CBSE Class 12 Accountancy Question Paper 2019 with Solution PDF-Set 67-1-3 - Compartment

Question Paper with Solutions

Conducted by the Central Board of Secondary Education (CBSE)

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

General Instructions

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

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

(iii) Part **B** has two options – Analysis of Financial Statements and Computerised Accounting.

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

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

Part A (60 marks)

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

1. B and C were partners in a firm sharing profits and losses in the ratio of 11 : 9. B had given a loan of Rs 80,000 to the firm and the firm also took a loan of Rs 1,60,000 from Mrs. C. On 31st March, 2019 the firm was dissolved and its assets realised Rs 1,20,000.

Assuming that the firm did not have any other third party liability, state the order of payment of B's loan and Mrs. C's loan. [1 mark]

Solution:

Concept:

- On dissolution, amounts realised are applied first to debts owed to outsiders, and then to loans advanced by partners.
- A loan by a partner's relative is an outside liability; the relationship does not give it the status of a partner's loan.

Step 1: Identify the priority Mrs. C is not a partner of the firm. Her loan of Rs 1,60,000 is therefore an outside liability. B's loan of Rs 80,000 is a partner's advance and is payable only after outside liabilities have been settled.

Step 2: Apply the realisation proceeds The assets realise only Rs 1,20,000. The whole amount is applied first towards Mrs. C's loan, leaving Rs 40,000 of that outside loan unpaid. No amount from these proceeds is available for B's loan. The profit-sharing ratio of 11 : 9 does not determine this payment priority.

Step 3: Conclusion Mrs. C's loan is paid first; B's loan is paid only after the outside loan has been settled. Of the stated proceeds, Rs 1,20,000 goes to Mrs. C and nothing to B.

Quick Tip to Solve: Classify the lender as an outsider or a partner before applying dissolution proceeds.

2. At the time of admission of a partner, who decides the share of profit of the new partner out of the firm's profit ? [1 mark]

Solution:

Concept:

- Admission changes the partnership agreement, including the shares in future profits.
- The incoming partner's profit share is a matter of mutual agreement among the partners.

Step 1: Identify who settles the share The existing partners and the incoming partner mutually agree upon the incoming partner's share in the profits of the reconstituted firm.

Step 2: Distinguish agreement from calculation The share is not fixed automatically by the incoming partner's capital contribution or by the old profit-sharing ratio. Once the agreed share and the manner of sacrifice are known, the partners can calculate their revised shares.

Step 3: Conclusion The new partner's share of profit is decided by mutual agreement between the existing partners and the new partner.

Quick Tip to Solve: Read the agreed profit share first; capital contribution alone does not fix that share.

OR

2. At the time of retirement, how is the new profit sharing ratio among the remaining partners calculated ? [1 mark]

Solution:

Concept:

- A continuing partner's new share equals the old share plus the share gained from the retiring partner.
- For each remaining partner: New share = Old share + Gaining share.

Step 1: Find each continuing partner's new share Add the fraction of the retiring partner's share acquired by each remaining partner to that partner's existing share. Use the agreement governing the acquisition of the retiring partner's share.

Step 2: Form the new ratio Express the resulting new shares with a common denominator and take the ratio of their numerators. If the retiring partner's share is acquired in the old ratio of the remaining partners, their relative profit-sharing ratio remains unchanged.

Step 3: Conclusion The new profit-sharing ratio is the ratio of the remaining partners' new shares, each calculated as old share plus share gained.

Quick Tip to Solve: Add the gain to each old share before simplifying the continuing partners' ratio.

3. How are general donations treated while preparing financial statements of a not-for-profit organisation ?

[1 mark]

Solution:

Concept:

- A general donation is received without a restriction that it must be used for a particular purpose.
- General donations are treated as revenue income in the Income and Expenditure Account.

Step 1: Classify the receipt Since a general donation is not earmarked for a specific fund or asset, it belongs to the organisation's general income. It is distinct from a donation received for a specified purpose.

Step 2: Show it in the financial statements Credit the general donation to the income side of the Income and Expenditure Account for the relevant accounting period. It therefore contributes to the surplus or reduces the deficit for that period; it is not credited directly to a specific-purpose fund.

Step 3: Conclusion General donations are treated as revenue receipts and credited to the Income and Expenditure Account.

Quick Tip to Solve: Check whether a donation has a stated purpose before choosing income or a specific fund.

OR

3. What is meant by 'life membership fee' ? [1 mark]

Solution:

Concept:

- A life member obtains membership for life by paying a single consolidated fee.
- The fee replaces the recurring annual subscription normally payable by an ordinary member.

Step 1: Explain the payment Life membership fee is the lump-sum amount paid by a person to become a member of a not-for-profit organisation for the whole of that person's life.

Step 2: Explain the entitlement After paying this amount, the member is entitled to continued membership without paying the usual annual membership subscription each year. Thus it is a single payment for a continuing membership entitlement, rather than a fee for only the current accounting year.

Step 3: Conclusion Life membership fee is a one-time lump-sum payment made to obtain membership of an organisation for life, in place of annual subscriptions.

Quick Tip to Solve: Link the single lump-sum payment with lifetime membership and exemption from annual subscriptions.

4. Raj and Seema started a partnership firm on 1st July, 2018. They agreed that Seema was entitled to a commission of 10% of the net profit after charging Raj's salary of Rs 2,500 per quarter and Seema's commission.

The net profit before charging Raj's salary and Seema's commission for the year ended 31st March, 2019 was Rs 2,27,500. Calculate Seema's commission. [1 mark]

Solution:

Concept:

- Deduct the salary for the actual period for which the partnership operated before calculating commission.
- If commission is $r\%$ of profit after charging itself, commission equals profit before commission multiplied by $r/(100+r)$.

Step 1: Deduct Raj's salary From 1st July, 2018 to 31st March, 2019 there are nine months, or three quarters. Therefore Raj's salary is $3 \times$ Rs $2,500 =$ Rs $7,500$. Profit after salary but before Seema's commission is Rs $2,27,500 -$ Rs $7,500 =$ Rs $2,20,000$.

Step 2: Calculate commission after charging itself Let Seema's commission be C. Then

$$C = \frac{10}{100}(2,20,000 - C), \qquad 110C = 22,00,000.$$

Thus $C =$ Rs $20,000$. As a check, the profit remaining after both appropriations is Rs 2,00,000, and 10% of this amount is Rs 20,000.

Step 3: Conclusion Seema's commission is Rs 20,000.

Quick Tip to Solve: For commission after charging itself, multiply the eligible profit by 10/110, not 10/100.

5. A, B and C were partners sharing profits in the ratio of 5 : 4 : 3. They decided to change their profit sharing ratio to 2 : 2 : 1 w.e.f. 1st April, 2019. On that date, there was a balance of Rs 3,00,000 in General Reserve and a debit balance of Rs 4,80,000 in the Profit and Loss Account.

Pass necessary journal entries for the above on account of change in the profit sharing ratio. [1 mark]

Solution:

Concept:

- Accumulated reserves and losses existing before a change in profit-sharing ratio belong to the old partners in their old ratio.
- Credit General Reserve to partners' capital accounts and debit the accumulated loss to those accounts in the old ratio of 5 : 4 : 3.

Step 1: Calculate the old-ratio allocations The total of the old ratio is $5+4+3=12$. General Reserve of Rs 3,00,000 is distributed as A: Rs 1,25,000, B: Rs 1,00,000 and C: Rs 75,000. The debit balance of Profit and Loss Account of Rs 4,80,000 is borne as A: Rs 2,00,000, B: Rs 1,60,000 and C: Rs 1,20,000.

Step 2: Record the necessary journal entries Journal of the Firm (1st April, 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	General Reserve A/c Dr. To A's Capital A/c To B's Capital A/c To C's Capital A/c (Being reserve distributed in old ratio)		3,00,000	 1,25,000 1,00,000 75,000
1-4-2019	A's Capital A/c Dr. B's Capital A/c Dr. C's Capital A/c Dr. To Profit and Loss A/c (Being accumulated loss written off in old ratio)		2,00,000 1,60,000 1,20,000	 4,80,000

Step 3: Conclusion Distribute General Reserve and write off the debit balance of Profit and Loss Account in the old ratio of 5 : 4 : 3 through the entries above.

Quick Tip to Solve: Use the old ratio for balances accumulated before the new ratio takes effect.

6. What is meant by over subscription of shares ? [1 mark]

Solution:

Concept:

- Subscription refers to the number of shares for which applications are received.
- Over subscription arises when applications exceed the number of shares offered for subscription.

Step 1: Compare applications with the issue Determine the number of shares offered by the company and the total number of shares applied for by investors. Over subscription occurs when the second number is greater than the first.

Step 2: Explain the excess demand For example, if a company offers 10,000 shares and receives applications for 12,000 shares, the issue is over subscribed by 2,000 shares. The term describes excess

applications; it does not mean that the company has issued more shares than it offered.

Step 3: Conclusion Over subscription of shares means receiving applications for more shares than the company has offered for subscription.

Quick Tip to Solve: Compare shares applied for with shares offered, rather than comparing their issue prices.

OR

6. What is meant by 'par value' of a share ? [1 mark]

Solution:

Concept:

- Par value is the nominal or face value assigned to one share by the company.
- It is distinct from the issue price and from the price at which an existing share trades in the market.

Step 1: Identify the fixed denomination The par value of a share is its stated face value, such as Rs 10 per share. It is the denomination in which the company's share capital is divided.

Step 2: Distinguish it from other values A share with a par value of Rs 10 may be issued at Rs 12; its face value remains Rs 10 and the additional Rs 2 is securities premium. Similarly, a change in the market quotation does not by itself change the share's par value.

Step 3: Conclusion Par value of a share means its nominal or face value, as stated for that share by the company.

Quick Tip to Solve: Keep face value separate from issue price: any excess over face value is premium.

7. Anita, Geeta, Sunita and Lata were partners in a firm. They admitted Kavita as a new partner for 1/5th share in the profits. Kavita aquired her share equally from Anita, Geeta, Sunita and Lata. The total capital of the new firm was agreed at Rs 4,00,000. Kavita brought cash equal to 1/5th of the total capital as her capital and the capitals of Anita, Geeta, Sunita and Lata were to be adjusted according to the new profit sharing ratio. For this necessary cash was to be brought by or paid to Anita, Geeta, Sunita and Lata as the case may be. After doing necessary adjustments related to revaluation of assets and reassessment of liabilities the balances in the capital accounts of Anita, Geeta, Sunita and Lata were Anita Rs 80,000; Geeta Rs 85,000; Sunita Rs 75,000 and Lata Rs 80,000. Calculate the new capitals of Anita, Geeta, Sunita and Lata and pass necessary journal entries for the above transactions in the books of the firm. [3 marks]

Solution:

Concept:

- In the absence of an agreed profit-sharing ratio, existing partners share profits equally. Each of the four old partners therefore originally has a share of $1/4$.
- A partner's proportionate capital equals the agreed total capital multiplied by the new profit share.

Cash introduced increases capital; cash repaid reduces capital.

Step 1: Calculate the new shares and proportionate capitals Kavita acquires $1/5$ equally from four partners, so each sacrifices $(1/5)/4 = 1/20$. Each old partner's new share is

$$\frac{1}{4} - \frac{1}{20} = \frac{1}{5}.$$

Thus the new ratio of Anita, Geeta, Sunita, Lata and Kavita is $1 : 1 : 1 : 1 : 1$. Each partner's required capital is Rs $4,00,000 \times 1/5 =$ Rs $80,000$.

Step 2: Determine the cash adjustments Anita and Lata already have Rs 80,000 each, so neither needs a cash adjustment. Geeta has Rs 85,000, an excess of Rs 5,000 to be repaid. Sunita has Rs 75,000, a deficiency of Rs 5,000 to be brought in. Kavita introduces Rs 80,000 as her capital. These amounts adjust the stated post-revaluation balances; no second revaluation adjustment is needed.

Step 3: Record the capital transactions

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Kavita's Capital A/c (Being capital brought in by Kavita)		80,000	 80,000
	Bank A/c Dr. To Sunita's Capital A/c (Being deficiency in capital brought in)		5,000	 5,000
	Geeta's Capital A/c Dr. To Bank A/c (Being excess capital refunded to Geeta)		5,000	 5,000

Step 4: Conclusion The new capitals of Anita, Geeta, Sunita and Lata are Rs 80,000 each. Kavita brings Rs 80,000; Sunita brings Rs 5,000 and Geeta receives Rs 5,000.

Quick Tip to Solve: Find each new profit share first; compare required capital with the adjusted capital balance to decide whether cash is brought in or refunded.

8. Hari and Krishan were partners sharing profits and losses in the ratio of 2 : 1. They admitted Shyam as a partner for 1/5th share in the profits. For this purpose the Goodwill of the firm was to be valued on the basis of three years' purchase of last five years average profits. The profits for the last five years were :

Year	2013 – 14	2014 – 15	2015 – 16	2016 – 17	2017 – 18
Profit (Rs)	50,000	40,000	75,000	(25,000)	50,000

Calculate Goodwill of the firm after adjusting the following :

The profit of 2014 – 15 was calculated after charging Rs 10,000 for abnormal loss of goods by fire. [3 marks]

Solution:

Concept:

- An abnormal loss is non-recurring. Add it back to the profit of the year in which it was charged to obtain normal maintainable profit.
- Average profit equals total adjusted profits divided by the number of years; goodwill equals average profit multiplied by the agreed years of purchase.

Step 1: Adjust the abnormal loss The Rs 10,000 loss of goods by fire reduced the reported profit of 2014–15. Since this is an abnormal loss, add it back, rather than deducting it again:

$$\text{Adjusted profit for 2014–15} = 40,000 + 10,000 = \text{Rs } 50,000.$$

No adjustment is specified for any other year. In particular, the bracketed amount for 2016–17 represents a loss and must be included as a negative figure.

Step 2: Calculate the five-year average The adjusted profits for 2013–14 to 2017–18 are respectively Rs 50,000, Rs 50,000, Rs 75,000, loss Rs 25,000 and Rs 50,000. Hence,

$$\begin{aligned}\text{Total adjusted profits} &= 50,000 + 50,000 + 75,000 - 25,000 + 50,000 \\ &= \text{Rs } 2,00,000, \\ \text{Average annual profit} &= \frac{2,00,000}{5} = \text{Rs } 40,000.\end{aligned}$$

Step 3: Apply three years of purchase The agreement values the firm's goodwill at three years' purchase of the five-year average profit. Therefore,

$$\text{Goodwill} = 40,000 \times 3 = \text{Rs } 1,20,000.$$

Shyam's admission share and the old partners' ratio do not change the valuation of the whole firm's goodwill; they would matter for a separate allocation or premium calculation.

Step 4: Conclusion The goodwill of the firm is Rs 1,20,000.

Quick Tip to Solve: Add back abnormal expenses before averaging, and treat bracketed profits as losses when adding the five years.

9. A and B are partners in a firm sharing profits and losses in the ratio of 7 : 3. Their fixed capitals were : A Rs 9,00,000 and B Rs 4,00,000. The partnership deed provided the following :

(i) Interest on capital @ 10% p.a.

(ii) A's salary Rs 50,000 per year and B's salary Rs 3,000 per month.

Profit for the year ended 31st March, 2019 Rs 2,78,000 was distributed without providing for interest on capital and partners' salary.

Showing your working clearly, pass the necessary adjustment entry for the above omissions. [3 marks]

Solution:

Concept:

- Where capitals are fixed, omitted appropriations are corrected through partners' current accounts; the fixed capital balances remain unchanged.
- For each partner compare the correct total entitlement (interest, salary and residual profit) with profit already credited. Debit an excess credit and credit a short credit.

Step 1: Compute omitted appropriations Interest on capital for the full year is: A, $9,00,000 \times 10\% =$ Rs $90,000$; B, $4,00,000 \times 10\% =$ Rs $40,000$. A's annual salary is Rs 50,000, while B's annual salary is $3,000 \times 12 =$ Rs $36,000$. Total omitted appropriations are $90,000 + 40,000 + 50,000 + 36,000 =$ Rs $2,16,000$.

Step 2: Compare the correct and actual distribution Residual profit is $2,78,000 - 2,16,000 =$ Rs $62,000$. This is divisible in the ratio $7 : 3$.

Particulars	A (Rs)	B (Rs)
Interest on capital	90,000	40,000
Annual salary	50,000	36,000
Residual profit: Rs 62,000 in 7:3	43,400	18,600
Correct total credit	1,83,400	94,600
Profit already credited: Rs 2,78,000 in 7:3	1,94,600	83,400
Adjustment required	11,200 debit	11,200 credit

A received Rs 11,200 too much and B received Rs 11,200 too little. The equal and opposite differences confirm that the adjustment redistributes profit without altering its total.

Step 3: Pass the adjustment entry

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	A's Current A/c Dr.		11,200	
	To B's Current A/c			11,200
	(Being omitted interest on capital and partners' salaries adjusted through current accounts)			

Step 4: Conclusion Debit A's Current Account and credit B's Current Account with Rs 11,200 each.

Quick Tip to Solve: Use current accounts for fixed capitals, and compare total correct credits with the profit already credited before choosing the debit.

OR

9. A, B and C were partners in a firm. On 1st April, 2018, their capitals stood at Rs 4,00,000, Rs 3,00,000 and Rs 2,00,000 respectively. As per the provisions of the partnership deed

(i) A was entitled to a salary of Rs 5,000 per month.

(ii) Partners were entitled to interest on capital @10% p.a.

The net profit for the year ended 31st March, 2019, Rs 3,00,000 was divided among the partners without providing for the above items.

Showing your working clearly, pass an adjustment entry to rectify the above error. [3 marks]

Solution:

Concept:

- If the partnership deed does not state a profit-sharing ratio, profits are shared equally; the capital ratio is not automatically the profit-sharing ratio.
- First allow the agreed salary and interest, then divide residual profit. Compare these correct credits with the equal profit credits already made.

Step 1: Compute interest and salary A's annual salary is $5,000 \times 12 =$ Rs $60,000$. Interest at 10% on the opening capitals for the year is Rs 40,000 for A, Rs 30,000 for B and Rs 20,000 for C. Total interest is Rs 90,000, so total appropriations omitted are $60,000 + 90,000 =$ Rs $1,50,000$.

Step 2: Determine the net adjustment The remaining profit is $3,00,000 - 1,50,000 =$ Rs $1,50,000$. No profit-sharing ratio is given, so each partner receives one-third, namely Rs 50,000. Originally each was credited $3,00,000/3 =$ Rs $1,00,000$.

Particulars	A (Rs)	B (Rs)	C (Rs)
Interest on capital	40,000	30,000	20,000
Salary	60,000	–	–
Residual profit	50,000	50,000	50,000
Correct total credit	1,50,000	80,000	70,000
Profit already credited	1,00,000	1,00,000	1,00,000
Net adjustment	50,000 credit	20,000 debit	30,000 debit

Thus B and C have been over-credited, while A has been under-credited. The total debit of Rs 50,000 equals the required credit to A.

Step 3: Record the rectifying entry

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	B's Capital A/c Dr.		20,000	
	C's Capital A/c Dr.		30,000	
	To A's Capital A/c			50,000
	(Being omitted salary and interest on capital adjusted)			

The question does not specify fixed capitals, so the adjustment is recorded in the capital accounts.

Step 4: Conclusion Debit B's Capital Account Rs 20,000 and C's Capital Account Rs 30,000; credit A's Capital Account Rs 50,000.

Quick Tip to Solve: When no sharing ratio is stated, divide residual profit equally even though partners have unequal capitals.

10. Present the following items in the Balance Sheet of Queen's Club as at 31st March, 2019 :

Capital Fund (1st April, 2018)	**Rs 10,80,000**
Building Fund (1st April, 2018)	**Rs 4,80,000**
Donation received for Building	**Rs 6,00,000**
10% Building Fund Investments (1st April, 2018)	**Rs 4,80,000**
Interest received on Building Fund Investments	**Rs 48,000**

Expenditure on construction of building Rs 3,60,000. The construction work is in progress and has not yet been completed. [3 marks]

Solution:

Concept:

- Building Fund is a specific-purpose fund. Donations for building and interest earned on its investments are credited to that fund, rather than general income.
- Building expenditure is capital expenditure. An incomplete building is shown as Building under Construction; until construction is complete, retain the specific fund separately.

Step 1: Calculate the closing Building Fund Add the specific donation and investment income to the opening fund:

$$\text{Building Fund} = 4,80,000 + 6,00,000 + 48,000 = \text{Rs } 11,28,000.$$

The interest received equals $10\% \times \text{Rs } 4,80,000 = \text{Rs } 48,000$, so no outstanding interest is indicated. The donation is restricted to building and cannot be added to the general Capital Fund.

Step 2: Identify the capital assets The expenditure of Rs 3,60,000 creates an unfinished capital asset; it is neither an ordinary expense nor a completed building. Since construction is still in progress, show Building under Construction Rs 3,60,000 and retain Building Fund Rs 11,28,000 separately. The Capital Fund remains Rs 10,80,000. The investments remain Rs 4,80,000 because their sale has not been stated.

Step 3: Present the specified Balance Sheet items

Queen's Club
Balance Sheet (Extract) as at 31st March, 2019

Liabilities	Rs	Assets	Rs
Capital Fund	10,80,000	Building under Construction	3,60,000
Building Fund:		10% Building Fund Investments	4,80,000
Opening: Rs 4,80,000			
Add: Donation: Rs 6,00,000			
Add: Interest: Rs 48,000	11,28,000		

Only the requested items are shown. Other assets and liabilities are not given, so no total or invented balancing cash amount is inserted in this extract.

Step 4: Conclusion Liabilities: Capital Fund Rs 10,80,000 and Building Fund Rs 11,28,000. Assets: Building under Construction Rs 3,60,000 and Building Fund Investments Rs 4,80,000.

Quick Tip to Solve: Use the words 'construction is in progress' to retain the specific fund and classify the building expenditure as an unfinished capital asset.

11. Amrit and Preet were partners in a firm sharing profits and losses in the ratio of 5 : 3. On 31st March, 2019 their firm was dissolved. On the date of dissolution their Balance Sheet showed stock of Rs 2,00,000 and creditors of Rs 1,20,000. After transferring assets (other than cash in hand and cash at bank) and third party liabilities to realisation account the following transactions took place.

(i) 40% of the total stock was taken over by Amrit at 10% less than book value.

(ii) 20% of the total stock was taken over by a creditor of Rs 50,000 in full settlement of his account.

(iii) The remaining creditors were paid at a discount of Rs 5,000.

(iv) The remaining stock was sold for cash for Rs 90,000.

Pass necessary journal entries for the above transactions in the books of the firm. [4 marks]

Solution:

Concept:

- After assets and outside liabilities have been transferred to Realisation Account, asset realisation is credited to Realisation Account and cash payments to creditors are debited to it.
- An asset taken over by a partner is debited to that partner's Capital Account at the agreed value. An asset taken by a creditor in full settlement requires no further entry when both were already transferred to Realisation Account.

Step 1: Calculate the amounts for the four transactions (i) Amrit takes stock with book value $40\% \times 2,00,000 = \text{Rs } 80,000$. Its agreed value is $80,000 \times 90\% = \text{Rs } 72,000$.

(ii) Stock with book value $20\% \times 2,00,000 = \text{Rs } 40,000$ settles a creditor of Rs 50,000 in full. No cash is paid and no separate entry is required: the stock and creditor already stand transferred to Realisation Account.

(iii) Remaining creditors are $1,20,000 - 50,000 = \text{Rs } 70,000$. Deduct the settlement discount of Rs 5,000: cash paid is Rs 65,000.

(iv) Remaining stock has book value $2,00,000 - 80,000 - 40,000 = \text{Rs } 80,000$; the actual cash proceeds of Rs 90,000 are recorded.

Step 2: Record the journal entries

Journal of Amrit and Preet

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Amrit's Capital A/c Dr. To Realisation A/c (Being 40% of stock taken over by Amrit at 10% below book value)		72,000	72,000
31-3-2019	Realisation A/c Dr. To Bank A/c (Being remaining creditors of Rs 70,000 paid after discount of Rs 5,000)		65,000	65,000
31-3-2019	Bank A/c Dr. To Realisation A/c (Being remaining stock sold for cash)		90,000	90,000

For transaction (ii), no journal entry is passed. The reduction in the creditor's claim relative to the

stock's book value automatically affects the final balance of Realisation Account. Likewise the Rs 5,000 discount is reflected through paying only Rs 65,000, without a separate Discount Received Account.

Step 3: Conclusion Debit Amrit's Capital Account and credit Realisation Account Rs 72,000; no entry for the creditor taking stock; debit Realisation Account and credit Bank Account Rs 65,000; debit Bank Account and credit Realisation Account Rs 90,000.

Quick Tip to Solve: Once both stock and creditors are transferred to Realisation Account, a creditor accepting stock in full settlement needs no second journal entry.

12. E, F and G were partners in a firm. On 31st March, 2015 G died. After doing all necessary adjustments the capital account of G showed a net balance of Rs 1,40,000. Rs 50,000 was immediately paid to G's executor H and starting from 31st March, 2016, the balance was paid to him in three equal yearly instalments with interest @ 12% p.a. The firm closes its books on 31st March every year. Prepare H's account till he is finally paid. [4 marks]

Solution:

Concept:

- The balance due to a deceased partner is transferred from his capital account to his executor's account. Payments debit the executor's account; interest due credits it.
- Equal yearly instalments mean equal portions of the outstanding principal. Interest at 12% p.a. is added separately on the unpaid principal for each year.

Step 1: Calculate principal and yearly interest The amount transferred to H is Rs 1,40,000. After the immediate payment of Rs 50,000 on 31 March 2015, the principal outstanding is Rs 90,000. Each annual principal instalment is therefore $90,000/3 = \text{Rs } 30,000$.

$$\text{Interest for 2015–16} = 90,000 \times 12/100 = \text{Rs } 10,800,$$
$$\text{Interest for 2016–17} = 60,000 \times 12/100 = \text{Rs } 7,200,$$
$$\text{Interest for 2017–18} = 30,000 \times 12/100 = \text{Rs } 3,600.$$

Thus the three yearly bank payments include both the principal instalment and that year's interest: Rs 40,800, Rs 37,200 and Rs 33,600 respectively. Interest is charged only on the outstanding principal after the preceding payment.

Step 2: Prepare H's account H's Account (G's Executor)

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	31-3-2015 To Bank	50,000	31-3-2015 By G's Capital	1,40,000	
	To Balance c/d	90,000			
	Total	1,40,000	Total	1,40,000	
	31-3-2016 To Bank	40,800	1-4-2015 By Balance b/d	90,000	
	To Balance c/d	60,000	31-3-2016 By Interest	10,800	
	Total	1,00,800	Total	1,00,800	
	31-3-2017 To Bank	37,200	1-4-2016 By Balance b/d	60,000	
	To Balance c/d	30,000	31-3-2017 By Interest	7,200	

Total	67,200	Total	67,200
31-3-2018 To Bank	33,600	1-4-2017 By Balance b/d	30,000
		31-3-2018 By Interest	3,600
Total	33,600	Total	33,600

The credit balances carried down represent the unpaid amount owed by the firm to H, and they are brought down on the credit side in the next accounting year. The final payment clears both the remaining Rs 30,000 principal and Rs 3,600 interest; hence no balance remains after 31 March 2018.

Step 3: Conclusion H is finally paid on 31 March 2018. Total interest is Rs 21,600, and total payments including the immediate Rs 50,000 are Rs 1,61,600.

Quick Tip to Solve: Divide only the Rs 90,000 unpaid principal into three equal parts; calculate interest afresh on Rs 90,000, Rs 60,000 and Rs 30,000.

13. On 1st April, 2016 X Ltd. issued 1000; 9% debentures of Rs 100 each at a premium of Rs 5 per debenture and redeemable on 31st March, 2019 at a premium of Rs 8 per debenture. The company created the minimum amount of debenture redemption reserve as per the provisions of the Companies Act, 2013 on 31st March, 2018 and made investments in 8% p.a. fixed deposits in State Bank of India on 1st April, 2018.

Excluding the entries for writing off loss on issue of debentures and interest on debentures, pass necessary journal entries for the above transactions in the books of X Ltd. [6 marks]

Solution:

Concept:

- The debenture account records nominal value. Issue premium is credited to Securities Premium Reserve, while the premium payable on redemption is a liability and creates loss on issue.
- Under the provisions applicable to this 2016 issue and 2019 redemption, minimum Debenture Redemption Reserve (DRR) is 25% of nominal value and prescribed investment is 15% of the debentures maturing.

Step 1: Compute the amounts The nominal value is $1,000 \times 100 = \text{Rs } 1,00,000$. Issue proceeds are $1,000 \times 105 = \text{Rs } 1,05,000$, including issue premium of Rs 5,000. Redemption premium is $1,000 \times 8 = \text{Rs } 8,000$, so debentureholders receive Rs 1,08,000 on redemption. The loss on issue arising from the redemption premium is recorded at issue; the question excludes its subsequent write-off.

$$\text{DRR} = 1,00,000 \times 25/100 = \text{Rs } 25,000,$$

$$\text{Investment} = 1,00,000 \times 15/100 = \text{Rs } 15,000,$$

$$\text{FD interest for one year} = 15,000 \times 8/100 = \text{Rs } 1,200.$$

The reserve is an appropriation of profits, whereas the fixed deposit is an asset. They therefore require separate entries. The fixed deposit is realised on redemption, with its interest credited to Interest on Debenture Redemption Investment Account.

Step 2: Record issue, reserve and investment Journal of X Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2016	Bank A/c Dr.		1,05,000	
	Loss on Issue of Debentures A/c Dr.		8,000	
	To 9% Debentures A/c			1,00,000
	To Securities Premium Reserve A/c			5,000
	To Premium on Redemption of Debentures A/c			8,000
	(Being 1,000 debentures issued at Rs 105, redeemable at Rs 108 each)			
31-3-2018	Surplus in Statement of Profit and Loss A/c Dr.		25,000	
	To Debenture Redemption Reserve A/c			25,000
	(Being minimum DRR created out of available profits)			
1-4-2018	Debenture Redemption Investment A/c Dr.		15,000	
	To Bank A/c			15,000
	(Being prescribed investment made in SBI fixed deposit earning 8% p.a.)			

Step 3: Record realisation and redemption Journal of X Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-3-2019	Bank A/c Dr.		16,200	
	To Debenture Redemption Investment A/c			15,000
	To Interest on Debenture Redemption Investment A/c			1,200
	(Being fixed deposit realised with one year's interest)			
31-3-2019	Interest on Debenture Redemption Investment A/c Dr.		1,200	
	To Statement of Profit and Loss A/c			1,200
	(Being investment interest transferred to profit and loss)			
31-3-2019	9% Debentures A/c Dr.		1,00,000	
	Premium on Redemption of Debentures A/c Dr.		8,000	
	To Debentureholders A/c			1,08,000
	(Being amount due on redemption at 8% premium)			
31-3-2019	Debentureholders A/c Dr.		1,08,000	
	To Bank A/c			1,08,000
	(Being debentureholders paid in full)			
31-3-2019	Debenture Redemption Reserve A/c Dr.		25,000	
	To General Reserve A/c			25,000
	(Being DRR transferred after complete redemption)			

The interest received on the SBI deposit is investment income. It is distinct from interest payable on the 9% debentures, whose entries are excluded by the question.

Step 4: Conclusion DRR created is Rs 25,000; the SBI investment is Rs 15,000, earning Rs 1,200. The debentures are redeemed for Rs 1,08,000 and DRR is transferred to General Reserve.

Quick Tip to Solve: Apply 25% DRR and 15% investment to the Rs 1,00,000 nominal value; include the Rs 8,000 premium only when calculating redemption liability.

14. From the following Receipts and Payments Account and additional information of Modern Health Club, prepare Income and Expenditure Account for the year ended 31st March, 2019 and the Balance Sheet as at 31st March, 2019.

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

Receipts	Amount (Rs)	Payments	Amount (Rs)
To Balance b/d	17,000	By Salaries	30,000
To Subscriptions	60,000	By Rent	18,300
To Donations	2,000	By Repairs	4,700
To Furniture (Book Value Rs 6,000)	5,000	By Books	16,000
To Life Membership Fees	7,000	By Buildings	30,000
To Interest on Investment (@ 5% for full year)	9,000	By Balance c/d	1,000
	1,00,000		1,00,000

Additional Information :

	Particulars	31.03.2018 (Rs)	31.03.2019 (Rs)
(i)	Subscription received in advance	4,000	5,000
(ii)	Outstanding Subscription	3,000	4,000
(iii)	Books	12,500	26,500

[6 marks]

Solution:

Concept:

- Income and Expenditure Account records revenue income and expenditure on the accrual basis; capital receipts and capital payments belong in the Balance Sheet.
- Subscription income equals cash received plus opening advance and closing outstanding, less closing advance and opening outstanding.
- Life membership fees are capitalised. Investment principal equals annual interest divided by its annual rate. Loss on sale and depreciation are revenue expenses.

Step 1: Calculate accrued income and depreciation Subscription income is

$$60,000 + 4,000 + 4,000 - 5,000 - 3,000 = \text{Rs } 60,000.$$

The opening advance becomes current-year income; the closing advance belongs to next year. Closing outstanding subscription is an asset. Books depreciation is $12,500 + 16,000 - 26,500 = \text{Rs } 2,000$. Furniture sold has book value Rs 6,000 and proceeds Rs 5,000; hence the loss is Rs 1,000. General donations of Rs 2,000 are revenue income. The investment earns Rs 9,000 for the full year at 5%, so its value is $9,000 \times 100/5 = \text{Rs } 1,80,000$.

Step 2: Prepare Income and Expenditure Account Modern Health Club: Income and Expenditure Account for the year ended 31st March, 2019

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Salaries	30,000	By Subscriptions	60,000
To Rent	18,300	By Donations	2,000
To Repairs	4,700	By Interest on investment	9,000
To Depreciation on books	2,000		
To Loss on furniture sale	1,000		
To Surplus (capital fund)	15,000		
Total	71,000	Total	71,000

Revenue expenses total Rs 56,000. The surplus is the excess of income over these expenses; purchase of books and building is excluded from expenses.

Step 3: Determine opening capital fund The opening assets are cash Rs 17,000, outstanding subscription Rs 3,000, books Rs 12,500, furniture Rs 6,000 and investment Rs 1,80,000. Opening subscription received in advance is a liability of Rs 4,000. Thus,

$$\text{Opening capital fund} = 17,000 + 3,000 + 12,500 + 6,000 + 1,80,000 - 4,000 = \text{Rs } 2,14,500.$$

Closing capital fund is $2,14,500 + 15,000 + 7,000 = \text{Rs } 2,36,500$. The Rs 7,000 life membership fees are added directly to the fund. Furniture has been sold, so no furniture remains at year end.

Step 4: Prepare the closing Balance Sheet Modern Health Club: Balance Sheet as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capital fund	2,36,500	Investment	1,80,000
Subscription in advance	5,000	Building	30,000
		Books	26,500
		Subscription outstanding	4,000
		Cash balance	1,000
Total	2,41,500	Total	2,41,500

The building payment is shown as an asset, the closing books balance is used after depreciation, and only subscriptions belonging to the current year enter income.

Step 5: Conclusion The surplus is Rs 15,000; closing capital fund is Rs 2,36,500 and the Balance Sheet total is Rs 2,41,500.

Quick Tip to Solve: Infer investment from Rs 9,000 at 5% before finding opening capital; capitalise life membership fees and expense only the furniture loss.

15. **X and Y are partners sharing profits in the ratio of 3 : 2. Their partnership deed provided for allowing interest on capital @ 10% p.a. and charging interest on drawings @ 12% p.a. The incomplete Profit and Loss Appropriation Account for the year ended 31st March, 2019, partners capital and current accounts are given below :**

Profit and Loss Appropriation Account for the year ended 31st March, 2019

Dr Particulars	Amount (Rs)	Cr Particulars	Amount (Rs)
To Interest on Capital : X's Current A/c ..... Y's Current A/c	.....	By Profit and Loss A/c Net Profit b/d	.....
To Salary Y's Current A/c	.....	By Interest on Drawings : X's Current A/c ..... Y's Current A/c	.....
To Profit transferred to : X's Current A/c 1,20,000 Y's Current A/c	.....		
	2,84,000		2,84,000

Partners' Capital Accounts

Dr Particulars	X (Rs)	Y (Rs)	Cr Particulars	X (Rs)	Y (Rs)
To Balance c/d	.....	.....	By Balance b/d	.....	.....
	.....	.....		.....	.....

Partners' Current Accounts

Dr Particulars	X (Rs)	Y (Rs)	Cr Particulars	X (Rs)	Y (Rs)
To Bank (Drawing)	10,000	9,000	By Balance b/d	78,000	69,000
To	.....	.....	By Interest on Capital	18,000	24,000
To	.....	.....	By ..... By	....	....
	.....	.....		.....	.....

Complete the Profit and Loss Appropriation Account for the year ended 31st March, 2019, Partners' Capital Accounts and Current Accounts. [6 marks]

Solution:

Concept:

- Under the fixed capital method, capital accounts retain their fixed balances, while drawings, interest, salary and profit shares enter current accounts.
- Interest on capital equals capital multiplied by 10%. The residual profit is divided between X and Y in the ratio 3:2.
- Where dates of drawings are unspecified, interest on total drawings is calculated for an average period of six months at the annual rate.

Step 1: Find capitals, profit shares and salary X has interest on capital of Rs 18,000 and Y has Rs 24,000. Therefore,

$$C_X = 18,000 \times 100/10 = \text{Rs } 1,80,000, \qquad C_Y = 24,000 \times 100/10 = \text{Rs } 2,40,000.$$

X's profit share is Rs 1,20,000 for three parts, so Y's two-part share is $1,20,000 \times 2/3 = \text{Rs } 80,000$. Total divisible profit is Rs 2,00,000. The debit total of the Appropriation Account is Rs 2,84,000. Hence Y's salary is $2,84,000 - 42,000 - 2,00,000 = \text{Rs } 42,000$.

Step 2: Calculate interest on drawings and net profit The drawings dates are not specified, so use the average period of six months:

$$I_X = 10,000 \times \frac{12}{100} \times \frac{6}{12} = \text{Rs } 600, \quad I_Y = 9,000 \times \frac{12}{100} \times \frac{6}{12} = \text{Rs } 540.$$

Total interest on drawings is Rs 1,140. Since it is credited to the Appropriation Account, net profit brought forward is $2,84,000 - 1,140 = \text{Rs } 2,82,860$. Interest on drawings is debited to the partners' current accounts.

Step 3: Complete Profit and Loss Appropriation Account Profit and Loss Appropriation Account for the year ended 31st March, 2019

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Interest on capital: X	18,000	By P&L A/c: Net profit	2,82,860
To Interest on capital: Y	24,000	By Interest on drawings: X	600
To Salary: Y's Current A/c	42,000	By Interest on drawings: Y	540
To Profit: X's Current A/c	1,20,000		
To Profit: Y's Current A/c	80,000		
Total	2,84,000	Total	2,84,000

Step 4: Complete the fixed Capital Accounts Partners' Capital Accounts

Dr. Particulars	X (Rs)	Y (Rs)	Cr. Particulars	X (Rs)	Y (Rs)
To Balance c/d	1,80,000	2,40,000	By Balance b/d	1,80,000	2,40,000
Total	1,80,000	2,40,000	Total	1,80,000	2,40,000

There is no permanent capital introduced or withdrawn, so opening and closing capitals are equal.

Step 5: Complete the Current Accounts Partners' Current Accounts

Dr. Particulars	X (Rs)	Y (Rs)	Cr. Particulars	X (Rs)	Y (Rs)
To Bank (drawings)	10,000	9,000	By Balance b/d	78,000	69,000
To Interest on drawings	600	540	By Interest on capital	18,000	24,000
To Balance c/d	2,05,400	2,05,460	By Salary	–	42,000
			By Profit share	1,20,000	80,000
Total	2,16,000	2,15,000	Total	2,16,000	2,15,000

X's closing credit balance is $2,16,000 - 10,000 - 600 = \text{Rs } 2,05,400$; Y's is $2,15,000 - 9,000 - 540 = \text{Rs } 2,05,460$. These balances are carried down on the debit side to balance the accounts and brought down on the credit side next year.

Step 6: Conclusion Net profit is Rs 2,82,860 and Y's salary is Rs 42,000. Fixed capitals are Rs 1,80,000 and Rs 2,40,000; closing current-account credit balances are Rs 2,05,400 and Rs 2,05,460 respectively.

Quick Tip to Solve: Use X's Rs 1,20,000 profit share to obtain the profit pool first; then subtract interest on capital and this pool from Rs 2,84,000 to find salary.

OR

15. X and Y are partners in a firm sharing profits and losses in the ratio of 2 : 1. Their fixed capitals are Rs 5,00,000 and Rs 3,00,000 respectively. Interest on capital is allowed @ 9% p.a. while interest on drawings is charged @ 12% p.a. X is allowed a salary of Rs 4,000 per month. Interest on Y's loan of Rs 2,00,000 is to be provided @ 6% p.a. During the year ended 31st March, 2019, X's drawings were Rs 60,000 and Y's drawings were Rs 72,000. 5% of the Net Profit is to be transferred to General Reserve. Incomplete Profit and Loss Appropriation Account for the year ended 31st March, 2019 prepared by the firm is given below :

Incomplete Profit and Loss Appropriation Account for the year ended 31st March, 2019

Dr Particulars	Amount (Rs)	Cr Particulars	Amount (Rs)
To Interest on Capital : X's Current A/c ..... Y's Current A/c	.....	By Profit and Loss A/c Net Profit b/d	.....
To Salary X's Current A/c	.....	By Interest on Drawings : X's Current A/c ..... Y's Current A/c	.....
To General Reserve	15,000		
To Profit transferred to : X's Current A/c ..... Y's Current A/c	.....		
	.....		.....

Complete the Profit and Loss Appropriation A/c of X and Y for the year ended 31st March, 2019.

[6 marks]

Solution:

Concept:

- Interest on partners' loans is a charge against profit, whereas interest on capital, salary and transfer to reserve are appropriations of net profit.
- Where dates of drawings are not specified, interest on the annual drawings is calculated for an average period of six months.
- The residual divisible profit is distributed between X and Y in their agreed ratio of $2 : 1$.

Step 1: Recover net profit from the reserve The General Reserve transfer of Rs 15,000 equals 5% of net profit. Therefore,

$$\text{Net profit} = 15,000 \times \frac{100}{5} = \text{Rs } 3,00,000.$$

Interest on Y's loan is $2,00,000 \times 6\% = \text{Rs } 12,000$. This is a charge already taken into account in arriving at net profit; it must not be deducted again in the appropriation account.

Step 2: Calculate interest, salary and divisible profit Interest on fixed capitals is X: $5,00,000 \times 9\% = \text{Rs } 45,000$, and Y: $3,00,000 \times 9\% = \text{Rs } 27,000$. X's annual salary is $4,000 \times 12 = \text{Rs } 48,000$. Interest

on drawings is:

$$X : 60,000 \times \frac{12}{100} \times \frac{6}{12} = \text{Rs } 3,600,$$
$$Y : 72,000 \times \frac{12}{100} \times \frac{6}{12} = \text{Rs } 4,320.$$

Thus the amount available before appropriations is Rs 3,07,920. Deducting capital interest Rs 72,000, salary Rs 48,000 and reserve Rs 15,000 leaves divisible profit Rs 1,72,920. X receives $1,72,920 \times 2/3 = \text{Rs } 1,15,280$; Y receives Rs 57,640.

Step 3: Complete the appropriation account **Profit and Loss Appropriation Account for the year ended 31st March, 2019**

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Interest on Capital:		By Profit and Loss A/c	3,00,000
X's Current A/c	45,000	By Interest on Drawings:	
Y's Current A/c	27,000	X's Current A/c	3,600
To X's Salary A/c	48,000	Y's Current A/c	4,320
To General Reserve	15,000		
To Profit transferred:			
X's Current A/c	1,15,280		
Y's Current A/c	57,640		
Total	3,07,920	Total	3,07,920

All appropriations are fully distributed, so this nominal account has no balance carried down. The capital-interest and salary credits belong to the partners' current accounts because their capitals are fixed.

Step 4: Conclusion Net profit is Rs 3,00,000. Divisible profit is Rs 1,72,920: X receives Rs 1,15,280 and Y Rs 57,640. Both sides of the appropriation account total Rs 3,07,920.

Quick Tip to Solve: Use the reserve percentage to recover net profit first; do not deduct loan interest a second time.

16. **Lisa, Monika and Nisha were partners in a firm sharing profits and losses in the ratio of 2 : 2 : 1. On 31st March, 2019, their Balance Sheet was as follows :**

Balance Sheet of Lisa, Monika and Nisha as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Trade Creditors	1,60,000	Land and Building	10,00,000
Bills Payable	2,44,000	Machinery	12,00,000
Employees Provident Fund	76,000	Stock	10,00,000
Capitals : Lisa 14,00,000 Monika 14,00,000 Nisha 3,60,000	31,60,000	Sundry Debtors	4,00,000
		Bank	40,000
	36,40,000		36,40,000

On 31st March, 2019, Monika retired from the firm and the remaining partners decided to carry on the business. It was agreed that :

(i) Land and building be appreciated by Rs 2,40,000 and machinery be depreciated by 10%.

(ii) 50% of the stock was taken over by the retiring partner at book value.

(iii) Provision for doubtful debts was to be made at 5% on debtors.

(iv) Goodwill of the firm be valued at Rs 3,00,000 and Monika's share of goodwill be adjusted in the accounts of Lisa and Nisha.

(v) The total capital of the new firm be fixed at Rs 27,00,000 which will be in the proportion of the new profit sharing ratio of Lisa and Nisha. For this purpose, current accounts of the partners were to be opened.

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

Solution:

Concept:

- Revaluation gains and losses belong to all old partners in their old ratio $2:2:1$. Taking stock at book value creates no revaluation gain or loss.
- With no fresh agreement, Lisa and Nisha retain their relative shares, so the new ratio is $2:1$. Their gains are $4/15$ and $2/15$, respectively.
- Adjust the retiring partner's goodwill through the gaining partners, then fix the continuing partners' capitals through current accounts. An unpaid retirement balance becomes a loan.

Step 1: Determine revaluation profit Land and building appreciate by Rs 2,40,000. Machinery depreciates by $12,00,000 \times 10\% =$ Rs $1,20,000$. Provision for doubtful debts is $4,00,000 \times 5\% =$ Rs $20,000$. Therefore revaluation profit is Rs 1,00,000, shared as Rs 40,000, Rs 40,000 and Rs 20,000.

Revaluation Account

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Machinery	1,20,000	By Land and Building	2,40,000
To Provision for doubtful debts	20,000		
To Lisa's Capital A/c	40,000		
To Monika's Capital A/c	40,000		
To Nisha's Capital A/c	20,000		
Total	2,40,000	Total	2,40,000

The account is closed by transferring its profit to capitals; it has no closing balance.

Step 2: Adjust goodwill and retirement dues Monika's goodwill share is $3,00,000 \times 2/5 =$ Rs $1,20,000$. Lisa's gain is $2/3 - 2/5 = 4/15$, and Nisha's gain is $1/3 - 1/5 = 2/15$; the gaining ratio is $2:1$. Debit Lisa's capital by Rs 80,000 and Nisha's by Rs 40,000 and credit Monika's by Rs 1,20,000. No goodwill asset remains in the books.

Monika takes stock of $10,00,000 \times 50\% =$ Rs $5,00,000$. Her unpaid entitlement is $14,00,000 + 40,000 + 1,20,000 - 5,00,000 =$ Rs $10,60,000$, transferred to her loan account. No cash payment is stipulated, so Bank remains Rs 40,000.

Step 3: Fix capitals and prepare capital accounts The required capitals are Lisa: $27,00,000 \times 2/3 =$ Rs $18,00,000$, and Nisha: Rs 9,00,000. Adjusted capitals before fixing are Lisa Rs 13,60,000 and Nisha Rs 3,40,000. Debit their current accounts by Rs 4,40,000 and Rs 5,60,000 respectively, crediting capitals with these amounts. These are debit current balances, shown as assets.

Partners' Capital Accounts (amounts in Rs)

Dr.				Cr.			
Particulars	Lisa	Monika	Nisha	Particulars	Lisa	Monika	Nisha
To Monika (goodwill)	80,000	–	40,000	By Balance b/d	14,00,000	14,00,000	3,60,000
To Stock	–	5,00,000	–	By Revaluation	40,000	40,000	20,000
To Monika's Loan	–	10,60,000	–	By Goodwill adjustment	–	1,20,000	–
To Balance c/d	18,00,000	–	9,00,000	By Current A/c	4,40,000	–	5,60,000
Total	18,80,000	15,60,000	9,40,000	Total	18,80,000	15,60,000	9,40,000

Step 4: Prepare the reconstituted balance sheet **Balance Sheet of Lisa and Nisha as at 31st March, 2019**

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Trade Creditors	1,60,000	Land and Building	12,40,000
Bills Payable	2,44,000	Machinery	10,80,000
Employees Provident Fund	76,000	Stock	5,00,000
Monika's Loan	10,60,000	Sundry Debtors	4,00,000
Partners' Capitals:		Less: Provision	20,000
Lisa	18,00,000	Net Debtors	3,80,000
Nisha	9,00,000	Bank	40,000
		Partners' Current A/cs (Dr.):	
		Lisa	4,40,000
		Nisha	5,60,000
Total	42,40,000	Total	42,40,000

The gross debtors and provision are working details; only net debtors Rs 3,80,000 are included in the asset total. Outside liabilities remain unchanged, since no settlement or revaluation of them is specified.

Step 5: Conclusion Revaluation profit is Rs 1,00,000; Monika's loan is Rs 10,60,000. Lisa and Nisha have capitals of Rs 18,00,000 and Rs 9,00,000, with debit current balances of Rs 4,40,000 and Rs 5,60,000. The balance sheet totals Rs 42,40,000.

Quick Tip to Solve: Fix capitals only after revaluation, goodwill and stock adjustments; transfer the shortfalls to debit current accounts.

OR

16. On 31st March, 2019 the Balance Sheet of Madan and Mohan who share profits and losses in the ratio of 3 : 2 was as follows :

Balance Sheet of Madan and Mohan as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	28,000	Cash at Bank	10,000
General Reserve	10,000	Debtors 65,000 Less : Provision for Doubtful debts 5,000	60,000
Employees Provident Fund	22,000	Stock	33,000
Capitals : Madan 60,000 Mohan 40,000	1,00,000	Patents	57,000
	1,60,000		1,60,000

They decided to admit Gopal on 1st April, 2019 for 1/5th share which Gopal acquired wholly from Mohan on the following terms :

(i) Gopal shall bring Rs 10,000 as his share of premium for Goodwill.

(ii) A debtor whose dues of Rs 3,000 were written off as bad debt paid Rs 2,000 in full settlement.

(iii) A claim of Rs 5,000 on account of workmen's compensation was to be provided for.

(iv) Patents were undervalued by Rs 2,000. Stock in the books was valued 10% more than its market value.

(v) Gopal was to bring in capital equal to 20% of the combined capitals of Madan and Mohan after all adjustments.

Prepare Revaluation Account, Capital Accounts of the Partners and the Balance Sheet of the new firm. [8 marks]

Solution:

Concept:

- Accumulated reserves and revaluation profit or loss belong to the old partners in their old ratio, $3:2$. A liability newly recognised is debited to Revaluation Account.
- Goodwill premium compensates the sacrificing partner. Since Gopal acquires his entire $1/5$ share from Mohan, the whole Rs 10,000 premium is credited to Mohan.
- When book value is 110% of market value, market value equals book value divided by 1.10. The

incoming capital is calculated only after adjusting old capitals.

Step 1: Determine the new ratio and revaluation adjustments Madan retains $3/5$; Mohan retains $2/5 - 1/5 = 1/5$; Gopal receives $1/5$. Thus the new ratio is $3 : 1 : 1$. Stock is valued at $33,000 \times 100/110 =$ Rs $30,000$, so its reduction is Rs 3,000. The recovered bad debt increases bank and revaluation profit by Rs 2,000; the unrecovered Rs 1,000 is not written off again because the entire debt was written off earlier. Patents increase to Rs 59,000. The compensation claim creates a liability of Rs 5,000; Employees Provident Fund remains payable in full.

Step 2: Prepare Revaluation Account **Revaluation Account**

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Workmen's compensation	5,000	By Bank (bad debts recovered)	2,000
To Stock	3,000	By Patents	2,000
		By Madan's Capital (loss)	2,400
		By Mohan's Capital (loss)	1,600
Total	8,000	Total	8,000

Revaluation loss $= 5,000 + 3,000 - 2,000 - 2,000 =$ Rs $4,000$, divided in the old ratio $3 : 2$.

Step 3: Prepare partners capital accounts General Reserve is credited as Rs 6,000 to Madan and Rs 4,000 to Mohan. Their adjusted capitals are respectively $60,000 + 6,000 - 2,400 =$ Rs $63,600$ and $40,000 + 4,000 + 10,000 - 1,600 =$ Rs $52,400$. Gopal brings $20\% \times (63,600 + 52,400) =$ Rs $23,200$ capital, in addition to goodwill premium.

Partners' Capital Accounts

Dr.				Cr.			
Particulars	Madan Rs	Mohan Rs	Gopal Rs	Particulars	Madan Rs	Mohan Rs	Gopal Rs
To Revaluation	2,400	1,600	–	By Balance b/d	60,000	40,000	–
To Balance c/d	63,600	52,400	23,200	By General Reserve	6,000	4,000	–
				By Goodwill Premium	–	10,000	–
				By Bank	–	–	23,200
Total	66,000	54,000	23,200	Total	66,000	54,000	23,200

Step 4: Prepare the new balance sheet Bank balance $= 10,000 + 2,000 + 10,000 + 23,200 =$ Rs $45,200$. The existing debtors provision remains Rs 5,000, so net debtors remain Rs 60,000. No goodwill asset is created because the premium is adjusted through partners' capitals.

Balance Sheet of Madan, Mohan and Gopal as at 1st April, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	28,000	Bank	45,200
Employees Provident Fund	22,000	Debtors 65,000	
Workmen's compensation claim	5,000	Less: Provision 5,000	60,000
Capitals: Madan	63,600	Stock	30,000
Mohan	52,400	Patents	59,000
Gopal	23,200		
Total	1,94,200	Total	1,94,200

Step 5: Conclusion The new ratio is $3 : 1 : 1$, revaluation loss is Rs 4,000, and Gopal brings capital of Rs 23,200. The new Balance Sheet totals Rs 1,94,200.

Quick Tip to Solve: For stock overstated by 10% of market value, divide its book value by 1.10; do not subtract 10% of book value.

17. Rathee Ltd. invited applications for issuing 1,00,000 equity shares of Rs 10 each. The shares were issued at a premium of 60%. The amount was payable as follows :

On Application and Allotment – Rs 6 per share (including premium Rs 4)

On First and Final Call – Balance including premium

Applications for 1,90,000 shares were received. The allotment was made as follows :

Category A – Applications for 10,000 shares were rejected.

Category B – Applications for 1,00,000 shares were allotted 50,000 shares.

Category C – Applications for 80,000 shares were allotted 50,000 shares.

Excess money received on application and allotment was adjusted towards sums due on first and final call.

Ali, who belonged to Category B, and had applied for 1,000 shares, paid the entire amount of his share money with application.

Bali, who belonged to Category C, was allotted 1,000 shares, failed to pay the first and final call money. His shares were forfeited and re-issued at Rs 15 per share fully paid up.

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

Solution:

Concept:

- Issue price is nominal value plus securities premium: $10 + 60\% \times 10 = \text{Rs } 16$. Application and allotment contain Rs 2 capital and Rs 4 premium; the call contains Rs 8 capital and Rs 2 premium.
- Pro-rata surplus is adjusted against the call before calculating arrears. On forfeiture, debit called-up capital and reverse only unpaid premium; credit Share Forfeiture with capital actually received.
- On reissue above face value, the excess is securities premium. Forfeiture relating to shares reissued, less any reissue discount, is transferred to Capital Reserve.

Step 1: Calculate allotments, surplus and Ali advance Category A receives no shares and its Rs 60,000 is refunded. Category B is allotted one share for every two applied for; Category C is allotted five for every eight. Normal application receipts are $1,90,000 \times 6 = \text{Rs } 11,40,000$. Surplus for B is $(1,00,000 - 50,000) \times 6 = \text{Rs } 3,00,000$; for C it is $(80,000 - 50,000) \times 6 = \text{Rs } 1,80,000$. Ali is allotted $1,000/2 = 500$ shares. His entire share money is $500 \times 16 = \text{Rs } 8,000$. Against his normal application payment of Rs 6,000, he pays Rs 2,000 extra; his total call advance is $8,000 - 500 \times 6 = \text{Rs } 5,000$. Thus total bank receipts on application are Rs 11,42,000 and total calls in advance are Rs 4,82,000.

Step 2: Compute Bali arrears and the forfeiture amount Bali applied for $1,000 \times 8/5 = 1,600$ shares and paid $1,600 \times 6 = \text{Rs } 9,600$. His application and allotment requirement is Rs 6,000, leaving Rs 3,600 against the Rs 10,000 call. Therefore his unpaid call is Rs 6,400. The adjusted Rs 3,600 first covers the Rs 2,000 call premium, with Rs 1,600 toward call capital. Consequently no premium remains unpaid. Capital received is $2,000 + 1,600 = \text{Rs } 3,600$. Forfeiture debits Share Capital Rs 10,000 and credits Call Rs 6,400 and Share Forfeiture Rs 3,600. Cash received on call is $10,00,000 - 4,82,000 - 6,400 = \text{Rs } 5,11,600$.

Step 3: Record application, allotment and call entries **Journal of Rathee Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		11,42,000	
	To Share Application and Allotment A/c			11,42,000
	(Being application money including Ali's advance received)			
	Share Application and Allotment A/c Dr.		11,42,000	
	To Share Capital A/c			2,00,000
	To Securities Premium A/c			4,00,000
	To Bank A/c			60,000
	To Calls in Advance A/c			4,82,000
	(Being allotment, rejection refund and call advances adjusted)			
	Share First and Final Call A/c Dr.		10,00,000	
	To Share Capital A/c			8,00,000
	To Securities Premium A/c			2,00,000
	(Being first and final call due on 1,00,000 shares)			
	Calls in Advance A/c Dr.		4,82,000	
	Bank A/c Dr.		5,11,600	
	To Share First and Final Call A/c			9,93,600
	(Being advances adjusted and call received except Bali's arrears)			

Step 4: Record forfeiture, reissue and capital reserve **Journal of Rathee Ltd. (continued)**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Capital A/c Dr.		10,000	
	To Share First and Final Call A/c			6,400
	To Share Forfeiture A/c			3,600
	(Being Bali's 1,000 shares forfeited for unpaid call)			
	Bank A/c Dr.		15,000	
	To Share Capital A/c			10,000
	To Securities Premium A/c			5,000
	(Being 1,000 forfeited shares reissued at Rs 15 fully paid)			
	Share Forfeiture A/c Dr.		3,600	
	To Capital Reserve A/c			3,600
	(Being forfeiture surplus on reissued shares transferred)			

All Bali's shares have been reissued and there is no discount on reissue, so the entire forfeiture amount becomes capital reserve. The Rs 5,000 reissue premium is separately credited to Securities Premium, never included in capital reserve.

Step 5: Conclusion Bali forfeits capital paid of Rs 3,600; call arrears are Rs 6,400. Reissue creates securities premium of Rs 5,000 and Capital Reserve of Rs 3,600.

Quick Tip to Solve: Before forfeiting pro-rata shares, apply the excess application money against the call and clear the unpaid premium component first.

OR

17. 'Venus Ltd' was registered with an authorised capital of Rs 40,00,000 divided into 4,00,000 equity shares of 10 each. 70,000 of these shares were issued as fully paid to 'M/s. Star Ltd.' for building purchased from them. 2,00,000 shares were issued to the public and the amounts were payable as follows :

On Application – Rs 3 per share

On Allotment – Rs 2 per share

On First Call – Rs 2 per share

On Second and Final Call – Rs 3 per share

The amounts received on these shares were as follows :

On 1,00,000 shares – Full amount called

On 60,000 shares – Rs 7 per share

On 30,000 shares – Rs 5 per share

On 10,000 shares – Rs 3 per share

The directiors forfeited 10,000 shares on which only Rs 3 per share were received. These shares were reissued at Rs 12 per share fully paid. Pass necessary journal entries for the above transactions in the books of 'Venus Ltd'. [8 marks]

Solution:

Concept:

- Assets purchased against shares are recorded at the agreed purchase consideration. Authorised capital is a limit and requires no journal entry on registration.
- Amounts called are credited to Equity Share Capital. Unpaid amounts are debited to Calls in Arrears; forfeiture cancels called-up capital and retains capital already received.
- On reissue above face value, the excess is Securities Premium Reserve. The forfeiture balance relating to reissued shares becomes Capital Reserve.

Step 1: Determine the receipts and arrears All 2,00,000 public shares are called up to Rs 10. Each shareholder paid application money. Allotment is unpaid only on 10,000 shares: $10,000 \times 2 =$ Rs $20,000$. The first call is unpaid on $30,000 + 10,000 = 40,000$ shares: $40,000 \times 2 =$ Rs $80,000$. The final call is unpaid on $60,000 + 30,000 + 10,000 = 1,00,000$ shares: $1,00,000 \times 3 =$ Rs $3,00,000$. Thus total arrears before forfeiture are Rs 4,00,000. Public cash received is $10,00,000 + 4,20,000 + 1,50,000 + 30,000 =$ Rs $16,00,000$. There is no payment ahead of a call in the stated information.

Step 2: Record the building purchase and application money Journal of Venus Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Building A/c Dr.		7,00,000	
	To M/s. Star Ltd. A/c			7,00,000
	(Being building purchased from vendor)			
	M/s. Star Ltd. A/c Dr.		7,00,000	
	To Equity Share Capital A/c			7,00,000
	(Being 70,000 fully paid shares of Rs 10 issued to vendor)			

	Bank A/c Dr.		6,00,000	
	To Share Application A/c			6,00,000
	(Being application money received on 2,00,000 shares)			
	Share Application A/c Dr.		6,00,000	
	To Equity Share Capital A/c			6,00,000
	(Being application money transferred to capital)			

Step 3: Record allotment and the first call Journal of Venus Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Allotment A/c Dr.		4,00,000	
	To Equity Share Capital A/c			4,00,000
	(Being allotment due at Rs 2 per share)			
	Bank A/c Dr.		3,80,000	
	Calls in Arrears A/c Dr.		20,000	
	To Share Allotment A/c			4,00,000
	(Being allotment received except on 10,000 shares)			
	Share First Call A/c Dr.		4,00,000	
	To Equity Share Capital A/c			4,00,000
	(Being first call due at Rs 2 per share)			
	Bank A/c Dr.		3,20,000	
	Calls in Arrears A/c Dr.		80,000	
	To Share First Call A/c			4,00,000
	(Being first call received except on 40,000 shares)			

Step 4: Record final call, forfeiture and reissue Journal of Venus Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Second and Final Call A/c Dr.		6,00,000	
	To Equity Share Capital A/c			6,00,000
	(Being final call due at Rs 3 per share)			
	Bank A/c Dr.		3,00,000	
	Calls in Arrears A/c Dr.		3,00,000	
	To Share Second and Final Call A/c			6,00,000
	(Being final call received on 1,00,000 shares)			
	Equity Share Capital A/c Dr.		1,00,000	
	To Calls in Arrears A/c			70,000
	To Share Forfeiture A/c			30,000
	(Being 10,000 shares forfeited for non-payment of calls)			
	Bank A/c Dr.		1,20,000	
	To Equity Share Capital A/c			1,00,000
	To Securities Premium Reserve A/c			20,000
	(Being forfeited shares reissued fully paid at Rs 12)			
	Share Forfeiture A/c Dr.		30,000	
	To Capital Reserve A/c			30,000
	(Being profit on all reissued shares transferred to capital reserve)			

Step 5: Check the capital and reserves The forfeited shares had received only application money of $10,000 \times 3 = \text{Rs } 30,000$; their unpaid balance is $10,000 \times 7 = \text{Rs } 70,000$. Reissue at Rs 12 gives premium of $10,000 \times 2 = \text{Rs } 20,000$ and uses none of the forfeiture balance as discount. All

forfeited shares are reissued, so the entire Rs 30,000 is transferred to Capital Reserve. Arrears remaining after forfeiture are $4,00,000 - 70,000 =$ Rs $3,30,000$. Final nominal share capital is $(70,000 + 2,00,000) \times 10 =$ Rs $27,00,000$, since all forfeited shares have been reissued.

Step 6: Conclusion The necessary entries are shown above. Reissue creates Securities Premium Reserve of Rs 20,000 and Capital Reserve of Rs 30,000; remaining Calls in Arrears are Rs 3,30,000.

Quick Tip to Solve: Track each payment group through application, allotment and both calls before recording forfeiture.

Part B (20 marks)

OPTION I (Analysis of Financial Statements)

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

Solution:

Concept:

- A cash flow statement explains changes in cash and cash equivalents during an accounting period.
- Its three activity classes are operating, investing and financing activities.

Step 1: State the meaning A Cash Flow Statement is a statement showing the inflows and outflows of cash and cash equivalents of an enterprise during a specified accounting period.

Step 2: Explain what it reports It classifies those cash flows into operating, investing and financing activities and explains the movement from the opening balance of cash and cash equivalents to the closing balance. It therefore reports actual cash movements during the period, rather than merely the accounting profit earned.

Step 3: Conclusion A Cash Flow Statement shows period-wise inflows and outflows of cash and cash equivalents, classified into operating, investing and financing activities.

Quick Tip to Solve: In a definition, include both cash equivalents and the three classes of activities.

19. Cashier of Y Ltd. withdrew Rs 2,00,000 from bank. Will this transaction result into inflow, outflow or no flow of cash ? Give reason in support of your answer. [1 mark]

Solution:

Concept:

- Cash flows are inflows and outflows of cash and cash equivalents considered together.
- Transfers between cash in hand and demand deposits at a bank do not change their combined total.

Step 1: Identify both sides of the withdrawal Withdrawing Rs 2,00,000 increases cash in hand by Rs 2,00,000 and reduces the bank balance by the same amount. The cashier merely changes the place in which the company holds its cash.

Step 2: Check the net change The change in total cash and cash equivalents is

$$\text{Rs } 2,00,000 - \text{Rs } 2,00,000 = 0.$$

This internal transfer neither generates additional cash for the company nor uses cash outside its cash resources. Hence it is excluded from cash flows in the cash flow statement.

Step 3: Conclusion There is no flow of cash: the increase in cash in hand is exactly offset by the decrease in the bank balance.

Quick Tip to Solve: For a bank-to-cash transfer, add the changes in both balances before deciding whether cash has flowed.

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20. Under which sub-headings will the following items be presented in the Balance Sheet of a company as per Schedule-III, Part-I of the Companies Act, 2013 ?

(i) General Reserve

(ii) Bank Drafts in hand

(iii) 9% loan from a financial institution

(iv) Furniture

(v) Debenture Redemption Reserve

(vi) Trade Marks

(vii) Sundry Creditors

(viii) Bills Receivables [4 marks]

Solution:

Concept:

- Schedule III groups items first as equity and liabilities or assets, and then under the appropriate sub-heading.
- Reserves are accumulated profits; borrowings are financing liabilities. Tangible assets have physical substance, whereas intangible assets are identifiable rights without physical substance.

Step 1: Classify equity and liability items General Reserve and Debenture Redemption Reserve are both reserves created out of profits. Therefore both appear under Reserves and Surplus within Shareholders' Funds. A loan from a financial institution is classified under Long-term Borrowings in Non-current Liabilities in the absence of any stated short-term maturity. Its 9% interest rate does not determine its balance-sheet sub-heading. Sundry Creditors arise from purchases in the ordinary course of business and are Trade Payables under Current Liabilities.

Step 2: Classify the assets and present the sub-headings Bank drafts in hand represent readily available banking instruments and belong to Cash and Cash Equivalents. Furniture has physical substance and is a Tangible Asset; trade marks are legal rights and are Intangible Assets. Bills Receivables arise from amounts due from customers and are Trade Receivables.

Schedule III classification

Item	Sub-heading
(i) General Reserve	Reserves and Surplus
(ii) Bank Drafts in hand	Cash and Cash Equivalents
(iii) 9% loan from a financial institution	Long-term Borrowings
(iv) Furniture	Tangible Assets
(v) Debenture Redemption Reserve	Reserves and Surplus
(vi) Trade Marks	Intangible Assets
(vii) Sundry Creditors	Trade Payables
(viii) Bills Receivables	Trade Receivables

Step 3: Conclusion The eight items are presented under the sub-headings shown above; both reserves fall under Reserves and Surplus, while operating debts due to and from the company are Trade Payables and Trade Receivables respectively.

Quick Tip to Solve: Classify the nature of each item before its name: a reserve is equity, a loan is borrowing, and a customer bill is a trade receivable.

21. Prepare a Common-Size Statement of Profit and Loss of 'Hari Darshan Ltd.' from the following information :

Particulars	Note No.	2018 – 19 (Rs)	2017 – 18 (Rs)
Revenue from Operations		20,00,000	10,00,000
Purchase of Stock in Trade		7,70,000	4,20,000
Changes in Inventories		1,20,000	80,000
Other Expenses		52,000	30,000
Other Incomes		60,000	50,000
Tax Rate 50%			

[4 marks]

Solution:

Concept:

- In a common-size Statement of Profit and Loss, Revenue from Operations is the base of 100% for each year. Each percentage equals the corresponding amount divided by that year's Revenue from Operations, multiplied by 100.
- Total income equals Revenue from Operations plus Other Income. Profit before tax is Total Income less Total Expenses; tax is 50% of Profit before Tax.

Step 1: Calculate expenses and profits in each year For 2018–19, total expenses are

$$7,70,000 + 1,20,000 + 52,000 = \text{Rs } 9,42,000.$$

Total income is Rs $20,00,000 + 60,000 = 20,60,000$. Thus profit before tax is Rs $20,60,000 - 9,42,000 = 11,18,000$; tax and profit after tax are each Rs $5,59,000$.

For 2017–18, total expenses are Rs $4,20,000 + 80,000 + 30,000 = 5,30,000$. Total income is Rs

$10,00,000 + 50,000 = 10,50,000$. Profit before tax is Rs $5,20,000$; tax and profit after tax are each Rs $2,60,000$. The positive Changes in Inventories amounts are included as expenses as presented in the question.

Step 2: Convert each amount into a percentage of revenue For example, purchases in 2018–19 are $7,70,000/20,00,000 \times 100 = 38.50\%$, while other income in 2017–18 is $50,000/10,00,000 \times 100 = 5.00\%$. Use each year's own revenue denominator throughout.

Hari Darshan Ltd.: Common-Size Statement of Profit and Loss

Particulars	2018–19		2017–18	
	Rs	%	Rs	%
Revenue from Operations	20,00,000	100.00	10,00,000	100.00
Add: Other Income	60,000	3.00	50,000	5.00
Total Income	20,60,000	103.00	10,50,000	105.00
Expenses:				
Purchase of Stock in Trade	7,70,000	38.50	4,20,000	42.00
Changes in Inventories	1,20,000	6.00	80,000	8.00
Other Expenses	52,000	2.60	30,000	3.00
Total Expenses	9,42,000	47.10	5,30,000	53.00
Profit before Tax	11,18,000	55.90	5,20,000	52.00
Less: Tax at 50%	5,59,000	27.95	2,60,000	26.00
Profit after Tax	5,59,000	27.95	2,60,000	26.00

Step 3: Conclusion Profit after Tax is Rs 5,59,000 (27.95% of Revenue from Operations) in 2018–19 and Rs 2,60,000 (26.00%) in 2017–18.

Quick Tip to Solve: Keep Revenue from Operations at 100% separately for each year; total income can exceed 100% because it includes Other Income.

OR

21. Following information is extracted from the Statement of Profit and Loss of Delko Ltd. for the year ended 31st March, 2019 :

Particulars	2018 – 19 (Rs)	2017 – 18 (Rs)
Revenue from Operations	60,00,000	45,00,000
Employee Benefit Expenses	30,00,000	22,50,000
Depreciation	7,50,000	6,00,000
Other Expenses	15,50,000	10,00,000
Tax Rate 50%		

Prepare Comparative Statement of Profit and Loss. [4 marks]

Solution:

Concept:

- A comparative statement presents the previous and current year figures alongside their absolute and percentage changes. The previous year is the base year.

- Absolute change = current year amount minus previous year amount; percentage change = absolute change divided by previous year amount multiplied by 100. Tax expense is 50% of profit before tax.

Step 1: Calculate expenses, profit and tax For 2017–18, total expenses are $22,50,000 + 6,00,000 + 10,00,000 =$ Rs $38,50,000$. Therefore profit before tax is $45,00,000 - 38,50,000 =$ Rs $6,50,000$, tax is Rs 3,25,000 and profit after tax is Rs 3,25,000.

For 2018–19, total expenses are $30,00,000 + 7,50,000 + 15,50,000 =$ Rs $53,00,000$. Profit before tax is $60,00,000 - 53,00,000 =$ Rs $7,00,000$; tax and profit after tax are each Rs 3,50,000.

Step 2: Prepare the comparative statement Comparative Statement of Profit and Loss of Delko Ltd. for the year ended 31st March, 2019

Particulars	2017–18 Rs	2018–19 Rs	Increase Rs	Change %
I. Revenue from operations	45,00,000	60,00,000	15,00,000	33.33
II. Expenses:				
Employee benefit expenses	22,50,000	30,00,000	7,50,000	33.33
Depreciation	6,00,000	7,50,000	1,50,000	25.00
Other expenses	10,00,000	15,50,000	5,50,000	55.00
Total expenses	38,50,000	53,00,000	14,50,000	37.66
III. Profit before tax (I–II)	6,50,000	7,00,000	50,000	7.69
IV. Tax expense (50%)	3,25,000	3,50,000	25,000	7.69
V. Profit after tax (III–IV)	3,25,000	3,50,000	25,000	7.69

For example, the increase in total expenses is $53,00,000 - 38,50,000 =$ Rs $14,50,000$; its percentage is $14,50,000/38,50,000 \times 100 = 37.66\%$. Percentages are rounded to two decimal places.

Step 3: Conclusion Profit after tax increased from Rs 3,25,000 to Rs 3,50,000, an increase of Rs 25,000 or 7.69%.

Quick Tip to Solve: Place the previous year first and use its corresponding amount as the denominator for every percentage change.

22. From the given information, calculate the following ratios :

(i) Operating Ratio

(ii) Inventory Turnover Ratio

Information :

Cash Revenue from Operations	**: Rs 10,00,000**
Credit Revenue from Operations	**: 120% of Cash Revenue from Operations**
Operating Expenses	**: 10% of Total Revenue from Operations**
Rate of Gross Profit	**: 40%**
Opening Inventory	**: Rs 1,50,000**
Closing Inventory	**: Rs 20,000 more than Opening Inventory**

[4 marks]

Solution:

Concept:

- Operating ratio measures operating cost as a percentage of revenue from operations: $\dfrac{\text{Cost of revenue from operations} + \text{Operating expenses}}{\text{Revenue from operations}} \times 100$.
- Inventory turnover ratio is $\dfrac{\text{Cost of revenue from operations}}{\text{Average inventory}}$, where average inventory is the arithmetic mean of opening and closing inventory. Gross profit percentage is based on revenue from operations.

Step 1: Determine revenue and cost of revenue from operations Credit revenue from operations is 120% of cash revenue, so

$$\text{Credit revenue} = 10,00,000 \times \frac{120}{100} = \text{Rs } 12,00,000.$$

Total revenue from operations is therefore $10,00,000 + 12,00,000 = \text{Rs } 22,00,000$. Gross profit is 40% of this revenue, i.e. $22,00,000 \times 40/100 = \text{Rs } 8,80,000$. Hence cost of revenue from operations is $22,00,000 - 8,80,000 = \text{Rs } 13,20,000$, or 60% of revenue.

Step 2: Calculate the operating ratio Operating expenses are 10% of total revenue:

$$\text{Operating expenses} = 22,00,000 \times \frac{10}{100} = \text{Rs } 2,20,000.$$

Thus total operating cost is $13,20,000 + 2,20,000 = \text{Rs } 15,40,000$. Substituting in the formula,

$$\text{Operating ratio} = \frac{15,40,000}{22,00,000} \times 100 = 70\%.$$

The operating expenses are added to cost of revenue, because both form part of the cost incurred in operating the business.

Step 3: Calculate average inventory and inventory turnover Closing inventory exceeds opening inventory by Rs 20,000:

$$\text{Closing inventory} = 1,50,000 + 20,000 = \text{Rs } 1,70,000.$$

$$\text{Average inventory} = \frac{1,50,000 + 1,70,000}{2} = \text{Rs } 1,60,000.$$

Use cost of revenue, rather than selling value, because inventory is carried at cost:

$$\text{Inventory turnover ratio} = \frac{13,20,000}{1,60,000} = 8.25 \text{ times.}$$

The result shows that inventory equal to the average stock was sold 8.25 times during the period.

Step 4: Conclusion (i) Operating Ratio = 70%. (ii) Inventory Turnover Ratio = 8.25 times.

Quick Tip to Solve: With gross profit at 40% and operating expenses at 10% of sales, operating ratio is immediately 60% + 10% = 70%.

OR

22. (A) Net profit after interest and tax of M Ltd. was Rs 1,00,000. Its Current Assets were Rs 4,00,000 and Current Liabilities were Rs 2,00,000. Tax rate was 50%. Its Total Assets were Rs 10,00,000 and 10% Long term debt was Rs 4,00,000.

Calculate Return on Investment.

(B) Rate of Gross profit on Revenue from operations of a company is 25%. Its Gross profit is Rs 5,00,000. Its Shareholders' Funds are Rs 25,00,000; Non-current Liabilities are Rs 8,00,000 and Non-current Assets are Rs 23,00,000.

Calculate its Working Capital Turnover Ratio. [4 marks]

Solution:

Concept:

- Return on investment (ROI) measures profit before interest and tax (PBIT) as a percentage of capital employed: $\text{ROI} = \frac{\text{PBIT}}{\text{Capital employed}} \times 100$.
- Working capital turnover ratio is revenue from operations divided by working capital. Working capital equals current assets less current liabilities, or long-term funds less non-current assets.

Step 1: Part (A): Recover profit before interest and tax Profit after tax is Rs 1,00,000 and tax is 50% of profit before tax. Therefore,

$$\text{Profit before tax} = \frac{1,00,000}{1 - 0.50} = \text{Rs } 2,00,000.$$

Interest on long-term debt is $4,00,000 \times 10\% = \text{Rs } 40,000$. Add interest back because ROI measures the return available to providers of both equity and long-term debt:

$$\text{PBIT} = 2,00,000 + 40,000 = \text{Rs } 2,40,000.$$

Step 2: Part (A): Calculate capital employed and ROI Capital employed excludes current liabilities

from total assets:

$$\text{Capital employed} = 10,00,000 - 2,00,000 = \text{Rs } 8,00,000.$$

Hence ROI $= \frac{2,40,000}{8,00,000} \times 100 = 30\%$. Current assets alone are not the investment base; non-current assets also contribute to the operating return.

Step 3: Part (B): Derive revenue and working capital Gross profit is 25% of revenue from operations, so

$$\text{Revenue from operations} = \frac{5,00,000}{25/100} = \text{Rs } 20,00,000.$$

Long-term funds comprise shareholders' funds and non-current liabilities. Their excess over non-current assets finances working capital:

$$\text{Working capital} = 25,00,000 + 8,00,000 - 23,00,000 = \text{Rs } 10,00,000.$$

Therefore, working capital turnover ratio is $20,00,000/10,00,000 = 2$ times. The gross profit percentage is applied to sales, not to cost of revenue from operations.

Step 4: Conclusion (A) Return on Investment is $\boxed{30\%}$. (B) Working Capital Turnover Ratio is $\boxed{2 \text{ times}}$.

Quick Tip to Solve: For ROI, first reverse tax and then add interest; for working capital, subtract non-current assets from long-term funds.

23. Following is the Balance Sheet of X Ltd. as at 31st March, 2018 :

X Ltd.
Balance Sheet as at 31st March, 2018

Particulars	Note No.	31.3.2018 Rs	31.3.2017 Rs
I – Equity and Liabilities :			
1. Shareholder's Funds :			
(a) Share Capital		19,00,000	17,00,000
(b) Reserves and Surplus	1	6,00,000	3,00,000
2. Non-Current Liabilities :			
Long-term Borrowings	2	5,00,000	4,00,000
3. Current Liabilities :			
(a) Short-term Borrowings	3	1,70,000	1,75,000
(b) Short-term Provisions	4	2,00,000	1,65,000
Total		33,70,000	27,40,000
II – Assets :			
1. Non-Current Assets :			
(a) Fixed Assets :			
(i) Tangible Assets	5	24,00,000	19,00,000
(ii) Intangible Assets	6	2,00,000	3,00,000
(b) Non-Current Investments :		3,00,000	2,00,000
2. Current Assets :			
(a) Current Investments		1,40,000	1,70,000
(b) Inventories		2,60,000	1,30,000

(c) Cash and cash equivalents		70,000	40,000
Total		33,70,000	27,40,000

Notes to Accounts :

Note No.	Particulars	31.3.2018 Rs	31.3.2017 Rs
1.	Reserves and Surplus : (Surplus i.e. Balance in Statement of Profit and Loss)	6,00,000	3,00,000
		6,00,000	3,00,000
2.	Long-term Borrowings : 12% Debentures	5,00,000	4,00,000
		5,00,000	4,00,000
3.	Short-term Borrowings : Bank Overdraft	1,70,000	1,75,000
		1,70,000	1,75,000
4.	Short-term Provisions : Provision for Tax	2,00,000	1,65,000
		2,00,000	1,65,000
5.	Tangible Assets : Machinery Less : Accumulated Depreciation	26,00,000 (2,00,000)	20,00,000 (1,00,000)
		24,00,000	19,00,000
6.	Intangible Assets : Goodwill	2,00,000	3,00,000
		2,00,000	3,00,000

Additional Information :

(i) Rs 1,00,000, 12% Debentures were issued on 1 April, 2017.

(ii) During the year, a piece of machinery costing Rs 80,000 on which accumulated depreciation was Rs 40,000 was sold at a gain of Rs 10,000.

Prepare a Cash Flow Statement. [6 marks]

Solution:

Concept:

- Under the indirect method, operating cash flow starts with profit before tax and adjusts non-cash expenses, non-operating items and changes in operating working capital.
- For a non-financial company, interest paid and proceeds from share and debenture issues are financing cash flows. Machinery and non-current investment transactions are investing cash flows.
- Current investments are included with cash and cash equivalents for reconciliation; bank overdraft is treated as a financing liability.

Step 1: Working note 1: Profit before tax and interest Increase in surplus equals profit after tax

because no dividend or transfer is given:

$$\text{PAT} = 6,00,000 - 3,00,000 = \text{Rs } 3,00,000.$$

Provision for the current year's tax is Rs 2,00,000. Thus profit before tax is Rs 5,00,000. The additional debentures were issued on 1 April, so the full closing balance bears interest for the entire year:

$$\text{Interest} = 5,00,000 \times 12\% = \text{Rs } 60,000.$$

With no outstanding interest specified, this is also interest paid. Opening tax provision of Rs 1,65,000 is treated as tax paid during the year; closing provision represents the current year's charge.

Step 2: Working note 2: Machinery and other adjustments The sold machinery had book value $80,000 - 40,000 = \text{Rs } 40,000$, so sale proceeds were $40,000 + 10,000 = \text{Rs } 50,000$.

$$\begin{aligned} \text{Depreciation} &= 2,00,000 + 40,000 - 1,00,000 \\ &= \text{Rs } 1,40,000, \\ \text{Machinery purchased} &= 26,00,000 + 80,000 - 20,00,000 \\ &= \text{Rs } 6,80,000. \end{aligned}$$

The Rs 1,00,000 reduction in goodwill is written off and added back as a non-cash expense. The Rs 1,00,000 increase in non-current investments is a purchase. Inventory increases by Rs 1,30,000, which uses operating cash. The bank overdraft falls by Rs 5,000, representing financing repayment.

Step 3: Prepare the cash flow statement **X Ltd. – Cash Flow Statement for the year ended 31 March, 2018**

Particulars	Amount (Rs)
A. Cash flows from operating activities	
Net profit before tax	5,00,000
Add: Depreciation on machinery	1,40,000
Add: Goodwill written off	1,00,000
Add: Interest on debentures	60,000
Less: Gain on sale of machinery	(10,000)
Operating profit before working capital changes	7,90,000
Less: Increase in inventories	(1,30,000)
Cash generated from operations	6,60,000
Less: Income tax paid	(1,65,000)
Net cash from operating activities (A)	**4,95,000**
B. Cash flows from investing activities	
Purchase of machinery	(6,80,000)
Proceeds from sale of machinery	50,000
Purchase of non-current investments	(1,00,000)
Net cash used in investing activities (B)	**(7,30,000)**
C. Cash flows from financing activities	
Proceeds from issue of share capital	2,00,000
Proceeds from issue of debentures	1,00,000
Interest paid on debentures	(60,000)
Repayment of bank overdraft	(5,000)

Net cash from financing activities (C)	**2,35,000**
Net change in cash and cash equivalents (A+B+C)	Nil
Opening cash and equivalents (40,000 + 1,70,000)	2,10,000
Closing cash and equivalents (70,000 + 1,40,000)	2,10,000

The Rs 30,000 rise in the balance-sheet cash figure is offset by a Rs 30,000 fall in current investments included in cash equivalents. Consequently, their combined balance is unchanged.

Step 4: Conclusion Operating cash inflow is Rs 4,95,000; investing cash outflow is Rs 7,30,000; financing cash inflow is Rs 2,35,000. Net change in cash and cash equivalents is nil, and the closing balance is Rs 2,10,000.

Quick Tip to Solve: Add depreciation on the sold asset when deriving annual depreciation, and include current investments consistently in both opening and closing cash equivalents.

OPTION II (Computerised Accounting)

18. Name the data element in accounting transaction. [1 mark]

Solution:

Concept:

- A data element is an individual field used to record an accounting transaction.
- The date, account identification and monetary amount specify when a transaction occurred, the account affected and the value recorded.

Step 1: Identify the transaction fields The basic data elements include the transaction date, account code (or account name) and transaction amount. Each is a separate field in the accounting record.

Step 2: Relate a field to its purpose For example, the amount field records the monetary value of the debit or credit. The account code identifies the ledger account to which that value belongs, while the date places the transaction in the correct accounting period.

Step 3: Conclusion Transaction date, account code/name and transaction amount are data elements in an accounting transaction.

Quick Tip to Solve: Remember the core transaction fields by asking: when, which account, and how much?

19. What is meant 'Primary Key' ? [1 mark]

Solution:

Concept:

- A database table stores records in rows and fields in columns.
- A primary key uniquely identifies every record in a table; its values must be unique and cannot be null.

Step 1: Meaning A primary key is a field, or a combination of fields, selected to identify each record of a table uniquely. No two records can have the same primary-key value, and the key cannot be left null.

Step 2: Example In an Employee table, Employee ID can be the primary key because each employee has a distinct ID. Employee Name alone is unsuitable when two employees have the same name.

Step 3: Conclusion A primary key is the field or combination of fields that uniquely identifies each record in a database table.

Quick Tip to Solve: Check both conditions for a primary key: no duplicate values and no null values.

20. State the features of a good accounting software. [4 marks]

Solution:

Concept:

- Accounting software should record transactions accurately and provide timely, useful accounting reports.
- Suitability includes ease of use, reliability, flexibility and protection of accounting data.

Step 1: Ease of use The software should be easy to learn and operate, with clear menus, suitable help facilities and simple data-entry screens. Users should be able to enter transactions and obtain reports without unnecessary complexity.

Step 2: Accuracy and reliability It should process transactions accurately and consistently, apply accounting rules correctly, and produce reliable ledgers, trial balances and financial statements. Input checks should help detect incomplete or invalid entries.

Step 3: Flexibility and scalability It should permit suitable changes in account heads, report formats and business requirements. It should also accommodate growth in the volume of transactions and the number of users without seriously reducing performance. It should generate reports suited to the information needs of management and other users.

Step 4: Security and backup It should restrict access through passwords and user authorisations, protect records from unauthorised alteration, and maintain an audit trail. Backup and recovery facilities should safeguard accounting data against accidental loss or system failure.

Step 5: Conclusion Good accounting software is user-friendly, accurate and reliable, flexible and scalable, and secure with effective backup and recovery facilities.

Quick Tip to Solve: For each feature, state its name and explain how it improves recording, reporting or protection of accounting data.

OR

20. State the steps involved in installation of 'Computerised accounting system'. [4 marks]

Solution:

Concept:

- Installation involves planning, selecting resources, configuring the system and preparing users and data for operation.
- The new system should be tested before normal use so that opening balances and reports are dependable.

Step 1: Plan requirements and select resources Study the size and nature of the business, its transaction volume, reporting needs and budget. Select suitable accounting software and compatible hardware, including storage and backup facilities, to meet these requirements.

Step 2: Install and configure the system Install the hardware and accounting software. Create the organisation or company, specify its accounting period and configure the chart of accounts, account groups and other relevant accounting settings. Set passwords and access rights for authorised users.

Step 3: Prepare and transfer accounting data Create the required masters, such as ledger accounts, customers, suppliers and inventory items where applicable. Enter or transfer verified opening balances and other necessary data from the existing records. Check that the balances agree with the old system.

Step 4: Test, train and commence operation Test data entry, processing and report generation, and correct any errors found. Train the accounting staff to use the software and backup procedures. Compare the new system with existing records, using a parallel run where appropriate, before switching to regular operation.

Step 5: Conclusion The steps are requirement planning and resource selection, installation and configuration, preparation and transfer of data, and testing and staff training followed by regular operation.

Quick Tip to Solve: Remember the practical sequence: select resources, configure accounts, transfer verified data, then test and train users.

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

Solution:

Concept:

- Security controls in a computerised accounting system protect financial information against unauthorised access and misuse.
- Password security controls entry to the system, whereas a data vault protects the stored accounting data through encryption.

Step 1: Password security Password security is the use of a secret password to permit only authorised users to access a computerised accounting system or its data. The user supplies the password when logging in; the system checks it before allowing access. Different users may be given different

passwords and access rights according to their responsibilities. For example, a data-entry operator may enter vouchers while the accountant alone may alter accounts or view confidential reports. Thus, knowing a password does not necessarily give a user permission to perform every operation. Passwords should be kept confidential, chosen so that they are difficult to guess, and changed periodically. This control helps prevent unauthorised viewing, alteration or deletion of accounting records.

Step 2: Data vault A data vault is a security facility that protects accounting data by storing it in an encrypted form. Encryption converts readable data into a coded form, so that a person who obtains the data files cannot readily understand their contents. An authorised user must supply the correct vault password or other required key to decrypt and use the protected information. In accounting software, the vault therefore safeguards confidential company data even when the files themselves are copied or accessed outside the normal application. The vault password must be preserved carefully, because access to the encrypted records depends on it. A data vault protects confidentiality; regular backups are also needed to recover records if files are lost or damaged.

Step 3: Conclusion Password security restricts access to authorised users; a data vault encrypts the stored data to preserve its confidentiality. Both help protect a computerised accounting system.

Quick Tip to Solve: Link a password with permission to enter, and a data vault with encryption of stored records.

22. Explain 'Sequential' and 'Mnemonic' codes. [4 marks]

Solution:

Concept:

- Coding assigns a short, unique symbol or set of symbols to an account or other data item, making its identification and processing easier.
- Sequential codes depend on numerical order; mnemonic codes use meaningful abbreviations that help the user remember the item.

Step 1: Sequential codes Sequential codes are codes in which consecutive numbers are assigned to items in a predetermined order. Each succeeding item receives the next available number. For example, three employees may be assigned employee codes 001, 002 and 003; similarly, invoices may be numbered 101, 102 and 103 in the order in which they are issued. The number identifies the individual item but does not, by itself, describe its nature or characteristics. This method is simple to design and operate, and new items can be added by using the next number in the sequence. It also helps in checking the completeness of a numbered series: an unexplained gap in invoice numbers can be investigated. However, the user generally needs a list or master record to identify what a particular numerical code represents.

Step 2: Mnemonic codes Mnemonic codes use letters, abbreviations or other symbols that suggest the name or description of the item being coded. They are designed to be easily remembered and recognised. For example, CSH can represent Cash, BNK can represent Bank and SAL can represent Salary. Unlike a purely sequential number, such a code conveys an immediate clue about the account or item. Mnemonic codes are therefore convenient for selecting accounts and entering transactions, since the user can associate the code with the account's name. The codes must nevertheless be

assigned consistently and uniquely: if similar account names produce the same abbreviation, the abbreviation must be adjusted so that each account remains separately identifiable.

Step 3: Conclusion Sequential coding identifies items through consecutive numbers, such as 001, 002 and 003. Mnemonic coding identifies them through meaningful, memorable symbols, such as CSH for Cash.

Quick Tip to Solve: Remember sequence as consecutive numbers and mnemonic as a code that suggests the item's name.

OR

22. State the element which is considered while calculating 'earning' for current payroll period.

[4 marks]

Solution:

Concept:

- Earnings are the employee's salary components for the current payroll period, before deductions such as provident fund and income tax.
- The payroll period, salary structure, eligible allowances and effective paid attendance determine the earnings payable for that period.

Step 1: State the pay elements The earning elements include the following:

1. Basic Pay (BP): pay in the employee's pay scale, including the applicable grade pay but excluding special pay.
2. Grade Pay (GP): the amount attached to the employee's designation and pay band. It is considered in determining basic pay; it must not be added again if already included in BP.
3. Dearness Pay (DP): the part of dearness allowance declared to have been merged with basic pay, wherever applicable.

Step 2: State allowances and other earnings

1. Dearness Allowance (DA): allowance intended to compensate for loss of purchasing power through rising prices; the applicable rate is applied to the prescribed salary base.
2. House Rent Allowance (HRA): allowance towards the employee's residential accommodation.
3. Transport Allowance (TRA): allowance towards travel between residence and the workplace, paid at the applicable fixed amount or rate.
4. Other earnings: any admissible additional allowance, such as education, medical or washing allowance, under the employer's rules.

Step 3: Relate earnings to the current payroll period The payroll month and year identify the applicable salary and allowance rates. Where earnings depend on paid attendance, basic pay earned is calculated using effective days present:

$$\text{Basic pay earned} = \text{BP} \times \frac{\text{Effective days present}}{\text{Days in the month}}.$$

Effective days present exclude leave without pay and unauthorised absence. Eligible allowances are

then calculated under the applicable payroll rules and added to obtain total earnings. Deductions are applied subsequently to determine net salary.

Step 4: Conclusion Current-period earnings comprise basic pay with the applicable grade/dearness pay, dearness allowance, house rent allowance, transport allowance and other admissible earnings, adjusted for the relevant payroll period and paid attendance.

Quick Tip to Solve: List pay and allowances under earnings; keep PF, TDS and other deductions out of the earnings total.

23. Identify the error that appears when there are invalid numeric values in a formula or function. How can this error be rectified ? Explain. [6 marks]

Solution:

Concept:

- The spreadsheet error `#NUM!` indicates an invalid numerical argument or a numerical result that the spreadsheet cannot calculate or represent.
- Rectification requires correcting the numerical inputs, calculation method or convergence settings that caused the error.

Step 1: Identify the error The error is `#NUM!`. It appears when numerical values supplied to a formula or function are invalid for that calculation. For example, `=SQRT(-9)` produces this error because the ordinary SQRT function requires a non-negative real argument. A negative number is valid numerical data in general, but is not an acceptable argument for this particular function.

Step 2: Correct invalid arguments and number entry Inspect the formula and the cells supplying its arguments. Check the required type, sign and permitted range for each argument, then correct erroneous data or references. For example, if a square-root argument was incorrectly entered as -9 instead of 9, correcting the source gives `=SQRT(9)`, which returns 3. Do not change a genuinely negative input merely to suppress the error; instead reconsider the intended calculation.

Enter numerical constants in formulas as plain numbers, without currency symbols or thousands separators: use `1000`, with the desired currency display applied through cell formatting. Check that the values supplied to each function agree with its argument requirements.

Step 3: Rectify a failure of an iterative function Functions such as RATE and IRR search for a numerical answer by successive approximations. If they fail to converge, check the input cash flows, their signs and the initial guess. Try a suitable different guess when the function permits it. Where the calculation uses configurable iteration, review the spreadsheet's calculation options and allow a suitable maximum number of iterations. The maximum change setting specifies the accepted difference between successive results: a smaller tolerance requires closer convergence. Increasing iterations cannot create a valid solution when the underlying data admit none.

Step 4: Correct an excessively large or small result and verify The error can also arise when the result is outside the spreadsheet's supported numerical range. Check for unintended exponents, incorrect units and faulty references. Correct the formula, or consistently rescale the calculation into suitable units, so the intermediate and final results can be represented. Recalculate after the correction,

evaluate the formula in stages if necessary, and verify that the resulting value is meaningful for the original data. Merely hiding the error with a replacement message does not rectify its cause.

Step 5: Conclusion The error is `#NUM!`. Correct invalid numeric arguments, review convergence and iteration where applicable, and correct or rescale calculations whose results exceed the supported numerical range.

Quick Tip to Solve: For `#NUM!`, check the argument's permitted range first, then iterative convergence and oversized results.