 (₹)	31-3-18 (₹)
Equity and Liabilities			
(1) Shareholders Funds			
(a) Share capital		21,00,000	20,00,000
(b) Reserves and Surplus		2,30,000	2,00,000
(2) Non-current liabilities			
Long term borrowing		5,60,000	2,00,000
(3) Current liabilities			
Trade payables		2,80,000	1,00,000
Total		31,70,000	25,00,000
Assets			
(1) Non-current Assets			
Fixed Assets			
(i) Tangible assets		21,00,000	20,00,000
(ii) Intangible assets		3,00,000	2,00,000
(2) Current Assets			
(a) Inventories		5,60,000	2,00,000
(b) cash and cash equivalents		2,10,000	1,00,000
Total		31,70,000	25,00,000

[4 marks]

Solution:

Concept:

- A comparative balance sheet shows each balance for two years, its absolute change and its percentage change, retaining the equity, liabilities and assets classification.
- Absolute change is the current year's amount minus the previous year's amount. Percentage change is absolute change/previous year's amount $\times$ 100; here 31 March 2018 is the base date.

Step 1: Calculate changes using the previous year as base Share capital increases by $21,00,000 - 20,00,000 =$ Rs $1,00,000$, or $1,00,000/20,00,000 \times 100 = 5\%$. Reserves increase by Rs 30,000, or 15%. Long-term borrowings increase by Rs 3,60,000, or 180%, and trade payables increase by Rs 1,80,000, or 180%.

Tangible assets rise by Rs 1,00,000 (5%), intangible assets by Rs 1,00,000 (50%), inventories by Rs 3,60,000 (180%) and cash and cash equivalents by Rs 1,10,000 (110%). All changes are increases, so the change columns below are positive.

Step 2: Prepare the comparative balance sheet **Vinayak Ltd.: Comparative Balance Sheet as at 31 March 2019**

Particulars	31-3-18 Rs	31-3-19 Rs	Increase Rs	Increase %
I. Equity and Liabilities				
1. Shareholders' funds				
(a) Share capital	20,00,000	21,00,000	1,00,000	5
(b) Reserves and surplus	2,00,000	2,30,000	30,000	15
Shareholders' funds subtotal	22,00,000	23,30,000	1,30,000	5.91
2. Non-current liabilities				
Long-term borrowings	2,00,000	5,60,000	3,60,000	180
3. Current liabilities				
Trade payables	1,00,000	2,80,000	1,80,000	180
Total	25,00,000	31,70,000	6,70,000	26.8
II. Assets				
1. Non-current assets				
Fixed assets:				
(a) Tangible assets	20,00,000	21,00,000	1,00,000	5
(b) Intangible assets	2,00,000	3,00,000	1,00,000	50
Non-current assets subtotal	22,00,000	24,00,000	2,00,000	9.09
2. Current assets				
(a) Inventories	2,00,000	5,60,000	3,60,000	180
(b) Cash and cash equivalents	1,00,000	2,10,000	1,10,000	110
Current assets subtotal	3,00,000	7,70,000	4,70,000	156.67
Total	25,00,000	31,70,000	6,70,000	26.8

The total increase checks on both sides: $1,00,000 + 30,000 + 3,60,000 + 1,80,000 = \text{Rs } 6,70,000$ for financing, and $1,00,000 + 1,00,000 + 3,60,000 + 1,10,000 = \text{Rs } 6,70,000$ for assets. Subtotal percentages are rounded to two decimal places.

Step 3: Conclusion Total assets and total equity and liabilities each increased from Rs 25,00,000 to Rs 31,70,000, an increase of Rs 6,70,000 or 26.8% over 31 March 2018.

Quick Tip to Solve: Use the 2018 amount in every percentage denominator, and check that the absolute increases on both sides total Rs 6,70,000.

32. Cash flow from operating activities of Starline Ltd. for the year ended 31.03.2019 was ₹ 18,000. The Balance Sheet along with notes to accounts of Starline Ltd. as at 31-03-19 is given below :

Starline limited

Balance Sheet as at 31st March, 2019

Particulars	Note No.	31-3-19 (₹)	31-3-18 (₹)
I. Equity and Liabilities :			
(1) Shareholders Funds			
(a) Share capital		18,00,000	10,00,000
(b) Reserves and Surplus	1	50,000	40,000
(2) Non-current liabilities			
Long term borrowing	2	1,00,000	4,00,000
(3) Current liabilities			
Short term provisions	3	2,50,000	3,60,000
Total		22,00,000	18,00,000
II. Assets :			
(1) Non-current Assets			
Fixed Assets			
(i) Tangible assets	4	14,00,000	10,00,000
(ii) Intangible assets	5	1,80,000	70,000
(2) Current Assets			
(a) Current Investments		30,000	1,90,000
(b) Trade Receivables		2,90,000	3,10,000
(c) Cash and Cash equivalents		3,00,000	2,30,000
Total		22,00,000	18,00,000

Notes to Accounts

Note	Particulars	31-3-19 (Rs)	31-3-18 (Rs)
1	Reserves and Surplus		
	Surplus (balance in statement of profit and loss)	50,000	40,000
	Total	50,000	40,000
2	Long term borrowing		
	8% debentures	1,00,000	4,00,000
	Total	1,00,000	4,00,000
3	Short term provisions		
	Provision for tax	2,50,000	3,60,000
	Total	2,50,000	3,60,000
4	Tangible Assets		
	Plant and Machinery	15,20,000	10,90,000
	Less: Accumulated depreciation	(1,20,000)	(90,000)
	Total	14,00,000	10,00,000
5	Intangible Assets		
	Goodwill	1,80,000	70,000
	Total	1,80,000	70,000

You are given the following additional information :

(a) A machinery of the book value of ₹ 40,000 (depreciation provided thereon ₹ 12,000) was sold at a loss of ₹ 6,000.

(b) 8% debentures were redeemed on 1st July 2018.

Prepare Cash Flow Statement. [6 marks]

Solution:

Concept:

- AS 3 classifies cash flows into operating, investing and financing activities.
- Cash proceeds of a machinery sale equal its carrying amount less the loss; purchases are found from the gross plant balances.
- For a non-financial enterprise, debenture interest paid is a financing outflow.

Step 1: Calculate machinery purchases and sale proceeds The machinery sold had original cost $40,000 + 12,000 = \text{Rs } 52,000$. Consequently,

$$\begin{aligned}\text{Plant purchased} &= 15,20,000 - 10,90,000 + 52,000\\ &= \text{Rs } 4,82,000.\\ \text{Sale proceeds} &= 40,000 - 6,000 = \text{Rs } 34,000.\end{aligned}$$

The increase in goodwill is $1,80,000 - 70,000 = \text{Rs } 1,10,000$. The decrease in current investments releases $1,90,000 - 30,000 = \text{Rs } 1,60,000$.

Step 2: Calculate financing flows Share capital increased by Rs $8,00,000$, and debentures redeemed were Rs $3,00,000$. Redemption took place on 1 July 2018, so interest on the opening debentures runs for three months and on the remaining debentures for nine months:

$$\text{Interest} = 4,00,000 \times \frac{8}{100} \times \frac{3}{12} + 1,00,000 \times \frac{8}{100} \times \frac{9}{12} = \text{Rs } 14,000.$$

Thus net financing inflow is $8,00,000 - 3,00,000 - 14,000 = \text{Rs } 4,86,000$.

Step 3: Prepare the cash flow statement from the stated operating cash flow Starline Ltd.: Cash Flow Statement for the year ended 31 March 2019

Particulars	Amount (Rs)
A. Cash flow from operating activities (given)	18,000
B. Cash flows from investing activities	
Purchase of plant and machinery	(4,82,000)
Sale of machinery	34,000
Purchase of goodwill	(1,10,000)
Sale of current investments	1,60,000
Net cash used in investing activities	(3,98,000)
C. Cash flows from financing activities	
Issue of share capital	8,00,000
Redemption of debentures	(3,00,000)
Interest paid on debentures	(14,000)
Net cash from financing activities	4,86,000
Net increase computed from A+B+C	1,06,000
Opening cash and cash equivalents	2,30,000
Closing cash implied by stated flows	3,36,000

Step 4: Check the inconsistency in the printed figures The balance sheet instead gives closing cash of Rs 3,00,000, so its actual increase is Rs 70,000. The cash flows computed using the stated operating inflow therefore exceed that increase by Rs 36,000. The difference must be disclosed rather than inserted as an unsupported cash payment.

An independent check confirms the discrepancy. Depreciation is $1,20,000 - 90,000 + 12,000 =$ Rs $42,000$. Let the current tax expense be T. With no dividend specified, profit after tax is the increase in surplus, Rs 10,000; tax paid is $3,60,000 + T - 2,50,000 = 1,10,000 + T$. Hence operating cash after tax is

$$10,000 + T + 42,000 + 6,000 + 14,000 + 20,000 - (1,10,000 + T) = -\text{Rs } 18,000.$$

Using that independently derived outflow yields $-18,000 - 3,98,000 + 4,86,000 =$ Rs $70,000$, matching the balance sheet. However, the question explicitly supplies a positive Rs 18,000, which cannot be silently replaced.

Step 5: Conclusion Using the given operating inflow: investing outflow Rs 3,98,000; financing inflow Rs 4,86,000; computed increase Rs 1,06,000. The printed data have a Rs 36,000 reconciliation discrepancy; an operating outflow of Rs 18,000 would reconcile to closing cash Rs 3,00,000.

Quick Tip to Solve: Compute interest separately before and after redemption, and reconcile the total cash movement with the two balance sheets.

Option – II (Computerized Accounting)

23. The interactive link between the user and data base oriented software through which the user communicates is known as: [1 mark]

(A) Front end interface

(B) Back end interface

(C) Data processing

(D) Reporting system

Correct Answer: (A) Front end interface

Solution:

Concept:

- An interface is the means by which a user interacts with an application.
- The front end receives user inputs and displays the results returned by the database application.

Step 1: Identify the user-facing component Forms, menus and input screens let the user communicate with database-oriented software. Together they constitute its front end interface.

Step 2: Eliminate the other choices The back end manages storage and database operations behind the interface. Data processing describes operations on data, while a reporting system produces outputs; neither names the general interactive link.

Step 3: Conclusion The correct option is (A), Front end interface.

Quick Tip to Solve: User inputs and screens belong to the front end; database storage is managed at the back end.

24. A sequential code helps either (i) in _____ or (ii) _____ a relevant document. [1 mark]

Solution:

Concept:

- Sequential codes assign consecutive identifiers to documents.
- A document number supports identification and helps trace the document later.

Step 1: Interpret a sequential code Documents receive numbers in a continuous sequence, such as 1001, 1002 and 1003. Each code distinguishes its document from the other documents in the same series.

Step 2: Complete the two functions The number helps in identifying the relevant document and in tracing it when a reference to that document is needed. A missing number can also draw attention to a break in the sequence.

Step 3: Conclusion (i) identifying; (ii) tracing.

Quick Tip to Solve: Consecutive document numbers identify and trace documents, and gaps reveal missing numbers.

25. A spreadsheet is used (i) _____ calculate and compare (ii) _____ or financial data. [1 mark]

Solution:

Concept:

- A spreadsheet arranges data in cells and applies formulas to perform calculations.
- Its numerical operations support comparison of accounting and financial information.

Step 1: Complete the grammatical link The phrase describes the purpose of a spreadsheet: it is used to calculate and compare data. Therefore the first missing word is "to".

Step 2: Identify the kind of data Calculations and comparisons operate on numerical or financial data. The second missing word is "numerical". A spreadsheet can sum figures, calculate differences and compare totals across periods.

Step 3: Conclusion (i) to; (ii) numerical.

Quick Tip to Solve: Spreadsheet formulas calculate numerical values and compare financial totals between periods.

26. _____ is a logical action to perform a task. [1 mark]

(A) Data

(B) Hardware

(C) System

(D) Procedure

Correct Answer: (D) Procedure

Solution:

Concept:

- A procedure specifies a logical sequence of actions for carrying out a task.
- Procedures guide the use of the other components of an accounting information system.

Step 1: Match the definition The statement refers to an action or method used to perform a task. A procedure describes how the task is carried out in a systematic way.

Step 2: Eliminate other components Data are the facts used as input, hardware is the physical equipment, and a system is the overall collection of related components. These do not specifically name the logical action used to perform a task.

Step 3: Conclusion The correct option is (D), Procedure.

Quick Tip to Solve: When a definition describes how a task is performed, match it to a procedure.

27. Name of account, (i) _____, (ii) _____ and amount are the four forms of data elements of a transaction in computerized accounting. [1 mark]

Solution:

Concept:

- A computerised transaction record identifies the account, transaction date, nature of entry and amount.
- The nature of an accounting entry indicates whether the account is debited or credited.

Step 1: Identify the missing time element The name of account identifies the ledger account affected. The date records when the transaction took place and is another essential data element.

Step 2: Identify the missing entry classification The nature of transaction specifies whether the entry is a debit or a credit. Together, name of account, date, nature of transaction and amount describe the accounting entry in the computerised record.

Step 3: Conclusion (i) Date; (ii) Nature of transaction (debit or credit).

Quick Tip to Solve: Check every transaction for four fields: account, date, debit or credit, and amount.

28. Cell address refers to: [1 mark]

(A) location of cell

(B) group of cells

(C) cell reference

(D) All of these

Correct Answer: (A) location of cell

Solution:

Concept:

- A cell is the intersection of a row and a column in a spreadsheet.
- A cell address identifies its location by combining the column letter with the row number.

Step 1: Identify what the address locates For example, B5 locates the individual cell at the intersection of column B and row 5. Hence the defining meaning of a cell address is the location of a cell.

Step 2: Distinguish the alternatives A group of cells is a range, such as B5:B9, so option (B) is incorrect. A cell reference uses an address in a formula, but option (A) states the direct meaning asked here. Since a cell address does not mean a group of cells, option (D), All of these, cannot be correct.

Step 3: Conclusion A cell address refers to the location of a cell. The correct option is (A).

Quick Tip to Solve: Read a spreadsheet address as column first, then row: B5 means column B, row 5.

29. To expect a well formatted printable data from access database, we use: [1 mark]

(A) Table

(B) Form

(C) Report

(D) Query

Correct Answer: (C) Report

Solution:

Concept:

- A report presents database information in a formatted layout suitable for printing.
- Tables store records, forms help users enter or view them, and queries retrieve selected information.

Step 1: Match the requirement to the database object The question asks for well-formatted, printable information from an Access database. A report supplies page layout, headings, grouping and totals, making it the appropriate object for this purpose.

Step 2: Eliminate the remaining objects A table is primarily a storage structure; a form is primarily an input and viewing interface. A query selects or processes records but does not itself supply the designed print layout required here. These objects may supply data to a report, but the report is the final presentation object.

Step 3: Conclusion The correct option is (C): Report.

Quick Tip to Solve: For an Access question, connect printing and formatted output with a report.

30. State any three requirements which should be considered before making an investment to choose between 'Desktop Database' or 'Server Database'. [3 marks]

Solution:

Concept:

- A desktop database is generally suited to smaller, simpler applications with limited users.
- A server database supports centralised processing and more demanding multi-user applications.
- The investment decision should match present requirements and expected growth.

Step 1: Number of users and simultaneous access Determine how many users will access the database and whether they must work simultaneously. A small office with one or a few users may manage with a desktop database. When many users need concurrent access, a server database is more suitable because it manages shared access and concurrent transactions centrally.

Step 2: Volume of data and processing requirements Estimate the number of records, transaction frequency and complexity of the queries and reports. A modest database with simple operations may be served economically by a desktop product. Large data volumes, frequent transactions and demanding processing favour a server database; expected future growth should also be considered.

Step 3: Cost and technical support requirements Assess the available budget for software, server hardware, installation and continuing maintenance. Also consider whether trained staff are available for administration, backup and security. Desktop databases are generally less costly and easier to maintain; a server database needs greater investment and skilled administration, which must be justified by business needs.

Step 4: Conclusion Three requirements are the number of simultaneous users, the volume and processing needs of the data, and the budget together with available technical support.

Quick Tip to Solve: Compare users, data workload and total cost before deciding which database to buy.

OR

30. Explain any three types of vouchers used for facilitating entry in 'Tally Software'. [3 marks]

Solution:

Concept:

- A voucher is the entry form used to record a particular class of accounting transaction in Tally.
- Choosing the correct voucher type ensures that the transaction is entered with its proper accounting effect.

Step 1: Receipt voucher A receipt voucher records money received by the business through cash or bank, such as collection from a customer or receipt of interest. For example, when a debtor pays Rs 5,000 into the bank, the bank account is debited and the debtor account is credited. The receipt voucher records the increase in money held by the business.

Step 2: Payment voucher A payment voucher records money paid by the business through cash or bank, such as payment to a supplier or payment of rent. For example, rent paid by cheque is entered by debiting Rent Account and crediting Bank Account. It therefore records an outward payment and

identifies the expense, liability or other account to which that payment relates.

Step 3: Contra voucher A contra voucher records transfers between the business's own cash and bank accounts, such as depositing cash into the bank, withdrawing cash from the bank for office use or transferring money between bank accounts. For a cash deposit of Rs 5,000, Bank Account is debited and Cash Account is credited. Such a transfer changes the composition of cash and bank balances without creating an income or expense.

Step 4: Conclusion Receipt, payment and contra vouchers record incoming money, outgoing money and transfers between the business's own cash or bank accounts, respectively.

Quick Tip to Solve: Ask whether money enters, leaves, or moves within the business to choose these vouchers.

31. Write and explain the formulae to calculate basic pay earned and total earnings. [4 marks]

Solution:

Concept:

- Basic pay earned is the portion of the agreed basic salary payable for the period actually worked or otherwise treated as paid service.
- Total earnings (gross earnings) combine basic pay earned and all admissible allowances. Deductions are applied afterwards to obtain net pay.

Step 1: Calculate basic pay earned Let B be the basic pay for a full month, D the number of days taken for that payroll month, and P the number of payable days. Then

$$\text{Basic pay earned} = \frac{B}{D} \times P.$$

Thus, divide the monthly basic pay by the days in the month to find the daily basic rate, and multiply by payable days. Paid leave included in payable service counts in P, whereas unpaid absence reduces it. For a full payable month, $P = D$, so basic pay earned equals the full monthly basic pay. In a spreadsheet, if monthly basic pay, month-days and payable days occupy cells B2, C2 and D2, respectively, the formula is `=B2/C2*D2`.

Step 2: Calculate total earnings Add the employee's basic pay earned and all allowances earned for the same period:

$$\begin{aligned}\text{Total earnings} = {} & \text{Basic pay earned} + \text{DA} \\ & + \text{HRA} + \text{Transport allowance} \\ & + \text{Other admissible allowances}.\end{aligned}$$

Here DA is dearness allowance and HRA is house rent allowance. Include only allowances to which the employee is entitled, using the rates and bases specified in the payroll rules. If basic pay earned and the allowance amounts occupy cells E2 to I2, the spreadsheet formula is `=SUM(E2:I2)`. Provident fund, income tax and other deductions do not reduce total earnings; they reduce gross earnings when calculating take-home or net pay.

Step 3: Conclusion Basic pay earned is monthly basic pay multiplied by the fraction of payable days

in the month. Total earnings equal basic pay earned plus all admissible allowances, before deductions.

Quick Tip to Solve: Calculate earned basic pay first, add the earned allowances next, and subtract deductions only when net pay is required.

OR

31. What is meant by a 'Form'? How is 'split form' different from 'simple form'? [4 marks]

Solution:

Concept:

- A form is a database object that provides a convenient user interface for entering, viewing and editing data stored in a table or obtained through a query.
- Controls such as text boxes, labels and buttons arrange fields clearly. Form design can guide data entry and display records without exposing the underlying table directly.

Step 1: Explain the meaning and use of a form A form presents database fields in an organised layout, such as an employee-details screen containing employee number, name and basic pay. The user can enter a new record, view an existing record or edit permitted values through the form's controls. The data are stored in the underlying table, rather than in the form itself. A form may use a table or a query as its record source. Appropriate controls and validation make data entry easier and help reduce mistakes. Thus a form serves as the interface between the user and the stored records.

Step 2: Explain a simple form A simple form displays a single form view of the underlying data, usually one record at a time in its standard single-record layout. The fields of that record are arranged with suitable labels and controls. The user moves to another record through navigation controls and enters or edits data in the form. It does not simultaneously provide the linked datasheet pane characteristic of a split form. It is useful when attention is on the details of one record, such as entering or updating one employee's particulars.

Step 3: Distinguish a split form A split form displays two views of the same data at the same time: a Form view and a Datasheet view. The datasheet presents records in rows and fields in columns, while the form pane presents the details of the selected record. Both panes use the same data source and remain synchronised: selecting a record in the datasheet selects that record in the form, and an allowed change made through either pane is reflected in the other. Consequently, the user can locate a record rapidly in the datasheet and then inspect or edit its details in the form pane. A simple form provides the form interface alone; a split form adds this synchronised datasheet interface.

Step 4: Conclusion A form is a database interface for entering, viewing and editing records. A split form combines synchronised Form and Datasheet views; a simple form has a single form view.

Quick Tip to Solve: Remember the defining feature of a split form: two synchronised views of the same records, not two separate tables.

32. Sunrise Ltd. has a sales linked bonus policy to motivate its sales personnel. Any employee, achieving target sales for the month, is paid ₹ 10,000 as bonus. There is an additional incentive of 4% of the amount of sales exceeding the target sales (i.e., the difference in target sales and actual sales). The target sale for the month was 2,500 units @ ₹ 4,000 per unit.

Calculate the bonus for employees mentioned below and also give its excel formulae.

(a) Tapan sold 2,500 units.

(b) Alok sold 2,400 units.

(c) Manoj sold 3,000 units. [6 marks]

Solution:

Concept:

- The fixed bonus of Rs 10,000 is payable when actual sales reach or exceed the target. An employee below target earns no bonus.
- Additional incentive equals 4% of sales revenue above the target, not 4% of total sales. With selling price Rs 4,000 per unit, excess revenue is $(\text{actual units} - 2,500) \times 4,000$.
- Excel's IF function selects the bonus according to whether the target is achieved. Its logical test must include equality, so an employee selling exactly 2,500 units receives the fixed bonus.

Step 1: Establish the target and spreadsheet arrangement Target revenue is $2,500 \times 4,000 =$ Rs $1,00,00,000$. Let column A contain the employee name, column B the number of units sold and column C the total bonus in rupees. Enter Tapan, Alok and Manoj in rows 2, 3 and 4 respectively, with B2 = 2500, B3 = 2400 and B4 = 3000. All three employees have the same target and selling price, so the same rule applies to each row.

Step 2: (a) Calculate Tapan's bonus and formula Tapan sells 2,500 units, exactly equal to the target. His sales revenue is Rs 1,00,00,000, so excess revenue is zero. He qualifies for the fixed bonus but earns no additional incentive:

$$\text{Bonus} = 10,000 + 0.04(2,500 - 2,500) \times 4,000 = \text{Rs } 10,000.$$

In cell C2 enter the Excel formula

```
=IF(B2>=2500,10000+(B2-2500)*4000*4%,0)
```

The logical test is TRUE, and the excess-sales term evaluates to zero.

Step 3: (b) Calculate Alok's bonus and formula Alok sells 2,400 units, which is 100 units below target. His sales revenue is $2,400 \times 4,000 =$ Rs $96,00,000$. Since the target has not been achieved, neither the fixed bonus nor an additional incentive is payable. His bonus is Rs 0.

In cell C3 enter the Excel formula

```
=IF(B3>=2500,10000+(B3-2500)*4000*4%,0)
```

The logical test is FALSE, so Excel returns zero directly; it does not deduct a negative incentive from the fixed bonus.

Step 4: (c) Calculate Manoj's bonus and formula Manoj sells 3,000 units. His excess sales are

$3,000 - 2,500 = 500$ units, worth $500 \times 4,000 = \text{Rs } 20,00,000$. Therefore,

$$\text{Additional incentive} = 20,00,000 \times 4\% = \text{Rs } 80,000,$$
$$\text{Total bonus} = 10,000 + 80,000 = \text{Rs } 90,000.$$

In cell C4 enter the Excel formula

```
=IF(B4>=2500,10000+(B4-2500)*4000*4%,0)
```

This returns 90,000, consisting of the fixed bonus and the incentive on excess revenue. The formula in C2 can also be copied down to C4; its relative row reference changes automatically.

Step 5: Conclusion Tapan receives Rs 10,000, Alok receives Rs 0 and Manoj receives Rs 90,000. The row-wise Excel IF formulae above calculate each total bonus, including the additional incentive where applicable.

Quick Tip to Solve: Test actual units against 2,500 using >=, then multiply only the excess units by Rs 4,000 before applying 4 percent.