CBSE Class 12 Accountancy Question Paper 2024 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 contains **34** questions. **All** questions are compulsory.

(ii) This question paper is divided into **two** Parts : **Part – A** and **Part – B**.

(iii) **Part – A** is **compulsory** for all candidates.

(iv) **Part – B** has **two** options i.e. (I) Analysis of Financial Statements and (II) Computerised Accounting. Candidates must attempt only **one** of the given options as per the subject opted in Part – B.

(v) Question numbers **1** to **16** and **27** to **30** carry **1** mark each.

(vi) Question numbers **17** to **20**, **31** and **32** are short answer type questions. Each carries **3** marks.

(vii) Question numbers **21**, **22** and **33** are long answer type-I questions. Each carries **4** marks.

(viii) Question numbers **23** to **26** and **34** are long answer type-II questions. Each carries **6** marks.

(ix) There is no overall choice. However, an internal choice has been provided in **7** questions of **one** mark, **2** questions of **three** marks, **1** question of **four** marks and **2** questions of **six** marks.

Part A (60 marks)

(Accounting for Partnership Firms and Companies)

1(a). Ridhima and Kavita were partners sharing profits and losses in the ratio of 3 : 2. Their fixed capitals were Rs. 1,50,000 and Rs. 2,00,000 respectively. The partnership deed provides for interest on capital @ 8% p.a. The net profit of the firm for the year ended 31st March, 2023 amounted to Rs. 21,000. The amount of interest on capital credited to the capital accounts of Ridhima and Kavita will be : [1 mark]

(A) Rs. 12,000 and Rs. 16,000 respectively.

(B) Rs. 10,500 and Rs. 10,500 respectively.

(C) Rs. 9,000 and Rs. 12,000 respectively.

(D) Rs. 16,000 and Rs. 5,000 respectively.

Correct Answer: (C) Rs. 9,000 and Rs. 12,000 respectively.

Solution:

Concept:

- Interest on capital is an appropriation of profit unless the deed makes it a charge. With insufficient profit, distribute the available profit in the ratio of the interest entitlements.
- Annual interest entitlement is capital multiplied by the annual interest rate; the profit-sharing ratio does not determine this allocation.

Step 1: Calculate the full interest entitlements Ridhima is entitled to $1,50,000 \times 8/100 = \text{Rs } 12,000$, and Kavita to $2,00,000 \times 8/100 = \text{Rs } 16,000$. Total entitlement is Rs 28,000, exceeding available profit of Rs 21,000. The entitlement ratio is $12,000 : 16,000 = 3 : 4$.

Step 2: Allocate the available profit Ridhima receives $21,000 \times 3/7 = \text{Rs } 9,000$; Kavita receives $21,000 \times 4/7 = \text{Rs } 12,000$. Option (A) exceeds profit, (B) ignores unequal capitals, and (D) does not follow the entitlement ratio. Under fixed capitals these appropriations are normally credited to current accounts; this does not alter the amounts asked.

Step 3: Conclusion Interest allowed is Rs 9,000 to Ridhima and Rs 12,000 to Kavita. Hence, the correct option is (C).

Quick Tip to Solve: When profit is insufficient, first compare total interest with profit, then allocate profit in the interest-entitlement ratio.

OR

1(b). Ruchika and Harshita were partners in a firm. Ruchika had withdrawn Rs. 9,000 at the end of each quarter, throughout the year. The interest to be charged on Ruchika's drawings at 6% p.a. will be : [1 mark]

(A) Rs. 540

(B) Rs. 2,160

(C) Rs. 1,080

(D) Rs. 810

Correct Answer: (D) Rs. 810

Solution:

Concept:

- Interest on drawings depends on the amount withdrawn and the time for which it remains withdrawn.
- For equal drawings at each quarter-end, the periods are 9, 6, 3 and 0 months; the average period is 4.5 months.

Step 1: Find total drawings and average time Total drawings are $4 \times 9,000 = \text{Rs } 36,000$. The last withdrawal is on the closing date and bears no interest for that year. Thus the average period is $(9 + 6 + 3 + 0)/4 = 4.5$ months.

Step 2: Calculate the interest and compare options

$$I = 36,000 \times \frac{6}{100} \times \frac{4.5}{12} = \text{Rs } 810.$$

Rs 2,160 incorrectly charges all drawings for a full year; Rs 1,080 uses six months instead of 4.5 months. Rs 540 also fails to account for the actual quarterly periods.

Step 3: Conclusion Interest on Ruchika's drawings is Rs 810. Hence, the correct option is (D).

Quick Tip to Solve: For equal quarter-end drawings use 4.5 months; beginning-of-quarter drawings instead use 7.5 months.

2. Assertion (A) : Securities Premium cannot be utilized for writing off loss on sale of a fixed asset.
Reason (R) : Securities Premium can be applied only for the purposes mentioned in the Companies Act, 2013.
Choose the correct option from the following : [1 mark]

(A) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct reason of Assertion (A).

(B) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct reason of Assertion (A).

(C) Both Assertion (A) and Reason (R) are false.

(D) Assertion (A) is false, but Reason (R) is true.

Correct Answer: (B) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct reason of Assertion (A).

Solution:

Concept:

- Securities Premium is a restricted capital reserve; its application is confined to purposes permitted by the Companies Act, 2013.
- A loss on disposal of a fixed asset is not one of the permitted applications of Securities Premium.

Step 1: Evaluate the assertion The assertion is true. Loss on sale of a fixed asset must be recognised through the appropriate profit and loss treatment; it cannot be written off against Securities Premium.

Step 2: Evaluate the reason The reason is true. Securities Premium may be used only for specified purposes, such as issuing fully paid bonus shares and other applications allowed by the Act. It is not freely available to absorb any business loss.

Step 3: Check the explanatory link The legal restriction stated in the reason directly explains why the particular loss in the assertion is excluded. Therefore (A), which denies the explanatory link, is incorrect. Options (C) and (D) incorrectly treat the assertion as false.

Step 4: Conclusion Both statements are true, and the reason correctly explains the assertion. Hence, the correct option is (B).

Quick Tip to Solve: For Securities Premium questions, test the proposed use against the permitted purposes; do not treat it as a general reserve.

3. Kewal Ltd. purchased sundry assets from Ganpati Ltd. for Rs. 28,60,000. The amount was paid by issuing fully paid shares of Rs. 100 each issued at a premium of 10%. The number of shares issued to Ganpati Ltd. were : [1 mark]

(A) 28,000

(B) 31,778

(C) 28,600

(D) 26,000

Correct Answer: (D) 26,000

Solution:

Concept:

- When shares settle the purchase consideration, their issue price, including premium, determines the number issued.
- Number of shares equals purchase consideration divided by issue price per share.

Step 1: Find the issue price per share The face value is Rs 100 and the premium is $100 \times 10/100 =$ Rs 10. Therefore each fully paid share settles $100 + 10 =$ Rs 110 of the amount payable.

Step 2: Divide the purchase consideration by issue price

$$\text{Number of shares} = \frac{28,60,000}{110} = 26,000.$$

As a check, share capital of Rs 26,00,000 plus securities premium of Rs 2,60,000 equals Rs 28,60,000. Option (C) divides by face value alone; neither 28,000 nor 31,778 shares settles the stated amount at Rs 110 each.

Step 3: Conclusion Kewal Ltd. issues 26,000 fully paid shares to Ganpati Ltd. Hence, the correct option is (D).

Quick Tip to Solve: For shares issued to a vendor, divide the purchase price by face value plus premium, not by face value alone.

4(a). Aarav Ltd. issued 10,000, 9% debentures of Rs. 100 each at a premium of 5%, redeemable at a premium of 10%. Loss on issue of debentures account will be debited by : [1 mark]

(A) Rs. 10,00,000

(B) Rs. 1,00,000

(C) Rs. 1,50,000

(D) Rs. 1,05,000

Correct Answer: (B) Rs. 1,00,000

Solution:

Concept:

- Loss on issue of debentures comprises discount on issue, if any, plus premium payable on redemption.

- Premium received on issue is credited separately to Securities Premium; it does not reduce the initial debit to Loss on Issue of Debentures.

Step 1: Calculate the face value and redemption premium Total face value is $10,000 \times 100 =$ Rs $10,00,000$. Premium on redemption is $10,00,000 \times 10/100 =$ Rs $1,00,000$. The issue is at a premium, so there is no issue discount.

Step 2: Determine the loss-account debit The loss-account debit is Rs 1,00,000. The issue premium of $10,00,000 \times 5/100 =$ Rs $50,000$ is recorded separately. Option (A) is face value, (C) wrongly adds the issue premium to the loss, and (D) is neither the redemption premium nor any applicable loss calculation.

Step 3: Conclusion Loss on Issue of Debentures Account is debited by Rs 1,00,000. Hence, the correct option is (B).

Quick Tip to Solve: Keep premium on issue and premium on redemption separate: the latter creates the loss on issue debit.

OR

4(b). Dove Ltd. issued 8,000, 11% debentures of Rs. 100 each at a premium of 5%. The total amount of interest on Debentures for one year will be : [1 mark]

(A) Rs. 80,000

(B) Rs. 92,400

(C) Rs. 88,000

(D) Rs. 880

Correct Answer: (C) Rs. 88,000

Solution:

Concept:

- Debenture interest is calculated on nominal or face value, irrespective of issue price.
- Annual interest equals number of debentures multiplied by face value per debenture and the stated annual coupon rate.

Step 1: Find the nominal debenture capital Dove Ltd. has issued 8,000 debentures of Rs 100 each, giving nominal debenture capital of $8,000 \times 100 =$ Rs $8,00,000$. The 5% issue premium is a separate capital receipt.

Step 2: Apply the annual coupon rate

$$\text{Annual interest} = 8,00,000 \times \frac{11}{100} = \text{Rs } 88,000.$$

Rs 92,400 wrongly applies the coupon to the issue proceeds of Rs 8,40,000. Rs 80,000 uses a 10% rate, and Rs 880 understates the result by a factor of 100.

Step 3: Conclusion Total interest on debentures for one year is Rs 88,000. Hence, the correct option

is (C).

Quick Tip to Solve: Ignore the issue premium when computing coupon interest; apply 11% only to the Rs 8,00,000 face value.

5 and 6. Read the following hypothetical situation and answer question numbers 5 and 6 :

Keshav and Hitesh are partners sharing profits and losses in the ratio of 3 : 2. On 31st March, 2023 after division of profit of Rs. 15,000, their capitals were Rs. 55,000 and Rs. 45,000 respectively. During the year Keshav's drawings were Rs. 1,500 at the beginning of each quarter and Hitesh withdrew Rs. 9,000 on 1st November, 2022.

After the final accounts have been prepared, it was discovered that interest on capital @ 5% p.a. and interest on drawings @ 8% p.a. have not been taken into consideration.

5. Opening capital of Keshav was : [1 mark]

(A) Rs. 35,000

(B) Rs. 39,000

(C) Rs. 43,000

(D) Rs. 52,000

Correct Answer: (D) Rs. 52,000

Solution:

Concept:

- Closing capital equals opening capital plus profit credited, less drawings, when no fresh capital is introduced.
- To recover opening capital, subtract the profit already credited and add back total drawings. Omitted interest adjustments have not affected the given closing balance.

Step 1: Determine profit credited and drawings Keshav receives three-fifths of the divisible profit because the profit-sharing ratio is $3 : 2$.

$$\text{Profit credited} = \text{Rs } 15,000 \times \frac{3}{5} = \text{Rs } 9,000.$$

He withdraws Rs 1,500 at the beginning of each of the four quarters, so total drawings are Rs $1,500 \times 4 = \text{Rs } 6,000$.

Step 2: Reverse the movements in capital The stated closing capital of Rs 55,000 is after profit distribution. Therefore,

$$\begin{aligned} \text{Opening capital} &= \text{Closing capital} - \text{Profit} + \text{Drawings} \\ &= \text{Rs } 55,000 - \text{Rs } 9,000 + \text{Rs } 6,000 \\ &= \text{Rs } 52,000. \end{aligned}$$

No interest is reversed because neither interest on capital nor interest on drawings was recorded. Options (A), (B) and (C) do not reconcile with the stated balance: adding Rs 9,000 and subtracting

Rs 6,000 from them gives Rs 38,000, Rs 42,000 and Rs 46,000 respectively, rather than Rs 55,000.

Step 3: Conclusion Keshav's opening capital was $\boxed{\text{Rs } 52,000}$. Hence, the correct option is (D).

Quick Tip to Solve: Work backwards from closing capital: remove credited profit and restore all four quarterly drawings; do not reverse unrecorded interest.

6. Amount of interest to be charged on Hitesh's drawings will be : [1 mark]

(A) Rs. 225

(B) Rs. 4,500

(C) Rs. 300

(D) Rs. 7,200

Correct Answer: (C) Rs. 300

Solution:

Concept:

- Interest on a single drawing is calculated from its actual withdrawal date to the end of the accounting year.
- For drawings D, annual rate $r\%$, and outstanding period m months, interest is $D \times r/100 \times m/12$.

Step 1: Count the period outstanding Hitesh withdrew Rs 9,000 on 1st November, 2022, and the accounts close on 31st March, 2023. The drawing remains outstanding throughout November, December, January, February and March: five months. The quarterly withdrawal pattern belongs to Keshav and is not applicable to Hitesh.

Step 2: Apply the annual interest rate Use the stated interest-on-drawings rate of 8% per annum and the actual five-month period:

$$\text{Interest} = \text{Rs } 9,000 \times \frac{8}{100} \times \frac{5}{12} = \text{Rs } 300.$$

Rs 225 in option (A) does not follow from the given rate and period. Rs 4,500 in (B) and Rs 7,200 in (D) greatly exceed even the full-year interest of Rs 720 and therefore cannot be the five-month interest. The 5% capital-interest rate must not be used for drawings.

Step 3: Conclusion Interest chargeable on Hitesh's drawings is $\boxed{\text{Rs } 300}$. Hence, the correct option is (C).

Quick Tip to Solve: For a single drawing on 1st November in a March-ending year, count five months and apply the drawings rate, not the capital rate.

7. Isha and Manish were partners in a firm sharing profits and losses in the ratio of 3 : 2. With effect from 1st April, 2023, they agreed to share profits equally. On this date the goodwill of the firm was valued at Rs. 3,00,000. The necessary journal entry for the treatment of goodwill without opening Goodwill Account will be : [1 mark]

(A)

Date 2023	Particulars	Dr. (Rs)	Cr. (Rs)
April, 1	Manish's Capital A/c. Dr. To Isha's Capital A/c.	30,000	 30,000

(B)

Date 2023	Particulars	Dr. (Rs)	Cr. (Rs)
April, 1	Isha's Capital A/c. Dr. To Manish's Capital A/c.	30,000	 30,000

(C)

Date 2023	Particulars	Dr. (Rs)	Cr. (Rs)
April, 1	Manish's Capital A/c. Dr. To Isha's Capital A/c.	3,000	 3,000

(D)

Date 2023	Particulars	Dr. (Rs)	Cr. (Rs)
April, 1	Isha's Capital A/c. Dr. To Manish's Capital A/c.	3,000	 3,000

Correct Answer: (A)

Date 2023	Particulars	Dr. (Rs)	Cr. (Rs)
April, 1	Manish's Capital A/c. Dr. To Isha's Capital A/c.	30,000	 30,000

Solution:

Concept:

- When goodwill is adjusted without opening Goodwill Account, the gaining partner compensates the sacrificing partner through capital accounts.
- Sacrifice equals old share minus new share; the compensation equals goodwill multiplied by the sacrificed share.

Step 1: Working Notes: determine sacrifice and gain Isha's sacrifice is $3/5 - 1/2 = 1/10$. Manish's gain is $1/2 - 2/5 = 1/10$. Therefore Manish must compensate Isha by $3,00,000 \times 1/10 = \text{Rs } 30,000$.

Step 2: Record the adjustment in the journal Journal of Isha and Manish

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Apr 2023	Manish's Capital A/c Dr. To Isha's Capital A/c (Being goodwill adjusted for Manish's gain and Isha's sacrifice)		30,000	 30,000

Option (B) reverses the compensation. Options (C) and (D) use Rs 3,000 instead of Rs 30,000; (D) also reverses the accounts.

Step 3: Conclusion Debit Manish's Capital Account and credit Isha's Capital Account by Rs 30,000. Hence, the correct option is (A).

Quick Tip to Solve: Identify the gaining partner first: debit that partner and credit the sacrificing partner for goodwill compensation.

8. Mahi, Ruhi and Ginni are partners in a firm sharing profits and losses in the ratio of 6 : 4 : 1. Mahi guaranteed a profit of Rs. 50,000 to Ginni. Net profit for the year ending 31st March, 2023 was Rs. 1,10,000. Mahi's share in the profit of the firm after giving guaranteed amount to Ginni will be : [1 mark]

(A) Rs. 20,000

(B) Rs. 60,000

(C) Rs. 40,000

(D) Rs. 10,000

Correct Answer: (A) Rs. 20,000

Solution:

Concept:

- First distribute the firm's profit in the agreed profit-sharing ratio.
- The partner who personally guarantees a minimum profit bears the guaranteed partner's deficiency.

Step 1: Calculate the ordinary shares The ratio is $6:4:1$, so the total is 11 parts. Before applying the guarantee, Mahi receives Rs $1,10,000 \times 6/11 =$ Rs $60,000$, Ruhi receives Rs 40,000 and Ginni receives Rs 10,000.

Step 2: Charge the deficiency to Mahi Ginni must receive Rs 50,000, giving a deficiency of Rs $50,000 -$ Rs $10,000 =$ Rs $40,000$. Mahi alone gave the guarantee, so her adjusted share is Rs $60,000 -$ Rs $40,000 =$ Rs $20,000$. The adjusted shares total $20,000 + 40,000 + 50,000 = 1,10,000$. Option (B) ignores the guarantee; (C) is the deficiency or Ruhi's share, and (D) is Ginni's ordinary share.

Step 3: Conclusion Mahi's share after meeting the guarantee is Rs 20,000. Hence, the correct option is (A).

Quick Tip to Solve: Deduct only Ginni's shortfall from Mahi's normal share; do not deduct the entire guaranteed Rs 50,000.

9. Sarita Ltd. forfeited 100 shares of Rs. 10 each, Rs. 8 called up issued at a premium of Rs. 2 per share to Ramesh for non-payment of allotment money of Rs. 5 per share (including premium). The first and final call of Rs. 2 per share was not made. Out of these 70 shares were reissued to Ashok as Rs. 8 called up for Rs. 10 per share. The gain on reissue will be : [1 mark]

(A) Rs. 500

(B) Rs. 400

(C) Rs. 350

(D) Rs. 300

Correct Answer: (C) Rs. 350

Solution:

Concept:

- Forfeited share capital is the capital amount already received on the forfeited shares; unpaid premium is excluded.
- Capital profit on reissue equals the forfeiture balance attributable to reissued shares less any reissue discount. A fresh premium on reissue goes to Securities Premium.

Step 1: Find the capital forfeited per share Called-up capital is Rs 8. The unpaid Rs 5 allotment includes Rs 2 premium, so unpaid capital is $5 - 2 =$ Rs 3 per share. Capital already received is therefore $8 - 3 =$ Rs 5 per share. The uncalled final Rs 2 contributes neither called-up capital nor forfeiture.

Step 2: Identify the capital profit for 70 reissued shares The 70 shares are reissued for Rs 10 each as Rs 8 called up, so there is no discount. The extra Rs 2 per share is securities premium, not the gain transferred from Share Forfeiture to Capital Reserve. The realised forfeiture gain is $70 \times$ Rs $5 =$ Rs 350. Rs 500 relates to all 100 forfeited shares; Rs 150 remains attached to the 30 shares not yet reissued. Rs 400 and Rs 300 do not equal the forfeiture gain on the 70 reissued shares.

Step 3: Conclusion The gain on reissue transferred to Capital Reserve is Rs 350. Hence, the correct option is (C).

Quick Tip to Solve: Multiply the capital received on forfeited shares by only the number reissued; keep any new reissue premium separate.

10. Assertion (A) : In partnership firm, the private assets of the partners can also be used to pay off the firm's debts.

Reason (R) : The liability of the partners for acts of the firm is limited.

Choose the correct option from the following : [1 mark]

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).

(C) Assertion (A) is false, but Reason (R) is true.

(D) Assertion (A) is true, but Reason (R) is false.

Correct Answer: (D) Assertion (A) is true, but Reason (R) is false.

Solution:

Concept:

- In an ordinary partnership, partners have unlimited liability for the firm's debts.
- For an Assertion-Reason item, test each statement separately before deciding whether the reason explains the assertion.

Step 1: Evaluate the assertion The assertion is true. If the firm's assets are insufficient to discharge its debts, the partners' private assets can also be used to meet those debts. Their exposure is not confined to the capital invested in the firm.

Step 2: Evaluate the reason The reason is false. It describes partners' liability for acts of the firm as limited, whereas ordinary partnership liability is unlimited. The question concerns an ordinary partnership firm, so limited liability is not the applicable principle.

Step 3: Check the explanatory link A false statement about limited liability cannot explain the use of private assets. The correct explanation would be unlimited liability. Options (A) and (B) wrongly treat the reason as true, and option (C) reverses both truth values.

Step 4: Conclusion The assertion is true, but the reason is false. Hence, the correct option is (D).

Quick Tip to Solve: Link the phrase "private assets" with unlimited liability, then check whether the reason actually says unlimited.

11(a). **Aditi, Sukriti and Niti were partners sharing profits in the ratio of 2 : 2 : 1. Sukriti died on 30th June, 2023. Net profit for the year ended 31st March, 2023 was Rs. 4,50,000. If the deceased partner's share of profit is to be calculated on the basis of previous year's profit, the amount of profit credited to Sukriti's Capital Account will be :** [1 mark]

(A) Rs. 90,000

(B) Rs. 45,000

(C) Rs. 1,80,000

(D) Rs. 1,12,500

Correct Answer: (B) Rs. 45,000

Solution:

Concept:

- When profit up to death is estimated from the previous year, use the prior annual profit for the elapsed fraction of the current year.
- The deceased partner's share equals estimated firm profit up to death multiplied by that partner's old profit share.

Step 1: Determine the time and profit share The previous accounting year ended on 31st March, 2023; the current year therefore starts on 1st April, 2023. Sukriti died on 30th June, 2023, after three months. Her share in the ratio $2:2:1$ is $2/5$.

Step 2: Calculate the amount due to Sukriti Estimated firm profit for three months is Rs $4,50,000 \times 3/12 =$ Rs $1,12,500$. Sukriti's portion is Rs $1,12,500 \times 2/5 =$ Rs $45,000$. Rs 1,12,500 is the whole firm's interim profit, not her share; Rs 1,80,000 is her full-year share. Rs 90,000 would use six months instead of three.

Step 3: Conclusion Rs 45,000 will be credited to Sukriti's Capital Account. Hence, the correct option is (B).

Quick Tip to Solve: Count the months from the start of the current accounting year to death before applying the deceased partner's share.

OR

11(b). Pawan, a partner was appointed to look after the process of dissolution of firm for which he was allowed a remuneration of Rs. 75,000. Pawan agreed to bear the dissolution expenses. Actual dissolution expenses Rs. 60,000 were paid by Pawan. Pawan's capital account will be credited by : [1 mark]

(A) Rs. 75,000

(B) Rs. 60,000

(C) Rs. 15,000

(D) Rs. 10,000

Correct Answer: (A) Rs. 75,000

Solution:

Concept:

- Agreed remuneration for carrying out dissolution is charged to Realisation and credited to the appointed partner's capital.
- When that partner undertakes to bear dissolution expenses and pays them personally, the firm does not reimburse those expenses.

Step 1: Identify the agreed credit Pawan is allowed fixed remuneration of Rs 75,000 for handling dissolution. This is the amount due from the firm for the agreed service, so his capital is credited by Rs 75,000 and Realisation bears the corresponding charge.

Step 2: Separate personal expenses from the firm's obligation Pawan agreed to bear the dissolution expenses himself and personally paid Rs 60,000. That payment requires no additional entry in the firm's books. Rs 15,000 is the difference between his remuneration and personal outlay, not the credit to his capital account. Rs 60,000 is the expense he undertook to pay; Rs 10,000 has no basis in the figures supplied.

Step 3: Conclusion Pawan's Capital Account is credited by Rs 75,000. Hence, the correct option is (A).

Quick Tip to Solve: Check separately who bears the expenses and who pays them; agreed remuneration is not reduced by personally borne expenses.

12. A partnership firm has 45 partners. It wants to admit 7 more partners into partnership. Only _____ more partners can be admitted in the partnership firm according to Companies Act, 2013. [1 mark]

(A) 1

(B) 6

(C) 5

(D) 3

Correct Answer: (C) 5

Solution:

Concept:

- The prescribed general maximum number of partners relevant to this question is 50 under the Companies Act, 2013 framework.
- The remaining admission capacity equals the permitted maximum less the existing number of partners.

Step 1: Find the available places The firm already has 45 partners. Applying the prescribed limit of 50 gives

$$\text{Available places} = 50 - 45 = 5.$$

The wish to admit seven partners does not increase the permitted maximum.

Step 2: Test the proposed admission and the choices Admitting all seven would produce $45 + 7 = 52$ partners and exceed the limit. Six also gives 51 and is inadmissible. Although one or three admissions would remain within the limit, those choices do not give the maximum number of the proposed seven who can be admitted. Exactly five can join, bringing the total to 50.

Step 3: Conclusion Only 5 more partners can be admitted. Hence, the correct option is (C).

Quick Tip to Solve: Subtract the existing 45 partners from the limit of 50; the proposed seven admissions are only a feasibility check.

13(a). **Kriti, Hina and Nidhi were partners sharing profits in the ratio of 3 : 2 : 1. Nidhi retired. On the date of her retirement, Workmen Compensation Fund stood in the Balance Sheet at Rs. 1,50,000. Workmen Compensation Claim was Rs. 1,20,000. How much amount of Workmen Compensation Fund will be credited to Nidhi's Capital Account ?** [1 mark]

(A) Rs. 30,000

(B) Rs. 10,000

(C) Rs. 5,000

(D) Rs. 15,000

Correct Answer: (C) Rs. 5,000

Solution:

Concept:

- An existing Workmen Compensation Claim must first be met from the Workmen Compensation Fund.
- Only the surplus fund is distributed among all old partners in their old profit-sharing ratio, including the retiring partner.

Step 1: Calculate the distributable surplus The fund is Rs 1,50,000 and the claim is Rs 1,20,000. The balance available for partners is

$$\text{Rs } 1,50,000 - \text{Rs } 1,20,000 = \text{Rs } 30,000.$$

The claim portion is retained for the liability and cannot be credited as a reserve distribution.

Step 2: Apply Nidhi's old share The old ratio $3 : 2 : 1$ has six parts, and Nidhi holds one part. Her credit is therefore Rs $30,000 \times 1/6 =$ Rs $5,000$. Rs 30,000 is the total surplus; Rs 10,000 belongs to Hina and Rs 15,000 to Kriti. These three credits together exhaust the surplus.

Step 3: Conclusion Nidhi's Capital Account is credited by Rs 5,000. Hence, the correct option is (C).

Quick Tip to Solve: Settle the compensation claim first, then apply the retiring partner's old share to the remaining fund only.

OR

13(b). Rohit, Udit and Mohit were partners in a firm sharing profits in the ratio of 3 : 2 : 1. Mohit retired. The balance in his capital account after making the necessary adjustments on account of reserves and revaluation of assets and liabilities was Rs. 1,80,000. Rohit and Udit agreed to pay him Rs. 2,00,000 in full settlement of his claim. Mohit's share of goodwill in the firm was [1 mark]

(A) Rs. 1,80,000

(B) Rs. 2,00,000

(C) Rs. 40,000

(D) Rs. 20,000

Correct Answer: (D) Rs. 20,000

Solution:

Concept:

- The excess of a retiring partner's agreed settlement over the adjusted capital balance represents that partner's share of hidden goodwill.
- An adjusted capital balance already reflects reserves and revaluation, so those adjustments must not be counted a second time.

Step 1: Identify the two comparable amounts Mohit's adjusted capital is Rs 1,80,000 after reserves and revaluation. The continuing partners agree to settle his entire claim for Rs 2,00,000. With no other adjustment specified, the excess payment is attributable to his goodwill entitlement.

Step 2: Calculate the goodwill included in settlement

$$\text{Mohit's goodwill share} = \text{Rs } 2,00,000 - \text{Rs } 1,80,000 = \text{Rs } 20,000.$$

Rs 1,80,000 is his adjusted capital and Rs 2,00,000 is the complete settlement, so neither is goodwill alone. Rs 40,000 is not the difference between the two amounts. The question asks for Mohit's share, so there is no need to multiply it by the reciprocal of his old share to value the whole firm.

Step 3: Conclusion Mohit's share of goodwill is Rs 20,000. Hence, the correct option is (D).

Quick Tip to Solve: For hidden goodwill on retirement, subtract adjusted capital from the settlement before considering any whole-firm valuation.

14. A, B and C were partners in a firm sharing profits and losses in the ratio of 1/2 : 1/3 : 1/4. D was admitted in the firm for 1/6th share. C would retain his original share. The new profit sharing ratio will be : [1 mark]

(A) 12 : 8 : 5 : 5

(B) 21 : 14 : 18 : 12

(C) 21 : 14 : 15 : 10

(D) 2 : 2 : 1 : 1

Correct Answer: No unique correct option as printed. The literal ratio gives $141 : 94 : 90 : 65$; (C) follows only from treating C's $1/4$ as an absolute share.

Solution:

Concept:

- A profit-sharing ratio gives relative weights; divide each weight by their total to obtain actual shares.
- If C retains the original share and no different sacrifice is specified, A and B share the remaining profit in their old relative ratio.

Step 1: Interpret the printed ratio literally The printed ratio is $1/2 : 1/3 : 1/4 = 6 : 4 : 3$; its weights total 13. Thus C's actual original share is $3/13$, while $A : B = 3 : 2$. With D receiving $1/6$, the share left for A and B is

$$1 - \frac{3}{13} - \frac{1}{6} = \frac{47}{78}.$$

Hence their shares are $47/130$ and $47/195$, respectively. On a common denominator of 390, the new ratio is $141 : 94 : 90 : 65$, which is absent from the options.

Step 2: Explain the alternative reading behind option (C) If the printed $1/4$ is instead treated as C's absolute share, the remainder for A and B is $1 - 1/4 - 1/6 = 7/12$. Dividing it in $3 : 2$ gives $7/20$ and $7/30$, so the ratio becomes $21 : 14 : 15 : 10$, option (C). However, the original printed fractions total $13/12$, not 1; they cannot all be absolute profit shares. Option (C) therefore depends on this alternative interpretation. Options (A) and (D) give D the required $1/6$, but also give C $1/6$, neither the original normalised $3/13$ nor the alternative $1/4$. Option (D) also fails to preserve $A : B = 3 : 2$. Option (B) gives D $12/65$.

Step 3: Conclusion The printed question has no uniquely defensible option: the literal ratio gives $141 : 94 : 90 : 65$. Option (C), $21 : 14 : 15 : 10$, follows only if C's stated $1/4$ is treated as an absolute share.

Quick Tip to Solve: When fractional terms are called a ratio, first normalise them; check that claimed absolute shares add to one.

15(a). **If all the forfeited shares are reissued, the balance, if any, left in the Forfeited Shares Account is transferred to :** [1 mark]

(A) General Reserve Account

(B) Securities Premium Account

(C) Capital Reserve Account

(D) Statement of Profit and Loss

Correct Answer: (C) Capital Reserve Account

Solution:

Concept:

- Money received towards share capital on forfeited shares is credited to the Share Forfeiture Account.
- After reissue, any surplus relating to the reissued shares is a capital profit and is transferred to Capital Reserve.

Step 1: Identify the balance after reissue A discount allowed on reissue is debited to the Share Forfeiture Account, up to the forfeiture amount available for those shares. When all forfeited shares have been reissued, the balance left is the realised surplus on that capital transaction.

Step 2: Classify the surplus This surplus is credited to Capital Reserve. General Reserve and the Statement of Profit and Loss relate to revenue profits, whereas Securities Premium records a premium received on the issue of securities. Therefore none of these three accounts is the appropriate destination for the remaining forfeiture balance.

Step 3: Conclusion The balance is transferred to **Capital Reserve Account**. Hence, the correct option is (C).

Quick Tip to Solve: Deduct any reissue discount from the forfeiture amount for the reissued shares; transfer only the remaining capital profit to Capital Reserve.

OR

15(b). Raghav Ltd. forfeited 100 shares of Rs. 10 each issued at a premium of 20% for non-payment of first call of Rs. 3 per share and final call of Rs. 1 per share. The minimum price per share at which these shares can be reissued will be : [1 mark]

(A) Rs. 4

(B) Rs. 6

(C) Rs. 8

(D) Rs. 10

Correct Answer: (A) Rs. 4

Solution:

Concept:

- The maximum discount on reissue cannot exceed the amount forfeited towards share capital on those shares.
- For reissue as fully paid, minimum reissue price equals face value less capital received before forfeiture. Securities premium received is excluded from the forfeiture amount.

Step 1: Calculate the capital received per share Both calls are unpaid, so the unpaid capital is Rs $3 + 1 = 4$ per share. Out of the face value of Rs 10, the company has received:

$$\text{Capital received per share} = 10 - 4 = \text{Rs } 6.$$

The premium of $20\% \times 10 = \text{Rs } 2$ is not share capital and cannot increase the maximum reissue discount.

Step 2: Apply the reissue discount limit The maximum discount is Rs 6 per share. Hence the lowest permissible price for a fully paid share is $10 - 6 = \text{Rs } 4$. Prices of Rs 6, Rs 8 and Rs 10 are permitted, but none is the minimum. For all 100 shares, the Rs 400 received on reissue plus Rs 600 forfeited supports capital of Rs 1,000.

Step 3: Conclusion The minimum reissue price is **Rs 4 per share**. Hence, the correct option is (A).

Quick Tip to Solve: Exclude premium from forfeiture: here Rs 4 unpaid capital is also the minimum price for reissue as fully paid.

16. On dissolution of a partnership firm, if realisation expenses are paid by the firm on behalf of a partner, then such expenses are debited to which of the following account : [1 mark]

(A) Realisation Account

(B) Partner's Capital Account

(C) Partner's Loan Account

(D) Bank Account

Correct Answer: (B) Partner's Capital Account

Solution:

Concept:

- Realisation expenses borne by the firm are charged to Realisation Account; expenses borne by a partner are charged to that partner.
- When the firm pays an amount on a partner's behalf, the partner's Capital Account is debited and Bank Account is credited.

Step 1: Identify who bears the expense The words "on behalf of a partner" mean that the payment settles the partner's obligation. Although the firm makes the cash payment, the expense is recoverable from that partner through the Capital Account.

Step 2: Select the debit account Debit the concerned Partner's Capital Account for the amount paid and credit Bank Account. Realisation Account would be debited if the expense were borne by the firm. Partner's Loan Account concerns a loan balance rather than this personal obligation. Bank Account is credited, not debited, because cash goes out.

Step 3: Conclusion The expenses are debited to the **Partner's Capital Account**. Hence, the correct option is (B).

Quick Tip to Solve: Separate the payer from the bearer: a firm paying a partner's obligation debits that partner's Capital Account.

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17. Anvi, Vani and Karan were partners in a firm sharing profits in the ratio of 2 : 2 : 1. Their fixed capitals were Rs. 4,00,000, Rs. 5,00,000 and Rs. 6,00,000 respectively. For the year ended 31st March, 2023, interest on capital was credited to the partners capital accounts @ 6% p.a. instead of 10% p.a. Pass the necessary adjusting Journal entry. [3 marks]

Solution:

Concept:

- Omitted interest on capital is credited to partners, but the resulting reduction in divisible profit is borne in the profit-sharing ratio.
- Net adjustment equals additional interest due minus the partner's share of the corresponding profit reduction. Under the fixed-capital method, adjustments are made through Current Accounts.

Step 1: Calculate the additional interest due **Working Notes** The short-credit is $10\% - 6\% = 4\%$ of

each fixed capital. Thus additional interest due to Anvi, Vani and Karan is respectively:

$$\text{Anvi: } 4,00,000 \times 4\% = \text{Rs } 16,000,$$
$$\text{Vani: } 5,00,000 \times 4\% = \text{Rs } 20,000,$$
$$\text{Karan: } 6,00,000 \times 4\% = \text{Rs } 24,000.$$

The total short-credit is Rs 60,000. Consequently, the profit already divided among the partners was Rs 60,000 too high and must be reduced in the ratio $2 : 2 : 1$.

Step 2: Determine each partner's net adjustment Anvi and Vani each bear $60,000 \times 2/5 = \text{Rs } 24,000$; Karan bears $60,000 \times 1/5 = \text{Rs } 12,000$.

Particulars (Rs)	Anvi	Vani	Karan
Additional interest (credit)	16,000	20,000	24,000
Excess profit share (debit)	24,000	24,000	12,000
Net adjustment	8,000 Dr.	4,000 Dr.	12,000 Cr.

The total net debit of Rs 12,000 equals the total net credit, so the adjustment transfers amounts between partners without changing total funds.

Step 3: Pass the adjusting journal entry Since capitals are fixed, use the partners' Current Accounts for this appropriation adjustment.

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2023	Anvi's Current A/c Dr.		8,000	
	Vani's Current A/c Dr.		4,000	
	To Karan's Current A/c			12,000
	(Being adjustment for interest on capital credited at 6% instead of 10% and the consequential excess profit distribution)			

Step 4: Conclusion Debit Anvi's Current Account by **Rs 8,000** and Vani's Current Account by **Rs 4,000**; credit Karan's Current Account by **Rs 12,000**.

Quick Tip to Solve: Compare each partner's 4% additional interest with their share of Rs 60,000; fixed capitals mean the net adjustment goes through Current Accounts.

18(a). Mahesh, Ramesh and Naresh were partners in a firm sharing profits in the ratio of 5 : 3 : 2. From 1st April, 2023, they decided to share profits equally. On that date, there was a balance of Rs. 3,60,000 in General Reserve and a debit balance of Rs. 1,80,000 in the Profit and Loss Account. Pass single adjustment Journal entry for the above on account of change in the profit sharing ratio. [3 marks]

Solution:

Concept:

- Accumulated profits and losses belong to the partners in their old profit-sharing ratio.
- A single adjustment entry for retained balances debits gaining partners and credits sacrificing

partners with the net accumulated profit multiplied by their respective gain or sacrifice.

Step 1: Determine the net accumulated profit **Working Notes** The General Reserve is a credit balance, while the debit balance of Profit and Loss Account is an accumulated loss. Therefore:

$$\text{Net accumulated profit} = 3,60,000 - 1,80,000 = \text{Rs } 1,80,000.$$

For a single adjustment, the reserve and loss balances remain in the books. The entry corrects the partners' relative entitlements when their ratio changes from $5:3:2$ to $1:1:1$.

Step 2: Calculate sacrifice and gains Mahesh sacrifices $5/10 - 1/3 = 1/6$, so he must receive $1,80,000 \times 1/6 = \text{Rs } 30,000$. Ramesh gains $1/3 - 3/10 = 1/30$, so he is debited with $1,80,000 \times 1/30 = \text{Rs } 6,000$. Naresh gains $1/3 - 2/10 = 2/15$, so he is debited with $1,80,000 \times 2/15 = \text{Rs } 24,000$. As a check, old entitlements are Rs 90,000, Rs 54,000 and Rs 36,000, whereas equal shares would be Rs 60,000 each. Thus the adjustment preserves the partners' old rights.

Step 3: Record the single adjustment The gaining partners compensate Mahesh through their Capital Accounts, leaving both accumulated balances unchanged.

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2023	Ramesh's Capital A/c Dr.		6,000	
	Naresh's Capital A/c Dr.		24,000	
	To Mahesh's Capital A/c			30,000
	(Being adjustment of General Reserve and accumulated loss on change in profit-sharing ratio, with the balances retained)			

Step 4: Conclusion Debit Ramesh's Capital Account by **Rs 6,000** and Naresh's Capital Account by **Rs 24,000**; credit Mahesh's Capital Account by **Rs 30,000**.

Quick Tip to Solve: Net the reserve against the debit Profit and Loss balance first, then multiply Rs 1,80,000 by each partner's gain or sacrifice.

OR

18(b). Ravi, Guru, Mani and Sonu were partners in a firm sharing profits in the ratio of the 2 : 2 : 2 : 1. On 31st January, 2023, Sonu retired. On Sonu's retirement the Goodwill of the firm was valued at Rs. 1,40,000. The new profit sharing ratio among Ravi, Guru and Mani was agreed as 5 : 1 : 1. Showing your workings clearly, pass necessary Journal entry for the treatment of Goodwill in the books of the firm on Sonu's retirement without opening goodwill account. [3 marks]

Solution:

Concept:

- When goodwill is adjusted without opening Goodwill Account, gaining partners compensate all sacrificing partners through their Capital Accounts.
- Gain equals new share minus old share. A continuing partner can also sacrifice; the retirement of one partner does not imply that every remaining partner gains.

Step 1: Find the change in each partner's share **Working Notes** The old shares of Ravi, Guru, Mani and Sonu are $2/7, 2/7, 2/7, 1/7$. Their new shares are $5/7, 1/7, 1/7, 0$, respectively.

$$\begin{aligned}\text{Ravi's gain} &= 5/7 - 2/7 = 3/7,\\ \text{Guru's sacrifice} &= 2/7 - 1/7 = 1/7,\\ \text{Mani's sacrifice} &= 2/7 - 1/7 = 1/7,\\ \text{Sonu's sacrifice} &= 1/7 - 0 = 1/7.\end{aligned}$$

Only Ravi gains. Guru and Mani continue as partners but each surrenders a share equal to Sonu's old share.

Step 2: Calculate the goodwill compensation The firm's goodwill is Rs 1,40,000. Ravi's debit is $1,40,000 \times 3/7 =$ Rs $60,000$. Each sacrificing partner receives $1,40,000 \times 1/7 =$ Rs $20,000$. Total compensation of Rs 60,000 equals the sum of the three credits. Crediting Sonu alone would overlook the sacrifice made by Guru and Mani.

Step 3: Pass the goodwill adjustment entry Adjust the amounts directly through partners' Capital Accounts; no Goodwill Account is opened.

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-1-2023	Ravi's Capital A/c Dr.		60,000	
	To Guru's Capital A/c			20,000
	To Mani's Capital A/c			20,000
	To Sonu's Capital A/c			20,000
	(Being adjustment of goodwill on Sonu's retirement, Ravi compensating Guru, Mani and Sonu for their sacrifice without opening Goodwill Account)			

Step 4: Conclusion Debit Ravi's Capital Account by **Rs 60,000**; credit Guru's, Mani's and Sonu's Capital Accounts by **Rs 20,000 each**.

Quick Tip to Solve: Calculate new minus old share for every partner: here Guru and Mani sacrifice despite remaining in the firm, so they also receive goodwill compensation.

19(a). Chavi Ltd. purchased machinery from Neo Ltd. It was agreed that the purchase consideration will be paid by issuing 10,000 equity shares of Rs. 10 each at a premium of 10% and a bank draft of Rs. 50,000. Pass the necessary Journal entries in the books of Chavi Ltd. for the above transactions.

[3 marks]

Solution:

Concept:

- An asset purchased for shares is debited at the purchase consideration; the vendor is credited with the amount payable.
- Share Capital is credited with the face value of shares issued, while the excess issue price is credited

to Securities Premium. Payment by bank draft reduces Bank.

Step 1: Calculate the purchase consideration **Working Notes:** The premium is calculated on the face value of Rs 10 per share.

$$\begin{aligned}\text{Premium per share} &= 10 \times 10\% = \text{Rs } 1,\\ \text{Issue price per share} &= 10 + 1 = \text{Rs } 11,\\ \text{Value of shares issued} &= 10,000 \times 11 = \text{Rs } 1,10,000,\\ \text{Purchase consideration} &= 1,10,000 + 50,000 = \text{Rs } 1,60,000.\end{aligned}$$

Of the share consideration, Rs 1,00,000 represents capital and Rs 10,000 represents securities premium. The cash component of Rs 50,000 is additional consideration, so it is included in the cost of machinery.

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

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Machinery A/c Dr. To Neo Ltd. (Being machinery purchased from Neo Ltd.)		1,60,000	 1,60,000
	Neo Ltd. Dr. To Equity Share Capital A/c To Securities Premium A/c To Bank A/c (Being purchase consideration discharged by issuing 10,000 equity shares of Rs 10 each at 10% premium and paying Rs 50,000 by bank draft)		1,60,000	 1,00,000 10,000 50,000

The first entry recognises the asset and the liability to the vendor. The second debits the vendor for the full liability, which is settled through the shares and bank draft; its credits total Rs 1,60,000.

Step 3: Conclusion Machinery is recorded at Rs 1,60,000. The settlement credits Equity Share Capital by Rs 1,00,000, Securities Premium by Rs 10,000 and Bank by Rs 50,000, fully clearing Neo Ltd.'s account.

Quick Tip to Solve: Value the 10,000 shares at Rs 11 each to find the machinery cost, but split their journal credit between Rs 10 face value and Rs 1 premium per share.

OR

19(b). On 1st October, 2022 Ninza Ltd. issued 4,000, 8% Debentures of Rs. 100 each at a discount of 10%. The company had a balance of Rs. 50,000 in Securities Premium Account on the same date. Pass necessary Journal entries for issue of debentures and to write off discount on issue of debentures.

[3 marks]

Solution:

Concept:

- Debentures issued at a discount are credited at their nominal value. Bank is debited with the cash received and Discount on Issue of Debentures with the shortfall.
- The available Securities Premium balance may be used to write off discount on issue of debentures. Writing off the discount debits Securities Premium and credits Discount on Issue of Debentures.

Step 1: Calculate face value, discount and proceeds **Working Notes:** The discount of 10% is applied to the nominal value of the 4,000 debentures, each of Rs 100.

$$\text{Nominal value} = 4,000 \times 100 = \text{Rs } 4,00,000,$$
$$\text{Discount on issue} = 4,00,000 \times 10\% = \text{Rs } 40,000,$$
$$\text{Bank proceeds} = 4,00,000 - 40,000 = \text{Rs } 3,60,000.$$

The existing Securities Premium balance of Rs 50,000 is sufficient to absorb the entire Rs 40,000 discount. The 8% rate identifies the interest-bearing debentures; it does not determine the issue discount. No interest entry is required for the transactions asked here.

Step 2: Journalise the issue and write-off **Journal of Ninza Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Oct. 2022	Bank A/c Dr.		3,60,000	
	Discount on Issue of Debentures A/c Dr.		40,000	
	To 8% Debentures A/c			4,00,000
	(Being 4,000, 8% debentures of Rs 100 each issued at a discount of 10%)			
1 Oct. 2022	Securities Premium A/c Dr.		40,000	
	To Discount on Issue of Debentures A/c			40,000
	(Being discount on issue of debentures written off against Securities Premium)			

The issue entry balances at Rs 4,00,000 on each side. The write-off closes the discount account and reduces Securities Premium to $50,000 - 40,000 = \text{Rs } 10,000$; it does not reduce the nominal debenture liability.

Step 3: Conclusion Bank receives Rs 3,60,000 against debentures of Rs 4,00,000. The issue discount of Rs 40,000 is fully written off using Securities Premium, leaving a Securities Premium balance of Rs 10,000.

Quick Tip to Solve: Keep the 8% interest rate separate from the 10% issue discount; calculate the Rs 40,000 discount first and compare it with the Rs 50,000 premium balance.

20. Maira and Shreya were partners in a firm. They earned an average profit of Rs. 2,00,000 during the last few years. The normal rate of profit in the similar type of business is 10%. The value of assets and liabilities of the business were Rs. 18,00,000 and Rs. 3,00,000 respectively. Calculate the value of goodwill of the firm by super profit method if it is valued at 3 years purchase of super profit. [3 marks]

Solution:

Concept:

- Capital employed is the net investment in the business: assets less outside liabilities. Normal profit is the profit this capital would earn at the normal rate of return.
- Super profit is the excess of average maintainable profit over normal profit. Under the super profit method, goodwill equals super profit multiplied by the agreed number of years' purchase.

Step 1: Determine capital employed The assets represent the resources used in the firm, while liabilities represent claims of outsiders. Deducting those liabilities gives the capital employed on which a normal return is expected.

$$\begin{aligned}\text{Capital employed} &= \text{Assets} - \text{Liabilities}\\ &= 18,00,000 - 3,00,000 = \text{Rs } 15,00,000.\end{aligned}$$

Step 2: Calculate normal profit and super profit Apply the given normal rate of 10% to capital employed, rather than to total assets or to the average profit.

$$\text{Normal profit} = 15,00,000 \times \frac{10}{100} = \text{Rs } 1,50,000.$$

The firm's average profit of Rs 2,00,000 is already given, so there is no need to calculate an average from individual years. The excess over the normal return is:

$$\begin{aligned}\text{Super profit} &= \text{Average profit} - \text{Normal profit}\\ &= 2,00,000 - 1,50,000 = \text{Rs } 50,000.\end{aligned}$$

Step 3: Apply three years' purchase The agreed purchase factor applies to super profit, not to the whole average profit. Therefore,

$$\begin{aligned}\text{Goodwill} &= \text{Super profit} \times \text{Years' purchase}\\ &= 50,000 \times 3 = \text{Rs } 1,50,000.\end{aligned}$$

This method values the firm's ability to earn Rs 50,000 annually above the normal return on its net capital, using the stated three-year multiplier.

Step 4: Conclusion The goodwill of Maira and Shreya's firm is Rs 1,50,000, based on capital employed of Rs 15,00,000, normal profit of Rs 1,50,000 and super profit of Rs 50,000.

Quick Tip to Solve: Use the sequence: assets less liabilities, then 10% normal profit, then average profit less normal profit, and finally multiply only the excess by 3.

21. On 1st April 2023, Khyati Ltd. was formed with an authorised capital of Rs. 20,00,000 divided into 2,00,000 equity shares of Rs. 10 each. The company invited applications for issuing 1,80,000 equity shares. The company received applications for 1,70,000 equity shares. During the first year, Rs. 8 per share were called and final call of Rs. 2 per share has not been made yet. Siya holding 2,000 shares and Piya holding 4,000 shares did not pay the first call of Rs. 2 per share. All the shares of Siya and Piya were forfeited after the first call.

Present the share capital in the Balance Sheet of Khyati Ltd. as per Schedule III, Part I of Companies Act, 2013 and also prepare 'Notes to Accounts' for the same. [4 marks]

Solution:

Concept:

- Authorised capital is the maximum registered share capital, whereas issued capital is the face value of shares offered for subscription. Applications received determine the shares initially subscribed.
- After forfeiture, the forfeited shares are excluded from outstanding subscribed capital. The amount already received on those shares is separately added as shares forfeited under share capital until reissue.
- A call that has not been made is uncalled capital, not calls in arrears. Shares on which only Rs 8 of the Rs 10 face value has been called are disclosed as subscribed but not fully paid-up.

Step 1: Calculate outstanding subscribed capital Initially, 1,70,000 shares were subscribed. Siya's 2,000 shares and Piya's 4,000 shares have both been forfeited. Hence the number of outstanding subscribed shares is

$$1,70,000 - (2,000 + 4,000) = 1,64,000.$$

The called-up amount on each remaining share is Rs 8, which has been received in full. Therefore subscribed but not fully paid-up capital is

$$1,64,000 \times 8 = \text{Rs } 13,12,000.$$

The final Rs 2 per share is uncalled and must not be deducted as calls in arrears. The unpaid first call related only to the shares already forfeited.

Step 2: Calculate the amount received on forfeited shares Each forfeited share had Rs 8 called up, of which the first call of Rs 2 was unpaid. Thus Rs 6 per share had been received before forfeiture:

$$\text{Siya's shares: } 2,000 \times 6 = \text{Rs } 12,000,$$
$$\text{Piya's shares: } 4,000 \times 6 = \text{Rs } 24,000,$$
$$\text{Shares forfeited balance} = \text{Rs } 36,000.$$

No reissue is stated, so this entire balance is shown with share capital. The 10,000 shares for which no applications were received do not form part of subscribed capital.

Step 3: Present the Balance Sheet extract **Balance Sheet of Khyati Ltd. as at 31st March, 2024 (Extract)**

Particulars	Note	Amount (Rs)
I. EQUITY AND LIABILITIES		
1. Shareholders' Funds		
(a) Share Capital	1	13,48,000

Step 4: Prepare the supporting note **Notes to Accounts: Note 1 – Share Capital**

Particulars	Amount (Rs)
Authorised capital	
2,00,000 equity shares of Rs 10 each	20,00,000
Issued capital	
1,80,000 equity shares of Rs 10 each	18,00,000
Subscribed but not fully paid-up capital	
1,64,000 equity shares of Rs 10 each, Rs 8 called and paid	13,12,000
Add: Shares forfeited (amount originally paid on 6,000 shares)	36,000
Total share capital	**13,48,000**

Step 5: Conclusion Share Capital under Shareholders' Funds is $\boxed{\text{Rs } 13,48,000}$, comprising Rs 13,12,000 subscribed but not fully paid-up capital and Rs 36,000 received on forfeited shares.

Quick Tip to Solve: Remove all 6,000 forfeited shares before multiplying by Rs 8, then add only Rs 6 received per forfeited share; never treat the unmade final call as arrears.

22. Madhav, Raghav and Purav were partners in a firm sharing profits and losses in the ratio of 3 : 1 : 1. Their Balance Sheet as at 31st March, 2023 was as follows :

Balance Sheet of Madhav, Raghav and Purav as at 31st March, 2023

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Creditors	1,00,000	Bank	20,000
General Reserve	50,000	Stock	1,10,000
Capitals :		Investment	70,000
Madhav 60,000		Furniture	35,000
Raghav 1,00,000		Building	1,15,000
Purav 40,000	2,00,000		
	3,50,000		3,50,000

Purav died on 30th September, 2023. According to Partnership deed, his legal representatives are entitled to the following :

(i) Balance in his Capital Account.

(ii) Share of profit upto the date of death to be calculated on the basis of last year's profit.

(iii) Share of goodwill calculated on the basis of three years purchase of average profits of last four years.

(iv) Interest on capital @ 12% p.a.

Purav's share of profit was Rs. 3,000 and the average profit of last four years were Rs. 50,000. Purav's drawings upto the date of death were Rs. 10,000.

Prepare Purav's Capital Account to be rendered to his legal representatives. [4 marks]

Solution:

Concept:

- A deceased partner's capital account is credited with opening capital, the share of accumulated reserves, goodwill, profit up to death and interest on capital. Drawings reduce the amount due to the estate.
- Purav's old profit share is $1/5$. His goodwill entitlement equals this share of the firm's goodwill, valued at three years' purchase of average profit. Interest on capital runs only from the start of the year to the date of death.
- The final amount due is transferred to the deceased partner's executor's account. This records the liability to the legal representatives without assuming immediate payment by bank.

Step 1: Calculate reserve and goodwill entitlements Purav is entitled to one-fifth of the general reserve accumulated before his death:

$$\text{Share of reserve} = 50,000 \times \frac{1}{5} = \text{Rs } 10,000.$$

The firm's goodwill is valued using average profits, not Purav's individual share of current-year profit:

$$\text{Firm's goodwill} = 50,000 \times 3 = \text{Rs } 1,50,000,$$
$$\text{Purav's goodwill share} = 1,50,000 \times \frac{1}{5} = \text{Rs } 30,000.$$

Since no new ratio is stated, Madhav and Raghav continue in their relative old ratio of $3:1$. They bear Purav's goodwill in that gaining ratio: Madhav Rs 22,500 and Raghav Rs 7,500. Goodwill is adjusted through the continuing partners' capital accounts.

Step 2: Calculate interest and the amount due Purav died on 30th September, 2023, six months after 1st April, 2023. Interest on his opening capital is therefore

$$40,000 \times \frac{12}{100} \times \frac{6}{12} = \text{Rs } 2,400.$$

The question directly gives Purav's share of profit as Rs 3,000; it must not be multiplied by $1/5$ again. This is credited through Profit and Loss Suspense Account. No interest on drawings or further revaluation adjustment is specified.

$$\begin{aligned}\text{Total credits} &= 40,000 + 10,000 + 30,000 + 3,000 + 2,400 \\ &= \text{Rs } 85,400, \\ \text{Amount due} &= 85,400 - 10,000 = \text{Rs } 75,400.\end{aligned}$$

Step 3: Prepare Purav's Capital Account **Purav's Capital Account (up to 30th September, 2023)**

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Drawings A/c	10,000	By Balance b/d	40,000	
	To Balance c/d	75,400	By General Reserve A/c	10,000	
			By Madhav's Capital A/c	22,500	
			By Raghav's Capital A/c	7,500	
			By P&L Suspense A/c	3,000	
			By Interest on Capital A/c	2,400	
	Total	**85,400**	**Total**	**85,400**	
	To Purav's Executor's A/c	75,400	By Balance b/d	75,400	
	Total	**75,400**	**Total**	**75,400**	

The credit balance is first established and then transferred to Purav's Executor's Account on the date of death. Both sides of the capital account agree, and no cash settlement is presumed.

Step 4: Conclusion Purav's legal representatives are entitled to $\boxed{\text{Rs } 75,400}$, transferred from his Capital Account to Purav's Executor's Account.

Quick Tip to Solve: Use six months for interest on capital and credit the given Rs 3,000 profit directly; remember Purav's one-fifth share of General Reserve as well as goodwill.

23(a). Arnav, Bhavi and Chavi were in partnership sharing profits and losses in the ratio of 3 : 2 : 1. On 31st March, 2023, their Balance Sheet was as follows :

Balance Sheet of Arnav, Bhavi and Chavi as at 31st March, 2023

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Capitals :		**Plant & Machinery**	**3,00,000**
Arnav 1,80,000		**Furniture**	**20,000**
Bhavi 1,60,000		**Debtors 3,50,000**	
Chavi 1,00,000	**4,40,000**	**Less : Provision for doubtful debts 20,000**	**3,30,000**
Creditors	**2,50,000**	**Cash in hand**	**10,000**
		Profit and Loss Account	**30,000**
	6,90,000		**6,90,000**

Chavi retired on the above date. It was agreed that :

(i) Plant and Machinery be valued at Rs. 4,30,000.

(ii) The existing Provision for Bad Debts was to be increased by 50%.

(iii) Chavi's share of Goodwill was valued at Rs. 80,000 and the same was to be treated without opening goodwill account.

(iv) The total amount to be paid to Chavi was brought in by Arnav and Bhavi in such a way as to make their capitals in proportion to their new profit sharing ratio.

Prepare Revaluation Account and Partners' Capital Accounts. [6 marks]

Solution:

Concept:

- Revaluation increases and decreases are transferred to all the old partners in their old profit-sharing ratio, $3:2:1$. An accumulated loss is also borne in that old ratio.
- The retiring partner's goodwill is credited to her capital and debited to the gaining partners in their gaining ratio, without opening a Goodwill Account.
- With no changed ratio specified, Arnav and Bhavi continue in $3:2$. Their final capitals must be in that ratio after they bring in the entire cash required to settle Chavi.

Step 1: Working Notes: calculate revaluation and goodwill adjustments Plant and Machinery appreciates by Rs $4,30,000 - 3,00,000 = 1,30,000$. The existing provision increases by 50% of Rs 20,000, that is, Rs 10,000; the revised provision is Rs 30,000. Only the increase is a revaluation loss.

$$\text{Revaluation profit} = 1,30,000 - 10,000 = \text{Rs } 1,20,000.$$

Distributing this profit in $3:2:1$ credits Arnav Rs 60,000, Bhavi Rs 40,000 and Chavi Rs 20,000. The debit balance of Profit and Loss Account, Rs 30,000, is an accumulated loss: debit their capitals with Rs 15,000, Rs 10,000 and Rs 5,000 respectively.

$$\text{Arnav's gain} = \frac{3}{5} - \frac{3}{6} = \frac{1}{10},$$
$$\text{Bhavi's gain} = \frac{2}{5} - \frac{2}{6} = \frac{1}{15}.$$

Thus the gaining ratio is $3:2$. Debit Arnav's capital with $80,000 \times 3/5 = \text{Rs } 48,000$, debit Bhavi's capital with Rs 32,000 and credit Chavi's capital with Rs 80,000. Rs 80,000 is already Chavi's share, so it is not multiplied by her old share again.

Step 2: Prepare the Revaluation Account Revaluation Account as at 31st March, 2023

Dr. Particulars	Amount (Rs)	Particulars	Amount (Rs) Cr.
To Provision for doubtful debts	10,000	By Plant and Machinery	1,30,000
To Arnav's Capital A/c	60,000		
To Bhavi's Capital A/c	40,000		
To Chavi's Capital A/c	20,000		
Total	1,30,000	Total	1,30,000

The profit is transferred to the partners, closing the Revaluation Account; it has no balance carried forward.

Step 3: Working Notes: determine cash contributions and final capitals After revaluation, accumulated loss and goodwill adjustments, the capital balances are:

$$\begin{aligned}\text{Arnav} &= 1,80,000 + 60,000 - 15,000 - 48,000 \\ &= \text{Rs } 1,77,000, \\ \text{Bhavi} &= 1,60,000 + 40,000 - 10,000 - 32,000 \\ &= \text{Rs } 1,58,000, \\ \text{Chavi} &= 1,00,000 + 20,000 - 5,000 + 80,000 \\ &= \text{Rs } 1,95,000.\end{aligned}$$

Arnav and Bhavi must bring the whole Rs 1,95,000 payable to Chavi; the existing cash of Rs 10,000 is not used to reduce this stipulated contribution. Their combined final capital is therefore

$$1,77,000 + 1,58,000 + 1,95,000 = \text{Rs } 5,30,000.$$

The required capitals in $3:2$ are Rs 3,18,000 and Rs 2,12,000. Hence Arnav brings Rs $3,18,000 - 1,77,000 = 1,41,000$, while Bhavi brings Rs $2,12,000 - 1,58,000 = 54,000$. Their contributions total Rs 1,95,000, exactly matching Chavi's payment.

Step 4: Prepare the Partners' Capital Accounts

Partners' Capital Accounts as at 31st March, 2023

Dr. Particulars	Arnav Rs	Bhavi Rs	Chavi Rs	Particulars Cr.	Arnav Rs	Bhavi Rs	Chavi Rs
To Profit and Loss A/c	15,000	10,000	5,000	By Balance b/d	1,80,000	1,60,000	1,00,000
To Chavi's Capital A/c	48,000	32,000	–	By Revaluation A/c	60,000	40,000	20,000
To Cash A/c	–	–	1,95,000	By Arnav's Capital A/c	–	–	48,000
To Balance c/d	3,18,000	2,12,000	–	By Bhavi's Capital A/c	–	–	32,000
				By Cash A/c	1,41,000	54,000	–
Total	3,81,000	2,54,000	2,00,000	Total	3,81,000	2,54,000	2,00,000

Each partner's account balances. Chavi's account closes on payment, and Arnav's and Bhavi's balances are carried forward as their continuing capitals.

Step 5: Conclusion Revaluation profit is Rs 1,20,000. Chavi receives Rs 1,95,000. Arnav and Bhavi bring Rs 1,41,000 and Rs 54,000 respectively, leaving final capitals of Rs 3,18,000 and Rs 2,12,000 in the required $3:2$ ratio.

Quick Tip to Solve: First find Chavi's fully adjusted capital. Add that entire payment to the continuing partners' adjusted capitals before dividing their total in $3:2$; do not simply split the cash contribution in that ratio.

OR

23(b). Divya and Ekta were partners in a firm sharing profits in the ratio of 3 : 1. On 31st March, 2023 they admitted Sona as a new partner for 1/4th share in the profits of the firm. Their Balance Sheet on that date was as follows :

Balance Sheet of Divya and Ekta as at 31st March, 2023

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Capitals :		Land and Building	5,00,000
Divya 10,00,000		Machinery	6,00,000
Ekta 7,00,000	17,00,000	Stock	1,50,000
General Reserve	3,20,000	Debtors 4,00,000	
Creditors	5,40,000	Less : Provision for doubtful debts 30,000	3,70,000
		Investments	5,00,000
		Cash	4,40,000
	25,60,000		25,60,000

Sona will bring Rs. 4,00,000 as her capital and her share of goodwill in cash. It was agreed that :

(i) Goodwill of the firm was valued at Rs. 2,40,000.

(ii) Land & Building were valued at Rs. 7,12,000.

(iii) Provision for doubtful debts was found to be in excess by Rs. 8,000

(iv) A liability for Rs. 20,000 included in Creditors was not likely to arise.

(v) The capitals of Divya and Ekta will be adjusted on the basis of Sona's capital by opening current accounts.

Prepare Revaluation Account and Partners' Capital Accounts. [6 marks]

Solution:

Concept:

- Revaluation profit and accumulated reserves belong to the old partners and are distributed in their old ratio, $3:1$.
- A new partner's goodwill premium compensates the sacrificing partners. With no other sacrifice specified, Divya and Ekta sacrifice in their old ratio, $3:1$.
- Total capital is obtained by dividing the incoming partner's capital by her profit share. Existing partners' capitals are adjusted to the new ratio through their Current Accounts, as required.

Step 1: Working Notes: determine ratios, premium and reserve shares Sona receives $1/4$ of the profits, leaving $3/4$ for Divya and Ekta in their existing ratio of $3:1$.

$$\text{Divya's new share} = \frac{3}{4}\times\frac{3}{4} = \frac{9}{16},$$
$$\text{Ekta's new share} = \frac{1}{4}\times\frac{3}{4} = \frac{3}{16},$$
$$\text{Sona's share} = \frac{1}{4} = \frac{4}{16}.$$

Thus the new profit-sharing ratio is $9:3:4$. Divya sacrifices $12/16 - 9/16 = 3/16$, while Ekta sacrifices $4/16 - 3/16 = 1/16$, giving the sacrificing ratio $3:1$.

$$\text{Sona's goodwill premium} = 2,40,000 \times \frac{1}{4} = \text{Rs } 60,000.$$

The premium is credited to Divya and Ekta in $3:1$: Rs 45,000 and Rs 15,000 respectively. Sona brings Rs 4,00,000 capital plus Rs 60,000 premium, totalling Rs 4,60,000 cash. Only Rs 4,00,000 is credited to Sona's Capital Account; the premium belongs to the old partners. General Reserve of Rs 3,20,000 is also credited to Divya and Ekta in $3:1$, giving Rs 2,40,000 and Rs 80,000 respectively.

Step 2: Prepare the Revaluation Account Land and Building appreciates by Rs $7,12,000 - 5,00,000 = 2,12,000$. The excess provision of Rs 8,000 and the liability of Rs 20,000 no longer required are both gains, credited to Revaluation Account. The revised provision is Rs 22,000 and revised creditors are Rs 5,20,000.

$$\text{Revaluation profit} = 2,12,000 + 8,000 + 20,000 = \text{Rs } 2,40,000.$$

This is shared in $3:1$, crediting Divya Rs 1,80,000 and Ekta Rs 60,000. Sona does not share in the pre-admission revaluation profit.

Revaluation Account as at 31st March, 2023

Dr. Particulars	Amount (Rs)	Particulars	Amount (Rs) Cr.
To Divya's Capital A/c	1,80,000	By Land and Building	2,12,000
To Ekta's Capital A/c	60,000	By Provision for doubtful debts	8,000
		By Creditors	20,000
Total	2,40,000	Total	2,40,000

Transfer of the profit closes the Revaluation Account.

Step 3: Working Notes: adjust capitals through Current Accounts The total capital implied by Sona's Rs 4,00,000 for a $1/4$ share is

$$\text{Total capital} = 4,00,000 \div \frac{1}{4} = \text{Rs } 16,00,000.$$

Required capitals in $9:3:4$ are Divya Rs 9,00,000, Ekta Rs 3,00,000 and Sona Rs 4,00,000. Before this adjustment, the old partners' capitals are:

$$\begin{aligned} \text{Divya} &= 10,00,000 + 2,40,000 + 1,80,000 + 45,000 \\ &= \text{Rs } 14,65,000, \\ \text{Ekta} &= 7,00,000 + 80,000 + 60,000 + 15,000 \\ &= \text{Rs } 8,55,000. \end{aligned}$$

Therefore transfer excess capital of Rs $14,65,000 - 9,00,000 = 5,65,000$ from Divya's Capital Account to her Current Account, and Rs $8,55,000 - 3,00,000 = 5,55,000$ from Ekta's Capital Account to her Current Account. Their Current Accounts acquire credit balances of these amounts. No cash withdrawal is made for these adjustments.

Step 4: Prepare the Partners' Capital Accounts Partners' Capital Accounts as at 31st March, 2023

Dr. Particulars	Divya Rs	Ekta Rs	Sona Rs	Particulars Cr.	Divya Rs	Ekta Rs	Sona Rs
To Current A/c	5,65,000	5,55,000	–	By Balance b/d	10,00,000	7,00,000	–
To Balance c/d	9,00,000	3,00,000	4,00,000	By General Reserve	2,40,000	80,000	–
				By Revaluation A/c	1,80,000	60,000	–
				By Premium for Goodwill A/c	45,000	15,000	–
				By Cash A/c	–	–	4,00,000
Total	14,65,000	8,55,000	4,00,000	Total	14,65,000	8,55,000	4,00,000

The capital balances carried down total Rs 16,00,000 and are in $9 : 3 : 4$. The transferred surplus remains payable to the old partners through their respective Current Accounts; it is not a revaluation expense or a loss.

Step 5: Conclusion Revaluation profit is Rs 2,40,000. Final capitals are Divya Rs 9,00,000, Ekta Rs 3,00,000 and Sona Rs 4,00,000. Credit balances transferred to Divya's and Ekta's Current Accounts are Rs 5,65,000 and Rs 5,55,000 respectively.

Quick Tip to Solve: Use Sona's capital alone, excluding her goodwill premium, to find total capital. After adding reserve, revaluation and goodwill to the old capitals, transfer each surplus to its partner's Current Account.

24(a). Murari Ltd. invited applications for issuing 80,000 equity shares of Rs. 10 each at a premium of Rs. 4 per share. The amount per share was payable as follows : Rs. 5 on application and Rs. 9 (including premium) on allotment.

Applications were received for 1,40,000 shares and allotment was made on pro-rata basis to all the applicants. Money overpaid on application was utilised towards sums due on allotment.

The allotment money was duly received except from Sameer who had applied for 1,400 shares. His shares were forfeited.

Pass the necessary journal entries in the books of Murari Ltd. to record the above transactions. Open calls-in-arrears account wherever required. [6 marks]

Solution:

Concept:

- Pro-rata allotment distributes available shares in the ratio of shares issued to shares applied for. Excess application money reduces the amount subsequently collectible on allotment.
- On forfeiture, debit Share Capital with called-up capital, reverse premium that was due but unpaid, credit Calls-in-Arrears with the unpaid amount, and credit Share Forfeiture with the capital amount received.

Step 1: Calculate the pro-rata allotment and excess application money The allotment ratio is $80,000 : 1,40,000 = 4 : 7$. Thus Sameer receives $1,400 \times 4/7 = 800$ shares. Total application money received is $1,40,000 \times$ Rs $5 =$ Rs $7,00,000$. Of this, $80,000 \times$ Rs $5 =$ Rs $4,00,000$ is transferred

to Share Capital and the balance Rs 3,00,000 is adjusted towards allotment. Allotment due is $80,000 \times$ Rs $9 =$ Rs $7,20,000$, comprising capital Rs 4,00,000 and premium Rs 3,20,000. Therefore the net amount collectible on allotment is Rs 4,20,000.

Step 2: Determine Sameer's arrears and the forfeiture amounts Sameer paid $1,400 \times$ Rs $5 =$ Rs $7,000$ on application. Application capital on his 800 shares is Rs 4,000, leaving Rs 3,000 for adjustment against allotment. His gross allotment is $800 \times$ Rs $9 =$ Rs $7,200$, so Calls-in-Arrears is Rs 4,200. The excess Rs 3,000 is adjusted first against allotment capital of Rs 4,000; hence capital unpaid is Rs 1,000 and the entire premium of $800 \times$ Rs $4 =$ Rs $3,200$ remains unpaid. Consequently, Share Forfeiture receives capital already paid of Rs $8,000 -$ Rs $1,000 =$ Rs $7,000$. Actual allotment cash received is Rs $4,20,000 -$ Rs $4,200 =$ Rs $4,15,800$.

Step 3: Record application, allotment and forfeiture **Journal of Murari Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Share Application A/c *(Being application money received on 1,40,000 shares at Rs 5 each)*		7,00,000	 7,00,000

	Share Application A/c Dr.
	  To Share Capital A/c
	  To Share Allotment A/c
	(Being application money on 80,000 shares transferred to capital and excess adjusted towards allotment)
			7,00,000	
				4,00,000
				3,00,000

	Share Allotment A/c Dr.
	  To Share Capital A/c
	  To Securities Premium A/c
	(Being allotment of Rs 9 per share due, including premium of Rs 4 per share)
			7,20,000	
				4,00,000
				3,20,000

	Bank A/c Dr. Calls-in-Arrears A/c Dr. To Share Allotment A/c *(Being net allotment received except Rs 4,200 due from Sameer)*		4,15,800 4,200	 4,20,000

	Share Capital A/c Dr.
	Securities Premium A/c Dr.
	  To Calls-in-Arrears A/c
	  To Share Forfeiture A/c
	(Being Sameer's 800 shares forfeited and unpaid premium reversed)
			8,000
			3,200
				
				4,200
				7,000

Step 4: Conclusion Sameer is allotted 800 shares. His arrears are Rs 4,200; forfeiture credits Share Forfeiture with Rs 7,000 and reverses unpaid securities premium of Rs 3,200. The entries above record all transactions, using Calls-in-Arrears as required.

Quick Tip to Solve: Apply the 4:7 allotment ratio to shares applied for before finding arrears; adjust excess application against allotment capital before identifying unpaid premium.

OR

24(b). Kavya Ltd. invited applications for issuing 30,000 shares of Rs. 10 each at a premium of Rs. 2 per share. The amount was payable as follows :

On application and allotment Rs. 7 per share

On first and final call Rs. 5 per share (including Rs. 2 premium)

Applications were received for 33,000 shares. Applications for 3,000 shares were rejected and money returned to the applicants. Applications for 30,000 shares were accepted in full.

The application and allotment money was duly received. The first and final call was made and money received except from a shareholder holding 500 shares. His shares were forfeited. All these shares were re-issued to Kartik as fully paid for Rs. 8 per share.

Pass necessary journal entries for the above transactions in the books of Kavya Ltd. Open calls-in-arrears account wherever required.

[6 marks]

Solution:

Concept:

- Application and allotment money on rejected applications is refunded. Here all Rs 7 received per allotted share represents share capital because premium is payable only with the first and final call.
- On forfeiture, reverse unpaid premium and transfer the capital received to Share Forfeiture. Reissue discount is charged to Share Forfeiture; the remaining surplus on reissued shares is transferred to Capital Reserve.

Step 1: Work out receipts, refund and call arrears Initial receipt is $33,000 \times$ Rs $7 =$ Rs $2,31,000$. The refund on 3,000 rejected shares is Rs 21,000, leaving $30,000 \times$ Rs $7 =$ Rs $2,10,000$ as share capital. The first and final call totals $30,000 \times$ Rs $5 =$ Rs $1,50,000$, consisting of capital $30,000 \times$ Rs $3 =$ Rs $90,000$ and premium $30,000 \times$ Rs $2 =$ Rs $60,000$. Arrears on 500 shares are Rs 2,500; therefore call cash received is Rs 1,47,500.

Step 2: Record the issue and call **Journal of Kavya Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		2,31,000	
	To Share Application and Allotment A/c			2,31,000
	(Being application and allotment received)			
	Share Application and Allotment A/c Dr.		21,000	
	To Bank A/c			21,000
	(Being money refunded on 3,000 rejected shares)			
	Share Application and Allotment A/c Dr.		2,10,000	
	To Share Capital A/c			2,10,000
	(Being allotment of 30,000 shares)			
	Share First and Final Call A/c Dr.		1,50,000	
	To Share Capital A/c			90,000
	To Securities Premium A/c			60,000
	(Being call of Rs 5 per share due)			
	Bank A/c Dr.		1,47,500	
	Calls-in-Arrears A/c Dr.		2,500	
	To Share First and Final Call A/c			1,50,000
	(Being call money received except on 500 shares)			

Step 3: Calculate forfeiture and the surplus on reissue The called-up capital of the forfeited shares is $500 \times \text{Rs } 10 = \text{Rs } 5,000$. Premium of $500 \times \text{Rs } 2 = \text{Rs } 1,000$ was due but never received, so Securities Premium is debited on forfeiture. Capital received is $500 \times \text{Rs } 7 = \text{Rs } 3,500$, credited to Share Forfeiture. Kartik pays $500 \times \text{Rs } 8 = \text{Rs } 4,000$ for shares credited fully paid at Rs 5,000. The Rs 1,000 reissue discount is within the Rs 3,500 forfeited amount. Since all forfeited shares are reissued, the whole balance $\text{Rs } 3,500 - \text{Rs } 1,000 = \text{Rs } 2,500$ is transferred to Capital Reserve.

Step 4: Record forfeiture, reissue and transfer to reserve **Journal of Kavya Ltd. (continued)**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Capital A/c Dr.		5,000	
	Securities Premium A/c Dr.		1,000	
	To Calls-in-Arrears A/c			2,500
	To Share Forfeiture A/c			3,500
	(Being 500 shares forfeited; premium reversed)			
	Bank A/c Dr.		4,000	
	Share Forfeiture A/c Dr.		1,000	
	To Share Capital A/c			5,000
	(Being 500 shares reissued fully paid at Rs 8)			
	Share Forfeiture A/c Dr.		2,500	
	To Capital Reserve A/c			2,500
	(Being reissue surplus transferred to reserve)			

Step 5: Conclusion Calls-in-Arrears of Rs 2,500 is cleared on forfeiture. The 500 shares are reissued to Kartik for Rs 4,000 as fully paid, and the resulting capital profit of Rs 2,500 is transferred to Capital Reserve.

Quick Tip to Solve: The premium here belongs to the call, so reverse Rs 1,000 on forfeiture and calculate reissue profit using only the Rs 3,500 capital already received.

25. Pass the necessary journal entries for the following transactions on the dissolution of the firm of Radha and Sudha after various assets (other than cash) and third party liabilities have been transferred to Realisation Account :

(i) Nitish, an old customer, whose account for Rs. 11,000 was written off as bad debt in the previous year, paid 70% of the amount.

(ii) Sundry creditors amounting to Rs. 40,000 were settled at a discount of 20%.

(iii) Radha took over investments worth Rs. 23,000 at Rs. 20,000.

(iv) Profit and Loss Account showed a debit balance of Rs. 18,000.

(v) Sudha's loan amounting to Rs. 15,000 was paid.

(vi) Machinery of the book value of Rs. 1,00,000 was given to a creditor of Rs. 85,000 in full settlement. [6 marks]

Solution:

Concept:

- After recorded assets and outside liabilities have been transferred to Realisation Account, cash received from assets is credited to Realisation and cash paid to settle outside liabilities is debited to it.
- An asset taken over by a partner is debited to that partner's Capital Account at its agreed value. Accumulated losses are transferred directly to partners' Capital Accounts in their profit-sharing ratio.
- A partner's loan is settled separately from Realisation Account. When a creditor accepts an already transferred asset in full settlement, no further entry is required.

Step 1: (i) Record recovery of the written-off debt The debtor no longer appears in the books because the debt was written off in the previous year. Therefore the receipt is a realisation of an unrecorded asset. The amount recovered is $11,000 \times 70/100 = \text{Rs } 7,700$.

Journal of Radha and Sudha

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Realisation A/c (Being 70% of the debt previously written off recovered from Nitish)		7,700	7,700

Step 2: (ii) Record payment to sundry creditors The discount is $40,000 \times 20/100 = \text{Rs } 8,000$, so the cash payment is $40,000 - 8,000 = \text{Rs } 32,000$. Creditors have already been transferred to Realisation, so their accounts must not be debited again. The discount benefit emerges through the balance of Realisation Account.

Journal of Radha and Sudha

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Realisation A/c Dr. To Bank A/c (Being creditors of Rs 40,000 settled at a discount of 20%)		32,000	32,000

Step 3: (iii) Record investments taken over by Radha Radha is charged the agreed takeover value of Rs 20,000. The book value of Rs 23,000 was already debited to Realisation on transfer; its difference from the takeover value is absorbed in realisation profit or loss.

Journal of Radha and Sudha

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Radha's Capital A/c Dr. To Realisation A/c (Being investments taken over by Radha at the agreed value)		20,000	 20,000

Step 4: (iv) Transfer the accumulated loss The debit balance of Profit and Loss Account is an accumulated loss, not a realisation expense. No profit-sharing ratio is given; therefore Radha and Sudha share equally. Each partner bears $18,000/2 = \text{Rs } 9,000$.

Journal of Radha and Sudha

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Radha's Capital A/c Dr. Sudha's Capital A/c Dr. To Profit and Loss A/c (Being accumulated loss transferred equally to partners' Capital Accounts)		9,000 9,000	 18,000

Step 5: (v) Settle Sudha's loan Sudha's loan is a separate liability to a partner and was not included in the transfer of third-party liabilities. Debit the Loan Account to close it and credit Bank for the payment.

Journal of Radha and Sudha

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Sudha's Loan A/c Dr. To Bank A/c (Being Sudha's loan repaid in full)		15,000	 15,000

Step 6: (vi) Examine settlement of the creditor with machinery The machinery of Rs 1,00,000 and the creditor of Rs 85,000 have both already been transferred to Realisation Account. The creditor now accepts that machinery in full settlement, with no additional cash payable or receivable. Consequently, **no journal entry is passed**. The difference of Rs 15,000 is already reflected by the earlier transfers to Realisation; recording it again would duplicate the effect.

Step 7: Conclusion The five entries above record receipts of Rs 7,700, creditor settlement of Rs 32,000, Radha's takeover of Rs 20,000, loss allocation of Rs 9,000 to each partner, and Sudha's loan repayment of Rs 15,000. No additional entry is required for machinery given to the creditor.

Quick Tip to Solve: First check whether the asset or liability has already entered Realisation. A creditor taking such an asset needs no new entry; a partner taking it is debited at the agreed takeover value.

26. Pass Journal entries relating to issue of debentures in the books of Unicorn Ltd. in each of the following cases :

(i) Issued 20,000, 8% Debentures of Rs. 100 each at a premium of 10%, redeemable at a premium of 5%.

(ii) Issued 8,000, 8% Debentures of Rs. 100 each at a discount of 10%, redeemable at a premium of 10%.

(iii) Issued 3,000, 8% Debentures of Rs. 100 each at par, redeemable at a premium of 10%. [6 marks]

Solution:

Concept:

- Debentures Account is credited with the nominal value: number of debentures multiplied by face value. Bank is debited with the actual issue proceeds.
- Issue premium is credited to Securities Premium Reserve. Discount on issue and premium payable on redemption are debited to Loss on Issue of Debentures Account.
- Premium on Redemption of Debentures Account is credited at issue to recognise the additional amount payable at redemption. The 8% interest rate does not change the issue entry.

Step 1: (i) Record issue at premium and redemption at premium **Working Notes**

$$\text{Nominal value} = 20,000 \times 100 = \text{Rs } 20,00,000,$$
$$\text{Issue premium} = 20,00,000 \times 10/100 = \text{Rs } 2,00,000,$$
$$\text{Bank proceeds} = 20,00,000 + 2,00,000 = \text{Rs } 22,00,000,$$
$$\text{Redemption premium} = 20,00,000 \times 5/100 = \text{Rs } 1,00,000.$$

Although the issue is at a premium, redemption premium is recognised separately as loss on issue; it is not netted against the Securities Premium Reserve in this issue entry.

Journal of Unicorn Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		22,00,000	
	Loss on Issue of Debentures A/c Dr.		1,00,000	
	To 8% Debentures A/c			20,00,000
	To Securities Premium Reserve A/c			2,00,000
	To Premium on Redemption of Debentures A/c			1,00,000
	(Being 20,000 debentures of Rs 100 each issued at 10% premium and redeemable at 5% premium)			

Total debit and credit are each Rs 23,00,000.

Step 2: (ii) Record issue at discount and redemption at premium **Working Notes**

$$\begin{aligned}\text{Nominal value} &= 8,000 \times 100 = \text{Rs } 8,00,000,\\ \text{Issue discount} &= 8,00,000 \times 10/100 = \text{Rs } 80,000,\\ \text{Bank proceeds} &= 8,00,000 - 80,000 = \text{Rs } 7,20,000,\\ \text{Redemption premium} &= 8,00,000 \times 10/100 = \text{Rs } 80,000,\\ \text{Loss on issue} &= 80,000 + 80,000 = \text{Rs } 1,60,000.\end{aligned}$$

Both the shortfall in cash received below face value and the excess payable on redemption form the loss on issue.

Journal of Unicorn Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		7,20,000	
	Loss on Issue of Debentures A/c Dr.		1,60,000	
	To 8% Debentures A/c			8,00,000
	To Premium on Redemption of Debentures A/c			80,000
	(Being 8,000 debentures of Rs 100 each issued at 10% discount and redeemable at 10% premium)			

Total debit and credit are each Rs 8,80,000.

Step 3: (iii) Record issue at par and redemption at premium **Working Notes**

$$\begin{aligned}\text{Nominal value} &= 3,000 \times 100 = \text{Rs } 3,00,000,\\ \text{Bank proceeds} &= \text{Rs } 3,00,000,\\ \text{Redemption premium} &= 3,00,000 \times 10/100 = \text{Rs } 30,000.\end{aligned}$$

Since the debentures are issued at par, there is no issue discount or issue premium. The only loss on issue is the premium payable on redemption.

Journal of Unicorn Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		3,00,000	
	Loss on Issue of Debentures A/c Dr.		30,000	
	To 8% Debentures A/c			3,00,000
	To Premium on Redemption of Debentures A/c			30,000
	(Being 3,000 debentures of Rs 100 each issued at par and redeemable at 10% premium)			

Total debit and credit are each Rs 3,30,000. These entries relate to issue; actual repayment entries will be passed on redemption.

Step 4: Conclusion For cases (i), (ii) and (iii), Bank is debited by Rs 22,00,000, Rs 7,20,000 and Rs 3,00,000 respectively. Loss on issue is Rs 1,00,000, Rs 1,60,000 and Rs 30,000 respectively; the journal entries recognise each case's nominal debt and redemption premium separately.

Quick Tip to Solve: Build each issue entry from face value, cash received and redemption premium. Add issue discount to redemption premium for the loss; keep issue premium in Securities Premium Reserve.

Part B (20 marks)

OPTION - I (Analysis of Financial Statements)

27(a). Shyam Sunder Ltd. is a financing company. Under which of the following activity will the amount of 'Interest paid on loan' be shown : [1 mark]

(A) Investing activity

(B) Financing activity

(C) Both Financing & Operating activity

(D) Operating activity

Correct Answer: (D) Operating activity

Solution:

Concept:

- Operating activities are the principal revenue-producing activities of an enterprise. Classification of interest cash flows depends on the nature of its business.
- For a financing company, interest paid and interest received are operating cash flows because borrowing and lending funds are integral to its ordinary business.

Step 1: Identify the nature of the company Shyam Sunder Ltd. is explicitly described as a financing company. Its use of borrowed funds forms part of its regular financing business. Interest on those borrowings is therefore an operating expense, and its payment is an operating cash outflow.

Step 2: Test the alternatives Investing activity, option (A), is inappropriate for this interest payment. Financing activity, option (B), is the usual classification of interest paid for a non-financial enterprise, but the question specifies a financing company. Option (C) incorrectly divides the same payment between financing and operating activities. Only option (D) applies to the stated company.

Step 3: Conclusion Interest paid on the loan is shown as a cash outflow under operating activities. Hence, the correct option is (D).

Quick Tip to Solve: Underline 'financing company' before classifying interest: interest paid is an operating cash outflow for this type of enterprise.

OR

27(b).

Particulars	1-4-2022	31-3-2023
Provision for Tax	Rs. 10,000	Rs. 25,000

Tax paid during the year ended 31st March, 2023 was Rs. 15,000.

While calculating Net Profit before Tax and Extra ordinary items, the amount of provision for tax to be added is _____. [1 mark]

(A) Rs. 30,000

(B) Rs. 25,000

(C) Rs. 10,000

(D) Rs. 15,000

Correct Answer: (A) Rs. 30,000

Solution:

Concept:

- Provision for tax made during the year is the tax expense charged against profit; it is added back to obtain net profit before tax.
- Closing provision = opening provision + current-year provision - tax paid. Cash tax paid and tax expense need not be equal.

Step 1: Determine the current-year tax charge Rearrange the provision movement to find the amount charged to profit:

$$\begin{aligned}\text{Provision made} &= \text{Closing provision} + \text{Tax paid} - \text{Opening provision}\\ &= 25,000 + 15,000 - 10,000\\ &= \text{Rs } 30,000.\end{aligned}$$

Step 2: Distinguish the balances from the expense The closing balance of Rs 25,000 and opening balance of Rs 10,000 are unpaid provisions at particular dates, so neither is the current-year expense. Rs 15,000 is the actual tax payment, which is treated separately when determining cash flow from operating activities. Hence options (B), (C) and (D) do not give the required add-back.

Step 3: Conclusion The provision for tax to be added is Rs $30,000$. Hence, the correct option is (A).

Quick Tip to Solve: Add tax paid to the increase in tax provision: $15,000 + (25,000 - 10,000) = 30,000$.

28. Which of the following is not a tool of Analysis of Financial Statements ? [1 mark]

(A) Ratio Analysis

(B) Comparative Statement

(C) Statement of Profit & Loss

(D) Cash flow Statement

Correct Answer: (C) Statement of Profit & Loss

Solution:

Concept:

- A financial statement supplies accounting information; a tool of analysis processes that information to study performance, liquidity or changes over time.
- Ratio analysis, comparative statements and cash flow statements are recognised tools of financial statement analysis.

Step 1: Identify the underlying financial statement The Statement of Profit and Loss reports revenue, expenses and the resulting profit or loss for an accounting period. It is one of the basic financial statements whose figures are analysed; it is not itself classified as an analysis tool in this list.

Step 2: Check the remaining options Ratio analysis relates selected financial figures to one another. A comparative statement reveals absolute and percentage changes between periods. A cash flow statement analyses changes in cash and cash equivalents by operating, investing and financing activities. Thus (A), (B) and (D) are analysis tools and cannot answer the negative question.

Step 3: Conclusion The Statement of Profit & Loss is not a tool of Analysis of Financial Statements. Hence, the correct option is (C).

Quick Tip to Solve: For a question asking which is not a tool, separate the basic statements being analysed from the methods used to analyse them.

29(a). Total Assets - Rs. 3,00,000

Non-current Assets - Rs. 2,60,000

Non-current Liabilities - Rs. 80,000

Shareholders Funds - Rs. 2,00,000

Current ratio calculated on the basis of above information will be : [1 mark]

(A) 0.5 : 1

(B) 2 : 1

(C) 1.5 : 1

(D) 1 : 1

Correct Answer: (B) 2 : 1

Solution:

Concept:

- Current ratio = current assets / current liabilities. Only current items enter this liquidity ratio.

- Total assets equal shareholders' funds plus non-current liabilities plus current liabilities.

Step 1: Calculate current assets Subtract non-current assets from total assets:

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

Step 2: Derive current liabilities and compare The balance sheet equation gives:

$$\begin{aligned}\text{Current liabilities} &= 3,00,000 - 2,00,000 - 80,000 \\ &= \text{Rs } 20,000, \\ \text{Current ratio} &= \frac{40,000}{20,000} = 2:1.\end{aligned}$$

Option (A), 0.5:1, reverses numerator and denominator. Options (C), 1.5:1, and (D), 1:1, do not follow from the derived current balances; non-current liabilities must not be used as the denominator.

Step 3: Conclusion The current ratio is $2:1$. Hence, the correct option is (B).

Quick Tip to Solve: First split total assets into current and non-current assets; then use the balance sheet equation to find current liabilities.

OR

29(b). When Current Ratio is 4 : 1, Current Assets are Rs. 60,000 and Quick Ratio is 2.5 : 1, the amount of 'Inventory' will be : [1 mark]

(A) Rs. 22,500

(B) Rs. 37,500

(C) Rs. 15,000

(D) Rs. 25,000

Correct Answer: (A) Rs. 22,500

Solution:

Concept:

- Current ratio = current assets / current liabilities; quick ratio = quick assets / current liabilities.
- Quick assets exclude inventory and prepaid expenses. Here no prepaid expenses are given, so inventory is the difference between current assets and quick assets.

Step 1: Find current liabilities and quick assets Use the same current-liabilities denominator for both ratios:

$$\begin{aligned}\text{Current liabilities} &= \frac{60,000}{4} = \text{Rs } 15,000, \\ \text{Quick assets} &= 2.5 \times 15,000 = \text{Rs } 37,500.\end{aligned}$$

Step 2: Calculate the inventory component

$$\text{Inventory} = 60,000 - 37,500 = \text{Rs } 22,500.$$

Rs 37,500 in option (B) is quick assets, not inventory. Rs 15,000 in option (C) is current liabilities. Rs 25,000 in option (D) would leave quick assets of Rs 35,000 and would not produce the given quick ratio.

Step 3: Conclusion Inventory is Rs $22,500$. Hence, the correct option is (A).

Quick Tip to Solve: Multiply current liabilities by the difference in the two ratios: $(4 - 2.5) \times 15,000$.

30. Which of the following transaction will result in flow of cash ? [1 mark]

(A) Cash withdrawn from bank Rs. 71,000.

(B) Issue of 9% debentures of Rs. 1,00,000 to the vendors of Machinery.

(C) Received from debtors Rs. 74,000.

(D) Redeemed 10% debentures by converting into equity shares.

Correct Answer: (C) Received from debtors Rs. 74,000.

Solution:

Concept:

- A cash flow is an inflow or outflow of cash and cash equivalents; a transfer between cash and bank does not change their combined total.
- Non-cash investing and financing transactions do not enter the cash flow statement as cash inflows or outflows.

Step 1: Identify the cash receipt Receiving Rs 74,000 from debtors increases cash or bank and reduces trade receivables. Trade receivables are not cash equivalents, so this collection causes an operating cash inflow of Rs 74,000.

Step 2: Test the other transactions Option (A) merely transfers Rs 71,000 from bank to cash in hand; total cash and cash equivalents remain unchanged. In (B), machinery is acquired by issuing debentures directly to its vendors, without payment of cash. In (D), converting debentures into equity replaces one source of finance with another, again without cash movement. Therefore none of these three transactions produces a cash flow.

Step 3: Conclusion Receipt of Rs $74,000$ from debtors results in a flow of cash. Hence, the correct option is (C).

Quick Tip to Solve: Check whether combined cash and bank changes: debtor collection changes it, whereas withdrawal from bank merely shifts its location.

31. Under which major heads and sub-heads will the following items be placed in the Balance Sheet of the company as per Schedule III, Part I of the Companies Act, 2013 :

(i) Patents

(ii) Capital Reserve

(iii) Prepaid rent [3 marks]

Solution:

Concept:

- Schedule III groups balance-sheet items by their nature: equity and liabilities on one side, and non-current or current assets on the other.
- An intangible asset has no physical substance but provides economic benefits. A capital reserve belongs to shareholders' funds, while a prepaid expense is an unexpired benefit.

Step 1: Classify patents Patents are legally protected rights used by a company to earn benefits over more than one accounting period. They are therefore placed under the major head Non-current Assets, within Fixed Assets, under the sub-head Intangible Assets. Their lack of physical substance does not make them a current asset.

Step 2: Classify capital reserve Capital reserve represents a reserve arising from capital profits. It forms part of the owners' funds and is reported under the major head Shareholders' Funds and the sub-head Reserves and Surplus. It is not a liability payable to an outside party.

Step 3: Classify prepaid rent Rent paid in advance relates to a future period and is a benefit available to the company. Under the usual current-period treatment in this question, it is shown under Current Assets and the sub-head Other Current Assets. It is neither a fixed asset nor an outstanding expense payable.

Step 4: Conclusion The required Schedule III classifications are:

Item	Major head	Sub-head
Patents	Non-current Assets	Fixed Assets: Intangible Assets
Capital Reserve	Shareholders' Funds	Reserves and Surplus
Prepaid rent	Current Assets	Other Current Assets

Quick Tip to Solve: Remember the nature of each item: a patent is an intangible right, capital reserve is owners' funds, and prepaid rent is a future expense benefit.

32. From the following information, calculate Working Capital Turnover Ratio :

Particulars	Amount
Gross Profit Ratio	25%
Gross Profit	Rs. 5,00,000
Shareholders Funds	Rs. 25,00,000
Non-current liabilities	Rs. 8,00,000
Non-current Assets	Rs. 23,00,000

[3 marks]

Solution:

Concept:

- Gross profit ratio = (gross profit / revenue from operations) multiplied by 100. This lets us obtain revenue when gross profit and its percentage are known.
- Working capital = current assets - current liabilities = shareholders' funds + non-current liabilities - non-current assets.
- Working capital turnover ratio = revenue from operations / working capital; it measures revenue earned per rupee of net working capital.

Step 1: Calculate revenue from operations Gross profit is 25% of revenue from operations. Therefore:

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

The numerator of working capital turnover is revenue, not gross profit or cost of revenue.

Step 2: Determine net working capital The balance sheet equation implies that the excess of long-term funds over non-current assets finances net current assets. Thus:

$$\begin{aligned}\text{Long-term funds} &= 25,00,000 + 8,00,000 \\ &= \text{Rs } 33,00,000, \\ \text{Working capital} &= 33,00,000 - 23,00,000 \\ &= \text{Rs } 10,00,000.\end{aligned}$$

The non-current liabilities are added because they provide long-term finance; they are not current liabilities to be deducted directly from current assets here.

Step 3: Apply the turnover formula Use the working capital derived from the supplied balances:

$$\text{Working capital turnover ratio} = \frac{20,00,000}{10,00,000} = 2 \text{ times.}$$

Thus each rupee of net working capital supports Rs 2 of revenue from operations. The question provides no separate opening balances, so the working capital computed from the given fund positions is used.

Step 4: Conclusion The Working Capital Turnover Ratio is 2 times.

Quick Tip to Solve: When current assets and liabilities are absent, find working capital as long-term funds minus non-current assets before computing turnover.

33(a). From the following Statement of Profit and Loss of Shikha Ltd., prepare Comparative Statement of Profit and Loss for the year ended 31st March, 2023.

Shikha Ltd.

Statement of Profit & Loss for the year ended 31st March, 2023

Particulars	2022-23 (Rs.)	2021-22 (Rs.)
Revenue from operations	32,00,000	20,00,000
Expenses :		
Employee benefit expenses	9,60,000	6,00,000
Other expenses	6,40,000	4,00,000

Rate of Tax is 50%. [4 marks]

Solution:

Concept:

- A comparative statement places the previous year's amount beside the current year's amount, and shows both the absolute increase and its percentage of the previous year's amount.
- Absolute change = current year amount minus previous year amount. Percentage change = $\frac{\text{Absolute change}}{\text{Previous year amount}} \times 100$.
- Profit before tax equals revenue less total expenses. Tax is charged on profit before tax, and profit after tax equals profit before tax less tax.

Step 1: Calculate total expenses and profits Working Notes: Use 2021-22 as the base year and 2022-23 as the current year. For 2021-22, total expenses are Rs $6,00,000 + 4,00,000 = 10,00,000$. Hence profit before tax is Rs $20,00,000 - 10,00,000 = 10,00,000$. Tax at 50% is Rs 5,00,000, leaving profit after tax of Rs 5,00,000.

For 2022-23, total expenses are Rs $9,60,000 + 6,40,000 = 16,00,000$. Profit before tax is Rs $32,00,000 - 16,00,000 = 16,00,000$. Tax at 50% is Rs 8,00,000 and profit after tax is Rs 8,00,000. The tax percentage is applied to profit, not to revenue.

Step 2: Prepare the comparative statement For example, the increase in revenue is Rs $32,00,000 - 20,00,000 = 12,00,000$, so its percentage increase is $12,00,000/20,00,000 \times 100 = 60\%$. Calculate each remaining row in the same way using that row's previous-year amount as its denominator.

Shikha Ltd.

Comparative Statement of Profit and Loss

for the year ended 31st March, 2023

Particulars	2021-22 (Rs)	2022-23 (Rs)	Increase (Rs)	Increase (%)
I. Revenue from operations	20,00,000	32,00,000	12,00,000	60
II. Expenses:				
Employee benefit expenses	6,00,000	9,60,000	3,60,000	60
Other expenses	4,00,000	6,40,000	2,40,000	60
Total expenses	10,00,000	16,00,000	6,00,000	60
III. Profit before tax (I–II)	10,00,000	16,00,000	6,00,000	60
IV. Tax at 50%	5,00,000	8,00,000	3,00,000	60
V. Profit after tax (III–IV)	5,00,000	8,00,000	3,00,000	60

Step 3: Conclusion Revenue, total expenses, profit before tax and profit after tax each increased by 60%. Profit after tax rose by Rs 3,00,000, from Rs 5,00,000 to Rs 8,00,000.

Quick Tip to Solve: Put 2021-22 first as the base year even though the question lists 2022-23 first. Divide each increase by its own 2021-22 amount; the common 60% increase provides a useful cross-check.

OR

33(b). From the following information prepare a Common Size Statement of Profit and Loss of A Ltd. and B Ltd. for the year ended 31st March, 2023 :

Particulars	A Ltd.	B Ltd.
Revenue from operations (Rs.)	20,00,000	10,00,000
Other income (Rs.)	3,00,000	80,000
Expenses (Rs.)	10,40,000	4,80,000
Tax Rate	40%	40%

[4 marks]

Solution:

Concept:

- In a common size statement of profit and loss, revenue from operations is the base and is taken as 100% for each company separately.
- Each percentage equals $\dfrac{\text{Amount of the item}}{\text{Revenue from operations}} \times 100$. Other income is added to revenue from operations to obtain total revenue, but it does not change the base.
- Profit before tax equals total revenue minus expenses. Tax equals profit before tax multiplied by the tax rate; profit after tax equals profit before tax less tax.

Step 1: Calculate total revenue, tax and profits Working Notes: A Ltd.'s total revenue is Rs $20,00,000 + 3,00,000 = 23,00,000$. Deducting expenses of Rs 10,40,000 gives profit before tax of Rs 12,60,000. Tax is Rs $12,60,000 \times 40/100 = 5,04,000$, and profit after tax is Rs $12,60,000 - 5,04,000 = 7,56,000$. B Ltd.'s total revenue is Rs $10,00,000 + 80,000 = 10,80,000$. Profit before tax is Rs $10,80,000 - 4,80,000 = 6,00,000$. Tax is Rs $6,00,000 \times 40/100 = 2,40,000$, leaving profit after tax of Rs 3,60,000.

Step 2: Express the statement items as percentages of revenue from operations Divide every A

Ltd. amount by Rs 20,00,000 and every B Ltd. amount by Rs 10,00,000, then multiply by 100. For example, A Ltd.'s other income is $3,00,000/20,00,000 \times 100 = 15\%$, while B Ltd.'s other income is $80,000/10,00,000 \times 100 = 8\%$.

Common Size Statement of Profit and Loss of A Ltd. and B Ltd.

for the year ended 31st March, 2023

Particulars	A Ltd. (Rs)	B Ltd. (Rs)	A Ltd. (%)	B Ltd. (%)
I. Revenue from operations	20,00,000	10,00,000	100	100
II. Other income	3,00,000	80,000	15	8
III. Total revenue (I+II)	23,00,000	10,80,000	115	108
IV. Expenses	10,40,000	4,80,000	52	48
V. Profit before tax (III–IV)	12,60,000	6,00,000	63	60
VI. Tax at 40% of profit before tax	5,04,000	2,40,000	25.2	24
VII. Profit after tax (V–VI)	7,56,000	3,60,000	37.8	36

The tax rate is 40% of profit before tax. Consequently, tax is 25.2% and 24% of revenue from operations for A Ltd. and B Ltd. respectively; it is not shown as 40% in these common size columns.

Step 3: Conclusion A Ltd.'s profit after tax is Rs 7,56,000, or 37.8% of its revenue from operations. B Ltd.'s profit after tax is Rs 3,60,000, or 36% of its revenue from operations.

Quick Tip to Solve: Keep each company's revenue from operations at 100%. Total revenue can exceed 100% because other income is added; compute the 40% tax on profit before tax before finding its common size percentage.

34. From the following Balance Sheet of Yogita Ltd., calculate 'Cash flows from Investing Activities' and 'Cash flows from Financing Activities'. Show your working properly.

Yogita Ltd.

Balance Sheet as at 31st March, 2023

Particulars	Note No.	31-3-2023 (Rs.)	31-3-2022 (Rs.)
I. Equity and Liabilities :			
(1) Shareholders' Funds			
(a) Share Capital		4,00,000	2,00,000
(b) Reserves and Surplus	1	2,00,000	1,00,000
(2) Non-Current Liabilities			
(a) Long term borrowings	2	1,50,000	2,20,000
(3) Current Liabilities			
(a) Short term borrowings	3	1,00,000	-
(b) Trade payables		70,000	50,000
(c) Short term provisions	4	50,000	30,000
Total		9,70,000	6,00,000
II. Assets			
(1) Non-Current Assets			
(a) Fixed Assets (Property, plant and equipment and intangible assets)			
(i) Tangible Assets (Property, plant and equipment)	5	7,00,000	4,00,000
(2) Current Assets			
(a) Inventories		1,70,000	1,00,000
(b) Trade Receivables		1,00,000	50,000
(c) Cash & Cash equivalents		-	50,000
Total		9,70,000	6,00,000

Notes to Accounts :

Note No.	Particulars	31-3-2023 (Rs.)	31-3-2022 (Rs.)
1.	Reserves and Surplus		
	Balance in statement of Profit & Loss	1,50,000	80,000
	General Reserve	50,000	20,000
		2,00,000	1,00,000
2.	Long term borrowings		
	10% Bank Loan	1,50,000	2,20,000
		1,50,000	2,20,000
3.	Short term borrowings		
	Bank Overdraft	1,00,000	-
		1,00,000	-
4.	Short term provisions		
	Provision for tax	50,000	30,000
		50,000	30,000
5.	Tangible Assets (Property, plant & equipment)		
	Plant and Machinery	7,90,000	4,70,000
	Less : Accumulated depreciation	(90,000)	(70,000)
		7,00,000	4,00,000

Additional Information :

(i) Rs. 50,000 was charged as depreciation on Plant and Machinery. A machinery costing Rs. 60,000 (Book value Rs. 45,000) was sold for Rs. 42,000.

(ii) Bank loan was repaid on 1st April, 2022. [6 marks]

Solution:

Concept:

- Investing activities include cash paid to buy plant and machinery and cash received on its sale. Depreciation and the loss on sale are non-cash adjustments, not investing cash payments.
- Financing activities include share capital raised, borrowing and repayment, and interest paid by a non-financial company. The bank overdraft is classified here as short-term borrowing, as presented in the question.
- Use the gross cost of machinery to find purchases: closing cost equals opening cost plus purchases less original cost of machinery sold.

Step 1: Prepare the machinery working note **Working Notes**

Note 5 lists gross plant and machinery of Rs 4,70,000 at the beginning and Rs 7,90,000 at the end, separately from accumulated depreciation of Rs 70,000 and Rs 90,000. The machinery sold had an original cost of Rs 60,000. Hence,

$$\begin{aligned}\text{Purchases} &= \text{Closing cost} - \text{Opening cost} + \text{Cost sold}\\ &= 7,90,000 - 4,70,000 + 60,000\\ &= \text{Rs } 3,80,000.\end{aligned}$$

The gross-cost account verifies this calculation. No non-cash acquisition is stated, so the purchase is treated as a cash payment.

Plant and Machinery Account (at cost)

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Balance b/d	4,70,000	By Machinery Disposal	60,000	
	To Bank (purchase)	3,80,000	By Balance c/d	7,90,000	
	Total	8,50,000	Total	8,50,000	

Step 2: Identify the sale proceeds and check depreciation The actual cash received on sale is Rs 42,000. The book value of Rs 45,000 and the original cost of Rs 60,000 are not the sale proceeds. The loss on sale is

$$45,000 - 42,000 = \text{Rs } 3,000.$$

This loss and depreciation would be relevant when reconciling operating profit; neither is a separate investing cash flow.

The printed depreciation figures contain an internal inconsistency: accumulated depreciation on the asset sold is $60,000 - 45,000 = \text{Rs } 15,000$, so the stated charge of Rs 50,000 would give closing accumulated depreciation of $70,000 + 50,000 - 15,000 = \text{Rs } 1,05,000$, whereas Note 5 gives Rs 90,000. The purchase calculation above uses the independently stated gross costs and original cost sold; no balancing cash flow is invented from this discrepancy.

Step 3: Calculate the financing amounts The increase in share capital is treated as cash proceeds because no bonus issue or other non-cash issue is stated:

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

Bank loan repaid is $2,20,000 - 1,50,000 = \text{Rs } 70,000$. Since repayment took place on 1st April, 2022,

the remaining Rs 1,50,000 bears interest for the full year:

$$\text{Interest paid} = 1,50,000 \times \frac{10}{100} = \text{Rs } 15,000.$$

There is no interest outstanding specified. The bank overdraft increased from nil to Rs 1,00,000, providing a financing inflow. The transfer to general reserve is an internal transfer within equity, not a cash receipt or payment. Provision for tax and changes in inventories and trade balances do not enter the two sections requested.

Step 4: Present the cash flow statement extracts **Yogita Ltd.**
Cash Flow Statement (Extracts)
for the year ended 31st March, 2023

Particulars	Amount (Rs)
A. Cash flows from Investing Activities	
Proceeds from sale of plant and machinery	42,000
Purchase of plant and machinery	(3,80,000)
Net cash used in Investing Activities	**(3,38,000)**
B. Cash flows from Financing Activities	
Proceeds from issue of share capital	2,00,000
Increase in bank overdraft	1,00,000
Repayment of bank loan	(70,000)
Interest paid on bank loan	(15,000)
Net cash from Financing Activities	**2,15,000**

Parentheses indicate cash outflows. The financing subtotal is obtained by adding Rs 3,00,000 of receipts and subtracting Rs 85,000 of payments.

Step 5: Conclusion Net cash used in Investing Activities is Rs 3,38,000. Net cash from Financing Activities is Rs 2,15,000, using the stated gross machinery costs and treating the bank overdraft as financing.

Quick Tip to Solve: Use gross machinery cost with the original cost sold to find purchases; calculate loan interest after the repayment made on the first day of the year.

OPTION - II (Computerised Accounting)

27. "A value or function or an arithmetic expression is recorded in _____." [1 mark]

(A) Row
(B) Column
(C) Range
(D) Cell

Correct Answer: (D) Cell

Solution:

Concept:

- A cell is the intersection of a row and a column in a spreadsheet.

- A cell can store a constant value or a formula, including an arithmetic expression or a function.

Step 1: Identify the unit that stores data A spreadsheet stores an individual entry in a cell. For example, cell A1 may contain a number, while another cell may contain a formula such as $= A1 + 5$ or a function such as $= SUM(A1 : A3)$. The formula is entered in one cell, which normally displays its calculated result.

Step 2: Eliminate the other locations A row is a horizontal collection of cells, and a column is a vertical collection of cells. A range is a selected group of cells. These terms describe collections or arrangements; the individual storage location for the value or expression is a cell.

Step 3: Conclusion The blank is filled by Cell. Hence, the correct option is (D).

Quick Tip to Solve: Identify the smallest spreadsheet location: a row number and column letter together identify one cell.

28(a). Depreciation is generated from which of the following Accounting information system ?

[1 mark]

(A) Tax accounting sub-system

(B) Expense accounting sub-system

(C) Final accounts sub-system

(D) Fixed assets accounting sub-system

Correct Answer: (D) Fixed assets accounting sub-system

Solution:

Concept:

- The fixed assets accounting sub-system maintains records of asset cost, acquisition, disposal and depreciation.
- Depreciation allocates the depreciable amount of a fixed asset over its useful life.

Step 1: Locate the asset information Calculation of depreciation needs the asset cost, date of acquisition, useful life or depreciation rate, and the chosen method. These details are held in the fixed assets accounting sub-system, which generates depreciation for accounting purposes.

Step 2: Distinguish the other sub-systems The tax accounting sub-system deals with tax matters. The expense accounting sub-system records and controls expenses generally, while the final accounts sub-system compiles financial statements. Though depreciation appears as an expense in the final accounts, its originating calculation belongs to the fixed assets sub-system.

Step 3: Conclusion Depreciation is generated from the Fixed assets accounting sub-system. Hence, the correct option is (D).

Quick Tip to Solve: Link depreciation to the records of each asset, rather than to the statement in which the expense finally appears.

OR

28(b). Which type of software package is suitable for an organization where the volume of accounting transactions is very low and adaptability is very high ? [1 mark]

(A) Specific

(B) Tailored

(C) ERP Software

(D) Generic

Correct Answer: (D) Generic

Solution:

Concept:

- Generic accounting software is a standard package suitable for routine accounting with a low volume of transactions.
- Software selection considers transaction volume, business requirements and the ability to adapt to a standard package.

Step 1: Apply both conditions in the question The organisation has a very low volume of accounting transactions and very high adaptability. It can therefore adopt the procedures and features of a standard, readily available generic accounting package. Extensive custom development is unnecessary for these stated requirements.

Step 2: Compare the alternatives Specific and tailored packages address specialised or customised organisational requirements. ERP software integrates several functions across an organisation and is more extensive than the simple requirement described here. Generic software best fits low transaction volume when the organisation can readily adapt to its standard features.

Step 3: Conclusion The suitable package is Generic software. Hence, the correct option is (D).

Quick Tip to Solve: Read adaptability with transaction volume: low volume and readiness to use standard features point to generic software.

29. Which chart has depth axis ? [1 mark]

(A) 2D chart

(B) 3D chart

(C) Radar chart

(D) Doughnut chart

Correct Answer: (B) 3D chart

Solution:

Concept:

- A three-dimensional chart can use a depth axis in addition to horizontal and vertical axes.
- The depth axis represents the third dimension and can separate the plotted data series.

Step 1: Identify the third dimension A depth axis extends into the chart, giving the visual a third dimension. A 3D chart is the option associated with this extra axis, in addition to the horizontal and vertical directions.

Step 2: Eliminate the other chart types A 2D chart has no depth dimension. A radar chart plots values on axes radiating from a common centre. A doughnut chart represents proportions as segments of a ring. Neither of these last two chart descriptions supplies the depth axis asked for in the question.

Step 3: Conclusion The chart with a depth axis is a 3D chart. Hence, the correct option is (B).

Quick Tip to Solve: Use the word depth as the clue: horizontal, vertical and depth correspond to three dimensions.

30(a). Which of the following is not a limitation of computerised accounting system ? [1 mark]

(A) Data may be lost or corrupted due to power interruptions.

(B) Data are prone to hacking.

(C) Data is made available to everybody.

(D) Unprogrammed and unspecific reports cannot be generated.

Correct Answer: (C) Data is made available to everybody.

Solution:

Concept:

- Computerised accounting can restrict data access through user permissions and passwords.
- Its limitations include technical failure, security threats and dependence on programmed reporting facilities.

Step 1: Find the statement that is not an inherent limitation Computerised accounting does not make data available to everybody. Access can be restricted to authorised users, with different rights for entering, viewing and changing records. Therefore, option (C) does not describe an inherent limitation of the system.

Step 2: Check the remaining statements Power interruptions can cause loss or corruption of unsaved data, and hacking is a security risk. A system also depends on its programmed facilities and cannot automatically generate any unspecified report without appropriate configuration or programming. Options (A), (B) and (D) thus describe limitations in the context of the question.

Step 3: Conclusion Data is made available to everybody is not a limitation. Hence, the correct option is (C).

Quick Tip to Solve: For a NOT question, test every statement: access controls refute the claim that everybody can see the accounting data.

OR

30(b). To safeguard assets and optimize the use of resources a business _____. [1 mark]

(A) Only tries to earn sufficient revenue.

(B) Only ensures accuracy in accounting records.

(C) Keeps internal controls.

(D) Only protects its assets.

Correct Answer: (C) Keeps internal controls.

Solution:

Concept:

- Internal controls are policies and procedures established to safeguard business assets and ensure efficient use of resources.
- Their objectives also include reliable accounting records, prevention and detection of errors and fraud, and compliance with management policies.

Step 1: Identify the comprehensive measure Authorising transactions, separating responsibilities and checking records help protect assets as well as avoid waste. These measures form a system of internal controls, so option (C) covers both objectives stated in the question.

Step 2: Eliminate the limited alternatives Earning revenue alone, in (A), does not ensure protection or efficient use of assets. Accuracy of records alone, in (B), does not cover every operational safeguard. Option (D) includes only protection of assets and omits efficient resource use. Each is narrower than the control system required.

Step 3: Conclusion A business keeps internal controls to safeguard assets and optimise the use of resources. Hence, the correct option is (C).

Quick Tip to Solve: When protection of assets and efficient resource use appear together, look for the comprehensive term internal controls.

31. How can a#DIV/0! error be corrected ? [3 marks]

Solution:

Concept:

- Excel displays `#DIV/0!` when a formula divides a number by zero or refers to a blank cell as its divisor.
- Correct the divisor or its reference to obtain a valid quotient; conditional formulas can suppress the error until the required input is available.

Step 1: Inspect and correct the divisor Select the error cell and examine its formula and the cell used as the denominator. If the formula points to the wrong cell, change that reference to the correct cell containing the required non-zero divisor. If the reference is correct but its input is missing or mistakenly zero, enter the actual non-zero value. For example, `=A5/B5` requires a valid non-zero number in B5; an arbitrary replacement would give a misleading answer.

Step 2: Indicate an unavailable value Where the divisor is genuinely not available, enter `#N/A` in the divisor cell. The formula then displays `#N/A` instead of `#DIV/0!`, signalling unavailable data. This changes the error indication; it does not produce a numerical quotient.

Step 3: Use a conditional formula To leave the result blank while the divisor is zero or empty, replace `=A5/B5` with

`=IF(B5=0,"",A5/B5).`

Excel tests B5 first. The empty text string, represented by two quotation marks, is displayed when B5 is zero or blank; otherwise Excel performs the division. Once the correct divisor is supplied, the formula calculates normally.

Step 4: Conclusion Correct the reference or supply the actual non-zero divisor. If the input is unavailable, use `#N/A` to identify it or an `IF` test to prevent a division-by-zero display until valid data are entered.

Quick Tip to Solve: Check the denominator before changing the formula; use an IF test for zero rather than inventing a divisor to hide the error.

32. Explain various 'Data tables' used in 'Pivot Table. [3 marks]

Solution:

Concept:

- A data table is a range showing the results obtained when different input values are substituted into a formula or formulas.
- The two types are one-variable and two-variable data tables. The distinction is the number of input cells whose values are varied, not the number of observations.

Step 1: Explain a one-variable data table A one-variable data table tries several values for one input cell referred to by a formula. The alternatives may run down a column or across a row. Excel substitutes each alternative into that same input cell and records the corresponding calculated result. One or more formulas may be tested, provided the changing input is the same.

For example, keep a basic budget of Rs 10,000 fixed and use the formula Revised budget $= 10,000(1+r)$, where r is the rate of increase. Testing $r = 0.05$ and 0.10 gives Rs 10,500 and Rs 11,000. Only the rate changes.

Step 2: Explain a two-variable data table A two-variable data table uses one formula referring to two different input cells. One list of possible values is arranged in a row and the other in a column. Excel substitutes every combination of these two lists and displays the result at the corresponding intersection.

For example, for Sales $=$ Quantity $\times$ Price, vary quantities of 10 and 20 units and prices of Rs 5 and Rs 8. The four combinations give sales of Rs 50, Rs 80, Rs 100 and Rs 160. Both quantity and price are varied, while the multiplication formula remains unchanged.

Step 3: Distinguish a PivotTable summary The printed wording mentions Pivot Table. A PivotTable summarises an existing source-data table, whereas the one-variable and two-variable Data Tables

described above test formula inputs; these are distinct spreadsheet tools. The source table has named columns (fields) and one record in each row. In a PivotTable, the Rows and Columns areas group categories, Values contains the numerical summaries such as Sum or Count, and Filters restricts which records are included. For example, a sales table can be summarised with Product in Rows, Month in Columns and Sum of Sales in Values, with Region as a Filter. Changing this layout reorganises existing records; it does not substitute trial inputs into a formula.

Step 4: Conclusion One-variable tables show the effect of changing one input; two-variable tables show the combined effect of changing two inputs on a single formula. Both facilitate comparison of possible results. A PivotTable instead groups and summarises source records through its Rows, Columns, Values and Filters areas.

Quick Tip to Solve: Count the changing input cells: one changing rate needs a one-variable table; changing quantity and price together needs a two-variable table.

33(a). List the points of nomenclature used in Excel for charts/graphs. [4 marks]

Solution:

Concept:

- Chart nomenclature means the names used for the components of a chart, so that each component can be identified and formatted separately.
- The chart includes the plotted values and the explanatory elements needed to read those values, such as titles, axes and legends.

Step 1: Name the areas and plotted data **(i) Chart area:** The complete chart space containing all its elements, including titles and the legend.

(ii) Plot area: The region in which the values are actually plotted; in a usual two-dimensional chart it is bounded by the axes.

(iii) Data points: The individual plotted observations, shown through markers such as columns, bars or points on a line. Related observations form a data series. For example, monthly sales of one product form one series; each month's sales form a point in that series.

Step 2: Name the scales and identifiers **(iv) Horizontal and vertical axes:** In a usual column or line chart, the horizontal axis identifies categories or base values and the vertical axis measures the corresponding numerical values. For example, months may appear horizontally and sales in Rs vertically.

(v) Legend: The key identifying series or categories through their colours, symbols or patterns. In a sales chart for two products, it shows which colour belongs to each product.

Step 3: Name the descriptive text **(vi) Chart and axes titles:** Text describing the chart's subject and what its axes represent; for example, "Monthly Sales", "Month" and "Sales (Rs)".

(vii) Data labels: Text placed beside individual data markers to show details such as the actual value, category or percentage. Thus a column's label can give its precise value while the axis provides the overall measurement scale.

Step 4: Conclusion The nomenclature comprises chart area, plot area, data points, horizontal and

vertical axes, legend, chart and axes titles, and data labels.

Quick Tip to Solve: Recall the names from outside to inside: chart area, plot area, data and axes; then add the legend, titles and labels used to explain them.

OR

33(b). Explain the steps to define 'Print area' using Dialog box. [4 marks]

Solution:

Concept:

- A print area is a specified range of worksheet cells selected for printing. Defining it allows the required report to be printed without including unrelated worksheet data.
- The Print area field on the Sheet tab of the Page Setup dialog box stores the required cell references; it does not delete or change the data outside that range.

Step 1: Open the worksheet and identify the range Activate the worksheet containing the report. Identify the first and last cells of the rectangular region to be printed, including the headings and totals required in the printed report. The range may be selected before opening the dialog box or specified directly in the Print area field later.

Step 2: Open the Page Setup dialog box Click the Page Layout tab. In the Page Setup group, click the small dialog-box launcher arrow at the lower-right corner. This opens the Page Setup dialog box, where settings for the printed worksheet can be defined.

Step 3: Specify the print area on the Sheet tab Select the Sheet tab of the dialog box and click inside the Print area box. Type the required range reference, for example `$A$1:$F$10`. Alternatively, click the range-selector button beside the box, select the required cells on the worksheet, and click the button again to return to the full dialog box. Check that the displayed reference covers the complete intended report.

Step 4: Confirm the setting and check the output Click OK to accept the print area. Open Print Preview from the printing screen and check that the intended headings, rows and totals are included. If the range is incorrect, return to Page Setup, Sheet, and edit the Print area entry. Save the workbook to retain the setting for subsequent printing.

Step 5: Conclusion Use Page Layout $\rightarrow$ Page Setup dialog box $\rightarrow$ Sheet tab $\rightarrow$ Print area; enter or select the required cell range and click OK.

Quick Tip to Solve: Use the Sheet tab of Page Setup for the Print area field, and include report headings and totals before confirming the range.

34.

	A	B	C	D	E	F
1	S. No	Subjects				
2		Name	Maths	English	Science	Total
3	1	Tarandeep	99	52	66	217
4	2	William	33	87	65	185
5	3	Margaret	37	62	88	187
6	4	Ram	89	46	56	191
7	5	Lewis	67	53	65	185
8	6	Afreen	88	49	49	186
9	7	Mehrunisha	66	77	59	202
10	8	Abid	100	51	79	230

From the given 'VLOOKUP' syntax find out the error and its reason using the worksheet.

(i) = VLOOKUP (B5, C3 : F10, 2, 0)

(ii) = SQRT (VLOOKUP (B3, B3 : F10, 2, 0) − 100)

(iii) = VLOOKUP (B2, B3 : F10, 5, 0)

(iv) = VLOOKUP (B3, B3 : B10, 2, 0)

(v) = VLOOKUP (B6, B3 : F10, 0, 0)

(vi) = VLOOKUP (B6, B3 : F10, 2, 0)/0 [6 marks]

Solution:

Concept:

- VLOOKUP searches for the lookup value in the first column of the specified table array. Its last argument 0 requires an exact match; a missing match produces `#N/A`.
- The column index is counted from the leftmost column of the table array, starting at 1. An index below 1 produces `#VALUE!`; an index beyond the table's width produces `#REF!`.
- Evaluate the lookup before the outer calculation. SQRT of a negative number produces `#NUM!`, while division by zero produces `#DIV/0!`.

Step 1: (i) Check the first column of the lookup table Cell B5 contains Margaret, but the array C3:F10 begins with column C, which contains the Maths scores. VLOOKUP therefore searches for the text Margaret among the numerical scores in C3:C10. There is no exact match. The error is `#N/A`. Although the name occurs elsewhere on the worksheet, it is not in the first column of the specified array; changing the array to B3:F10 would allow the name lookup.

Step 2: (ii) Evaluate the lookup and the square root Cell B3 contains Tarandeep. The array B3:F10 starts with the names, and its second column is Maths (column C). The lookup therefore returns C3, which is 99. Subtracting 100 gives $99 - 100 = -1$, so the outer function attempts to evaluate $\sqrt{-1}$. Excel's SQRT function requires a non-negative real argument. Thus the error is `#NUM!`; the lookup itself has succeeded.

Step 3: (iii) Look for the heading as an exact match Cell B2 contains the heading Name. The lookup searches B3:B10, which contains individual students' names and does not contain the heading Name. Hence the exact-match lookup fails and returns `#N/A`. The column index 5 is valid for the five-column

array B3:F10, so the error is due to the absent lookup value, not an excessive column index.

Step 4: (iv) Compare the column index with the array width The array B3:B10 has only one column, while the requested column index is 2. Even though Tarandeep occurs in its first row, this array has no second column from which to return a value. The formula therefore returns `#REF!`. To retrieve Maths scores, the array must include column C as well as the name column B.

Step 5: (v) Check the minimum permitted column index Cell B6 contains Ram, and the name exists in the first column of B3:F10. However, the column index is 0. VLOOKUP counts the first column of its array as 1 and has no column numbered 0, so this invalid argument produces `#VALUE!`. To retrieve Ram's Maths score, the column index should be 2.

Step 6: (vi) Check the divisor after the successful lookup The lookup finds Ram in B6 and returns the value from the second column of B3:F10, namely C6 = 89. The remaining operation is $89/0$. Division by zero is undefined, so Excel returns `#DIV/0!`. The error comes from the divisor outside VLOOKUP, and cannot be removed merely by changing the lookup range.

Step 7: Conclusion The errors are: (i) `#N/A`; (ii) `#NUM!`; (iii) `#N/A`; (iv) `#REF!`; (v) `#VALUE!`; and (vi) `#DIV/0!`.

Quick Tip to Solve: Check the array's first column, then its column index, and finally any outer arithmetic; in B3:F10, Maths is column 2, not column 3.