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

Question Paper with Solutions

Conducted by the Central Board of Secondary Education (CBSE)

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

General Instructions

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

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

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

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

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

Part A (60 marks)

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

1. How are Specific donations treated while preparing final accounts of a 'Not-For-Profit Organisation' ?

[1 mark]

Solution:

Concept:

- A specific donation is received for an identified purpose, such as a building fund or a prize fund.
- The restriction on its use makes it a capital receipt credited to the relevant specific fund.

Step 1: Identify the nature of the receipt The donor has earmarked the donation for a particular purpose. It is therefore not unrestricted revenue available to meet the organisation's ordinary operating expenses.

Step 2: Show its treatment in final accounts Add the donation to the relevant specific fund and show that fund on the liabilities side of the Balance Sheet. Do not credit the donation to the Income and Expenditure Account.

Step 3: Conclusion Specific donations are capitalised and shown on the liabilities side of the Balance Sheet under the relevant specific fund.

Quick Tip to Solve: Look for a stated purpose: credit the named fund, not the Income and Expenditure Account.

OR

1. State the basis of accounting of preparing 'Income and Expenditure Account' of a Not-For-Profit Organisation.

[1 mark]

Solution:

Concept:

- The Income and Expenditure Account measures the surplus or deficit for an accounting period.
- Under the accrual basis, income is recognised when earned and expenditure when incurred.

Step 1: Relate items to the current period Include only revenue income and revenue expenditure belonging to the current accounting year, irrespective of when cash is received or paid.

Step 2: Apply year-end adjustments Include outstanding expenses and accrued income of the year. Exclude prepaid expenses and income received in advance relating to a future period. These adjustments distinguish this account from the cash-based Receipts and Payments Account.

Step 3: Conclusion The Income and Expenditure Account is prepared on the accrual basis of accounting.

Quick Tip to Solve: For Income and Expenditure, ask which year an item belongs to, rather than when cash moved.

2. Chhavi and Neha were partners in a firm sharing profits and losses equally. Chhavi withdrew a fixed amount at the beginning of each quarter. Interest on drawings is charged @ 6% p.a. At the end of the year, interest on Chhavi's drawings amounted to Rs 900. Pass necessary journal entry for charging interest on drawings. [1 mark]

Solution:

Concept:

- Interest on drawings is charged to the partner whose withdrawals created the charge.
- Debit the partner's capital account and credit Interest on Drawings Account; both sides must equal the interest charged.

Step 1: Identify the amount and accounts The question already gives Chhavi's annual interest on drawings as Rs 900. Hence the quarterly withdrawal need not be calculated. The charge reduces Chhavi's capital, while Interest on Drawings Account is credited.

Step 2: Record the charging entry Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
Year end	Chhavi's Capital A/c Dr.		900	
	To Interest on Drawings A/c			900
	(Being interest on Chhavi's drawings charged for the year)			

The debit and credit are equal. The equal profit-sharing ratio does not split this personal charge between the two partners.

Step 3: Conclusion Debit Chhavi's Capital Account with Rs 900 and credit Interest on Drawings Account with Rs 900.

Quick Tip to Solve: Use the given interest of Rs 900 directly; do not distribute a partner's drawings charge in the profit-sharing ratio.

3. What is meant by 'Gaining Ratio' on retirement of a partner ? [1 mark]

Solution:

Concept:

- On retirement, continuing partners may acquire the retiring partner's share of future profits.
- For each continuing partner, Gain = New share − Old share.

Step 1: Find each continuing partner's gain Express each old and new profit share on a common base. Subtract the old share from the new share to identify the additional share acquired by each continuing partner.

Step 2: Form the ratio of gains The ratio of these additional shares is called the gaining ratio. It is used, for example, to allocate the goodwill compensation payable to the retiring partner among the partners who gain.

Step 3: Conclusion Gaining ratio is the ratio in which the continuing partners acquire the retiring

partner's share of profits; gain equals new share minus old share.

Quick Tip to Solve: For retirement, calculate new share minus old share for each continuing partner before forming the ratio.

OR

3. P, Q and R were partners in a firm. On 31st March, 2018 R retired. The amount payable to R Rs 2,17,000 was transferred to his loan account. R agreed to receive interest on this amount as per the provisions of Partnership Act, 1932. State the rate at which interest will be paid to R. [1 mark]

Solution:

Concept:

- An amount due to a retiring partner may remain in the firm as a loan instead of being paid immediately.
- The Partnership Act treatment applicable here provides interest at 6% per annum on the unpaid amount.

Step 1: Identify the balance on which interest is payable R retired on 31st March, 2018 and the amount due, Rs 2,17,000, was transferred to R's Loan Account. It is therefore an unpaid amount due to the retiring partner, rather than continuing capital of an active partner.

Step 2: Apply the stated basis for interest R has agreed to receive interest according to the provisions of the Partnership Act, 1932. Consequently the applicable annual rate is 6%; the size of the loan balance affects the amount of interest, not this rate.

Step 3: Conclusion Interest will be paid to R at 6% per annum.

Quick Tip to Solve: When the question asks only the statutory rate on the retiring partner's unpaid balance, state 6 percent per annum.

4. What is meant by 'Issued Capital ? [1 mark]

Solution:

Concept:

- Authorised capital is the maximum share capital a company is authorised to issue.
- Issued capital is the portion of authorised capital that the company offers for subscription.

Step 1: Identify the company's offer A company need not offer its entire authorised share capital at once. It may issue only a part of that amount, represented by a specified number of shares of a specified face value.

Step 2: Distinguish the offer from subscription The amount offered is issued capital. The portion actually subscribed for is subscribed capital, and the amount actually received against calls is paid-up capital. These terms describe different stages of raising share capital.

Step 3: Conclusion Issued capital is that part of the authorised capital which is issued or offered by the company for subscription.

Quick Tip to Solve: Remember the sequence: authorised is the ceiling, issued is the offer, and subscribed is the amount taken up.

OR

4. What is meant by 'Employees Stock Option Plan' ? [1 mark]

Solution:

Concept:

- An Employees Stock Option Plan is a scheme giving employees an option to acquire shares in their employer company.
- An option is a right to buy shares on specified terms, rather than an obligation to buy them.

Step 1: State the benefit given to employees Under the plan, eligible employees are offered the right to purchase or subscribe for the company's shares at a predetermined price, subject to the terms of the scheme.

Step 2: Explain how the option operates The employee may exercise the right at a future date or within the prescribed period. Such a plan links employees' interests with the company's growth by giving them an opportunity to become shareholders.

Step 3: Conclusion An Employees Stock Option Plan gives employees the right to purchase or subscribe for their company's shares at a predetermined price at a future date, on specified terms.

Quick Tip to Solve: Define an ESOP with three elements: employee, option to acquire company shares, and a predetermined price.

5. Atul and Neera were partners in a firm sharing profits in the ratio of 3 : 2. They admitted Mitali as a new partner. Goodwill of the firm was valued at Rs 2,00,000. Mitali brings her share of goodwill premium of Rs 20,000 in cash, which is entirely credited to Atul's Capital Account. Calculate the new profit sharing ratio. [1 mark]

Solution:

Concept:

- New partner's share equals goodwill premium brought in divided by the total goodwill of the firm.
- Goodwill premium is credited to the sacrificing partners in their sacrificing ratio.

Step 1: Find Mitali's share Mitali brings Rs 20,000 as her share of goodwill valued at Rs 2,00,000. Hence

$$\text{Mitali's share} = \frac{20,000}{2,00,000} = \frac{1}{10}.$$

Step 2: Allocate the sacrifice and find the revised shares The entire premium is credited to Atul, so

he alone sacrifices the share acquired by Mitali. Neera's share remains unchanged.

$$\text{Atul's new share} = \frac{3}{5} - \frac{1}{10} = \frac{5}{10},$$
$$\text{Neera's new share} = \frac{2}{5} = \frac{4}{10},$$
$$\text{Mitali's share} = \frac{1}{10}.$$

The three new shares sum to one, confirming that the full profit is allocated.

Step 3: Conclusion The new profit-sharing ratio of Atul, Neera and Mitali is $5 : 4 : 1$.

Quick Tip to Solve: When the whole goodwill premium goes to one old partner, deduct the new partner's share only from that partner.

6. State any two contingencies that may result into dissolution of a partnership firm. [1 mark]

Solution:

Concept:

- A partnership firm may dissolve on the occurrence of specified contingencies.
- Dissolution on such contingencies is subject to the agreement between the partners.

Step 1: Expiry of the agreed term If the firm was constituted for a fixed period, expiry of that period may result in its dissolution, subject to any contract between the partners providing otherwise.

Step 2: Completion of the agreed undertaking If the firm was formed to carry out one or more particular adventures or undertakings, their completion may result in dissolution, subject to the partners' agreement. The purpose for which that firm was constituted has then been fulfilled.

Step 3: Conclusion Any two contingencies are: (i) expiry of the fixed term for which the firm was formed; and (ii) completion of the particular undertaking for which it was formed, subject to agreement.

Quick Tip to Solve: Use the firm's agreed duration or specific purpose to recall two clear contingencies for dissolution.

7. Garvit Ltd. invited applications for issuing 3,000, 11% Debentures of Rs 100 each at a discount of 6%. The full amount was payable on application. Applications were received for 3,600 debentures. Applications for 600 debentures were rejected and the application money was refunded. Debentures were allotted to the remaining applicants. Pass the necessary journal entries for the above transactions in the books of Garvit Ltd. [3 marks]

Solution:

Concept:

- Debentures are credited at their face value. An issue discount is debited separately; it is not deducted from the debenture liability.
- Application money received equals the number applied for multiplied by the issue price. Money on rejected applications is refunded before the balance is transferred on allotment.

Step 1: Calculate the issue price and application amounts **Working Notes.** The discount per debenture is $100 \times 6\% = \text{Rs } 6$, so the full application price is $100 - 6 = \text{Rs } 94$.

$$\text{Money received} = 3,600 \times 94 = \text{Rs } 3,38,400,$$
$$\text{Refund} = 600 \times 94 = \text{Rs } 56,400,$$
$$\text{Money retained} = 3,000 \times 94 = \text{Rs } 2,82,000,$$
$$\text{Discount on issue} = 3,000 \times 6 = \text{Rs } 18,000.$$

The 11% rate is the interest rate and does not affect the issue price. No interest entry is required for these issue transactions.

Step 2: Record receipt, refund and allotment **Journal of Garvit Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Debenture Application A/c (Being application money received for 3,600 debentures at Rs 94 each)		3,38,400	3,38,400
	Debenture Application A/c Dr. To Bank A/c (Being money refunded on 600 rejected applications)		56,400	56,400
	Debenture Application A/c Dr. Discount on Issue of Debentures A/c Dr. To 11% Debentures A/c (Being 3,000 debentures of Rs 100 each allotted at a discount of 6%)		2,82,000 18,000	3,00,000

After the refund and allotment, the application account is cleared: its debit total is $56,400 + 2,82,000 = \text{Rs } 3,38,400$, equal to its credit on receipt.

Step 3: Conclusion Garvit Ltd. records debentures of Rs 3,00,000, discount on issue of Rs 18,000 and net bank receipts of Rs 2,82,000 after refunding Rs 56,400.

Quick Tip to Solve: Use Rs 94 for cash received or refunded, but Rs 100 for the debenture liability; apply discount only to the 3,000 debentures actually issued.

OR

7. On 1st April 2015, P Ltd. Issued 6,000 12% Debentures of Rs 100 each at par redeemable at a premium of 7%. The Debentures were to be redeemed at the end of third year. Prepare Loss on issue of 12% Debentures Account. [3 marks]

Solution:

Concept:

- Premium payable on redemption creates a loss on issue even when debentures are issued at par. Loss on issue equals issue discount plus redemption premium.
- When all debentures remain outstanding until a single redemption date, the loss is written off equally over their life because the outstanding face value is unchanged.

Step 1: Determine the loss and annual write-off **Working Notes.** Face value issued is $6,000 \times 100 =$ Rs $6,00,000$. Issue at par means there is no issue discount. However, redemption at a premium of 7% creates a liability in addition to the face value:

$$\text{Loss on issue} = 6,00,000 \times \frac{7}{100} = \text{Rs } 42,000.$$

The three financial years end on 31st March 2016, 2017 and 2018. All 6,000 debentures are outstanding throughout these three years, so the annual amount charged to Statement of Profit and Loss is

$$\frac{42,000}{3} = \text{Rs } 14,000.$$

The 12% coupon concerns debenture interest; it is not used to compute the loss on issue.

Step 2: Prepare the loss account for all three years **Loss on Issue of 12% Debentures Account**

Dr.			Cr.
Particulars	Amount (Rs)	Particulars	Amount (Rs)
1 Apr 2015: To Premium on Redemption of Debentures A/c	42,000	31 Mar 2016: By Statement of Profit and Loss	14,000
		31 Mar 2016: By Balance c/d	28,000
Total	42,000	Total	42,000
1 Apr 2016: To Balance b/d	28,000	31 Mar 2017: By Statement of Profit and Loss	14,000
		31 Mar 2017: By Balance c/d	14,000
Total	28,000	Total	28,000
1 Apr 2017: To Balance b/d	14,000	31 Mar 2018: By Statement of Profit and Loss	14,000
Total	14,000	Total	14,000

The debit balance represents the amount of loss still to be written off. It reduces from Rs 42,000 to Rs 28,000 and then Rs 14,000. The final charge clears it completely by the redemption date; no closing balance remains on 31st March 2018.

Step 3: Conclusion The loss on issue is Rs 42,000, written off at Rs 14,000 in each of the three years ending 31st March 2016, 2017 and 2018.

Quick Tip to Solve: For redemption in one lump sum after three years, divide the loss equally by three; a decreasing ratio applies only when outstanding debentures decrease.

8. L, M and N were partners in a firm sharing profits and losses in the ratio of 5 : 3 : 2. On 1st April, 2018 they admitted S as a new partner in the firm for 1/5th share in the profits. On. S' admission the goodwill of the firm was valued at 3 years purchase of last five years average profits. The profits during the last five years were :

Year ended 31st March	Profit (Rs)
2014	4,00,000
2015	3,00,000
2016	2,00,000
2017	50,000
2018	(50,000)

Calculate the value of the goodwill of the firm. Pass necessary journal entry for the treatment of goodwill on S's admission. [3 marks]

Solution:

Concept:

- Under the average-profit method, goodwill equals average annual profit multiplied by the agreed number of years' purchase. A loss is subtracted when finding total profit.
- An incoming partner compensates the old partners for goodwill in their sacrificing ratio. If no different sacrifice is specified, the old partners sacrifice in their old profit-sharing ratio.
- When cash for goodwill is not stated to be brought in, the incoming partner's capital or current account is debited and the sacrificing partners' accounts are credited.

Step 1: Calculate the five-year average profit and goodwill **Working Notes.** Parentheses around the 2018 amount indicate a loss of Rs 50,000. Thus it must be deducted, although the preceding four amounts are profits.

$$\begin{aligned}\text{Total profit} &= 4,00,000 + 3,00,000 + 2,00,000 \\ &\quad + 50,000 - 50,000 = \text{Rs } 9,00,000,\\ \text{Average profit} &= \frac{9,00,000}{5} = \text{Rs } 1,80,000,\\ \text{Goodwill} &= 1,80,000 \times 3 = \text{Rs } 5,40,000.\end{aligned}$$

Step 2: Determine S's contribution and the old partners' credits S acquires a $1/5$ share, so S's share of goodwill is $5,40,000 \times 1/5 = \text{Rs } 1,08,000$. No different source of S's share is given; L, M and N therefore sacrifice in their old ratio $5 : 3 : 2$. Their respective sacrifices are $1/10, 3/50, 1/25$, whose sum is $1/5$.

$$\begin{aligned}\text{L's credit} &= 1,08,000 \times \frac{5}{10} = \text{Rs } 54,000,\\ \text{M's credit} &= 1,08,000 \times \frac{3}{10} = \text{Rs } 32,400,\\ \text{N's credit} &= 1,08,000 \times \frac{2}{10} = \text{Rs } 21,600.\end{aligned}$$

Step 3: Record the goodwill adjustment on admission Since cash brought in for goodwill is not mentioned, adjust S's share through the partners' capital accounts. No goodwill asset is raised in the books.

Journal of the Firm

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Apr 2018	S's Capital A/c Dr.		1,08,000	
	To L's Capital A/c			54,000
	To M's Capital A/c			32,400
	To N's Capital A/c			21,600
	(Being S's share of goodwill adjusted in favour of the sacrificing partners in the ratio 5:3:2)			

The credits total Rs 1,08,000 and equal the debit. If the firm maintains fixed capitals, the same adjustment is made through the partners' current accounts.

Step 4: Conclusion The firm's goodwill is Rs 5,40,000. Debit S's Capital Account by Rs 1,08,000 and credit L, M and N by Rs 54,000, Rs 32,400 and Rs 21,600, respectively.

Quick Tip to Solve: Deduct the bracketed 2018 loss, value the whole firm's goodwill first, and only then multiply by S's one-fifth share before distributing it.

9. From the following information calculate the amount of 'Sports Material' to be debited to Income and Expenditure Account of Young Football Club for the year ended 31st March, 2018.

	Rs
Opening Stock of Sports Material	**21,000**
Closing Stock of Sports Material	**24,000**
Opening Creditors of Sports Material	**23,500**
Closing Creditors of Sports Material	**27,000**

During the year the creditors for sports material were paid Rs 1,10,000. [3 marks]

Solution:

Concept:

- The Income and Expenditure Account records material consumed during the year on the accrual basis, rather than cash paid to suppliers.
- Purchases equal payments to creditors plus closing creditors less opening creditors, where the given payment is for material and no other creditor adjustments are stated.
- Material consumed equals opening stock plus purchases less closing stock. Closing stock remains an asset for use in a later period.

Step 1: Convert payments to accrual purchases Deduct opening creditors of Rs 23,500, which relate to earlier purchases, from payments of Rs 1,10,000. Add closing creditors of Rs 27,000 for current

purchases still unpaid.

$$\begin{aligned}\text{Purchases} &= 1,10,000 + 27,000 - 23,500 \\ &= \text{Rs } 1,13,500.\end{aligned}$$

Check: Rs 23,500 opening creditors + Rs 1,13,500 purchases - Rs 1,10,000 payments = Rs 27,000 closing creditors.

Step 2: Adjust purchases for stock and find material consumed Add opening stock because it was available for use during the current year. Deduct closing stock because it has not yet been consumed. The calculation is:

Young Football Club: Sports Material Consumed

For the year ended 31st March 2018

Particulars	Amount (Rs)
Opening stock of sports material	21,000
Add: Purchases during the year	1,13,500
Sports material available for use	1,34,500
Less: Closing stock of sports material	(24,000)
Sports material consumed	1,10,500

The Rs 3,500 increase in creditors raises purchases above payments; the Rs 3,000 stock increase reduces consumption below purchases.

Step 3: Conclusion Sports Material of Rs 1,10,500 is to be debited to the Income and Expenditure Account of Young Football Club for the year ended 31st March 2018.

Quick Tip to Solve: Adjust creditors first to obtain purchases, then adjust stocks to obtain consumption: add closing creditors but subtract closing stock.

10. On 1st April, 2013 Anushka Ltd. issued Rs 70,00,000, 9% debentures of Rs 100 each at par, redeemable at a premium of 5% on 31st march, 2018. The company created the necessary, minimum amount of debenture redemption reserve and purchased debenture redemption reserve investments. The debentures were redeemed on 31st March, 2018.

Pass necessary journal entries for the redemption of debentures, in the books of the company.

[3 marks]

Solution:

Concept:

- For the period in this question, the minimum Debenture Redemption Reserve (DRR) is 25% of the nominal value of debentures to be redeemed. It is an appropriation of profits, not an expense.
- Debenture Redemption Investments (DRI) are made for at least 15% of the nominal amount maturing during the year, by 30th April of that year. Redemption premium is added to the amount payable to debentureholders.

Step 1: Calculate the reserve, investment and redemption amount The nominal amount is Rs

70,00,000. Hence,

$$\begin{aligned}\text{DRR} &= 70,00,000 \times 25\% = \text{Rs } 17,50,000,\\ \text{DRI} &= 70,00,000 \times 15\% = \text{Rs } 10,50,000,\\ \text{Premium} &= 70,00,000 \times 5\% = \text{Rs } 3,50,000,\\ \text{Amount due} &= 70,00,000 + 3,50,000 = \text{Rs } 73,50,000.\end{aligned}$$

The reserve and investment percentages apply to nominal value; the premium is not included in their base. The 9% rate concerns interest and does not determine the redemption premium.

Step 2: Create the reserve and purchase investments before redemption Journal of Anushka Ltd. (pre-redemption entries)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-03-2017	Surplus in Statement of Profit and Loss A/c Dr. To Debenture Redemption Reserve A/c (Being minimum DRR created at 25% of nominal value)		17,50,000	 17,50,000
By 30-04-2017	Debenture Redemption Investments A/c Dr. To Bank A/c (Being investments purchased for 15% of debentures maturing in 2017–18)		10,50,000	 10,50,000

Step 3: Realise investments, redeem debentures and transfer the reserve Journal of Anushka Ltd. (31st March, 2018)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-03-2018	Bank A/c Dr. To Debenture Redemption Investments A/c (Being investments realised at book value)		10,50,000	 10,50,000
31-03-2018	9% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Debentureholders A/c (Being debentures due for redemption at 5% premium)		70,00,000 3,50,000	 73,50,000
31-03-2018	Debentureholders A/c Dr. To Bank A/c (Being amount due paid to debentureholders)		73,50,000	 73,50,000
31-03-2018	Debenture Redemption Reserve A/c Dr. To General Reserve A/c (Being DRR transferred after complete redemption)		17,50,000	 17,50,000

Investments are realised at book value because no separate sale proceeds or investment income are specified. The premium liability recognised on issue is discharged through the entry making

redemption due; no second provision for that premium is required here.

Step 4: Conclusion The minimum DRR is Rs 17,50,000 and DRI is Rs 10,50,000. Debentureholders are paid Rs 73,50,000, including premium of Rs 3,50,000, and the DRR is then transferred to General Reserve.

Quick Tip to Solve: For this 2018 redemption, calculate 25% DRR and 15% DRI on Rs 70,00,000; add the 5% premium only when calculating payment to debentureholders.

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11. Ravi, Shankar and Madhur were partners in a firm sharing profits in the ratio of 7 : 2 : 1. On 31st March, 2018, the firm was dissolved, after transferring sundry assets (other than cash in hand and cash at bank) and third party liabilities in the realization account the following transactions took place.

(i) Debtors amounting to Rs 1,40,000 were handed over to a debt collection agency which charged 5% commission. The remaining debtors were Rs 47,000, out of which debtors of Rs 17,000 could not be recovered because the same became insolvent.

(ii) Creditors amounting to Rs 5,000 were paid Rs 3,500 in full settlement of their claim and balance creditors were handed over stock of Rs 90,000 in full settlement of their claim of Rs 95,000.

(iii) A bills receivable Rs 2,000 discounted with the bank was dishonoured by its acceptor and the same had to be met by the firm.

(iv) Profit on realisation amounted to Rs 6,000.

Pass necessary journal entries for the above transactions in the books of Ravi, Shankar and Madhur.

[4 marks]

Solution:

Concept:

- After assets and outside liabilities have been transferred to Realisation Account, cash collected from those assets is credited to Realisation Account and cash paid to discharge those liabilities is debited to it.
- No further entry is needed when a creditor takes over an asset already transferred to Realisation Account in full settlement. The asset and liability book values are already reflected there.
- A previously unrecorded liability paid on dissolution is debited to Realisation Account. The final profit on realisation is credited to partners' capital accounts in their profit-sharing ratio, here $7:2:1$.

Step 1: Calculate the debtor collections The agency's commission is $1,40,000 \times 5\% = \text{Rs } 7,000$, leaving net collection of $1,40,000 - 7,000 = \text{Rs } 1,33,000$. The other debtors yield $47,000 - 17,000 = \text{Rs } 30,000$. Thus total cash recovered is Rs 1,63,000. The debtors have already been transferred to Realisation Account, so they must not be credited again. The unrecovered Rs 17,000 needs no separate bad-debt entry because only the actual proceeds are credited to Realisation Account.

Journal of Ravi, Shankar and Madhur (31st March, 2018)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-03-2018	Bank A/c Dr. To Realisation A/c (Being net proceeds received from the debt collection agency after 5% commission)		1,33,000	 1,33,000
31-03-2018	Bank A/c Dr. To Realisation A/c (Being remaining debtors realised, excluding Rs 17,000 irrecoverable)		30,000	 30,000

Step 2: Record the cash settlement and dishonoured bill Creditors of Rs 5,000 are discharged by paying Rs 3,500. Their Rs 1,500 concession is automatically reflected in Realisation Account; a separate discount entry would duplicate it. No entry is passed for stock of Rs 90,000 handed to creditors of Rs 95,000 in full settlement, since both balances have already been transferred.

The discounted bill was no longer an asset in the books. Its dishonour makes the firm's contingent liability actual, and the Rs 2,000 payment is therefore a realisation loss.

Journal of Ravi, Shankar and Madhur (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-03-2018	Realisation A/c Dr. To Bank A/c (Being creditors of Rs 5,000 paid in full settlement)		3,500	 3,500
31-03-2018	Realisation A/c Dr. To Bank A/c (Being payment to the bank for the discounted bill dishonoured by its acceptor)		2,000	 2,000

Step 3: Distribute the stated realisation profit The profit of Rs 6,000 is the final realisation profit given in the question. Divide it using the total ratio $7 + 2 + 1 = 10$: Ravi receives $6,000 \times 7/10 = \text{Rs } 4,200$, Shankar receives $6,000 \times 2/10 = \text{Rs } 1,200$, and Madhur receives $6,000 \times 1/10 = \text{Rs } 600$. These credits total Rs 6,000.

Journal of Ravi, Shankar and Madhur (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31-03-2018	Realisation A/c Dr. To Ravi's Capital A/c To Shankar's Capital A/c To Madhur's Capital A/c (Being realisation profit distributed in the ratio 7 : 2 : 1)		6,000	 4,200 1,200 600

Step 4: Conclusion Debtor collections are Rs 1,63,000; payments are Rs 3,500 to creditors and Rs 2,000 for the dishonoured bill. No additional entry is required for stock taken by creditors. The Rs 6,000 realisation profit is credited to Ravi, Shankar and Madhur as Rs 4,200, Rs 1,200 and Rs 600

respectively.

Quick Tip to Solve: Once assets and liabilities are transferred, record only cash proceeds or payments; do not record stock taken by creditors a second time.

12. Aman, Bobby and Chandani were partners in a firm sharing profits and losses in the ratio of 5 : 4 : 1. From 1st April, 2018 they decided to share profits equally. The revaluation of assets and re-assessment of liabilities resulted in a loss of Rs 5,000. The goodwill of the firm on its reconstitution was valued at Rs 1,20,000. The firm had a balance of Rs 20,000 in General Reserve.

Showing your workings clearly pass necessary journal entries on the reconstitution of the firm.

[4 marks]

Solution:

Concept:

- A revaluation loss and accumulated general reserve belong to the partners in their old profit-sharing ratio, here $5 : 4 : 1$.
- Sacrifice equals old share minus new share; gain equals new share minus old share. The gaining partner compensates the sacrificing partners for goodwill through their capital accounts.
- Goodwill is adjusted without opening a Goodwill Account: debit the gaining partner and credit the sacrificing partners with the value of their respective gains and sacrifices.

Step 1: Calculate sacrifice and gain **Working Notes.** Each partner's new share is $1/3$. Therefore,

$$\text{Aman's sacrifice} = \frac{5}{10} - \frac{1}{3} = \frac{5}{30},$$
$$\text{Bobby's sacrifice} = \frac{4}{10} - \frac{1}{3} = \frac{2}{30},$$
$$\text{Chandani's gain} = \frac{1}{3} - \frac{1}{10} = \frac{7}{30}.$$

Aman and Bobby sacrifice in the ratio $5 : 2$. Their goodwill compensation is Rs $1,20,000 \times 5/30 = 20,000$ and Rs $1,20,000 \times 2/30 = 8,000$, respectively. Chandani is debited with Rs $1,20,000 \times 7/30 = 28,000$.

Step 2: Allocate the loss and reserve in the old ratio The revaluation loss of Rs 5,000 is debited to Aman, Bobby and Chandani in $5 : 4 : 1$, giving Rs 2,500, Rs 2,000 and Rs 500. The General Reserve of Rs 20,000 is credited in the same old ratio, giving Rs 10,000, Rs 8,000 and Rs 2,000. These amounts arose before the new equal-sharing arrangement, so the new ratio is not used for them.

Step 3: Record the reconstitution entries **Journal of the Firm (1 April 2018)**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Apr 2018	Aman's Capital A/c Dr.		2,500	
	Bobby's Capital A/c Dr.		2,000	
	Chandani's Capital A/c Dr.		500	
	To Revaluation A/c			5,000
	(Being revaluation loss transferred in the old ratio of 5:4:1)			

1 Apr 2018	General Reserve A/c Dr. To Aman's Capital A/c To Bobby's Capital A/c To Chandani's Capital A/c (Being general reserve distributed in the old ratio of 5:4:1)		20,000	 10,000 8,000 2,000
1 Apr 2018	Chandani's Capital A/c Dr. To Aman's Capital A/c To Bobby's Capital A/c (Being goodwill adjusted for Chandani's gain in favour of Aman and Bobby)		28,000	 20,000 8,000

Step 4: Conclusion Revaluation loss and reserve are adjusted in $5:4:1$; Chandani compensates Aman and Bobby by Rs 20,000 and Rs 8,000. Together, the entries increase Aman's capital by Rs 27,500 and Bobby's by Rs 14,000 and reduce Chandani's by Rs 26,500.

Quick Tip to Solve: Use the old ratio for both the Rs 5,000 loss and Rs 20,000 reserve; only the Rs 1,20,000 goodwill uses the partners' sacrifice or gain.

13. Giriija, Yatin and Zubin were partners sharing profits in the ratio 5 : 3 : 2. Zubin died on 1st August, 2015. Amount due to Zubin's executor after all adjustments was Rs 90,300. The executor was paid Rs 10,300 in cash immediately and the balance in two equal annual instalments with interest @ 6% p.a. starting from 31st March, 2017. Accounts are closed on 31st March each year.

Prepare Zubin's Executors Account till he is finally paid. [6 marks]

Solution:

Concept:

- The amount due to a deceased partner is transferred from the partner's Capital Account to the Executor's Account. Payments to the executor are debited; interest due is credited.
- Equal instalments of the outstanding principal are calculated separately from interest. Interest is charged at the agreed annual rate on principal remaining unpaid for the relevant time.
- Accounts are balanced on each 31 March even when no instalment falls due on that date. Unpaid accrued interest remains payable and is distinguished from principal when calculating subsequent interest.

Step 1: Determine the principal instalments **Working Notes.** The amount due after all adjustments is already supplied, so the partners' profit-sharing ratio is not needed to recalculate Zubin's entitlement. On 1 August 2015 his executor is credited with Rs 90,300 and paid Rs 10,300 in cash.

$$\text{Principal left unpaid} = 90,300 - 10,300 = \text{Rs } 80,000,$$
$$\text{Each principal instalment} = 80,000 \div 2 = \text{Rs } 40,000.$$

The first and second principal instalments fall due on 31 March 2017 and 31 March 2018, respectively. Interest is payable in addition to these instalments.

Step 2: Calculate interest and the cash payments From 1 August 2015 to 31 March 2016, eight

months' interest accrues. No instalment is payable at that first year-end.

$$I_{2015-16} = 80,000 \times \frac{6}{100} \times \frac{8}{12} = \text{Rs } 3,200.$$

Thus, the balance carried forward is Rs $80,000 + 3,200 = 83,200$, comprising principal of Rs 80,000 and accrued interest of Rs 3,200. The stipulated interest is applied to unpaid principal; no interest on interest is stipulated.

$$I_{2016-17} = 80,000 \times \frac{6}{100} = \text{Rs } 4,800,$$
$$\text{Payment on 31 March 2017} = 40,000 + 3,200 + 4,800$$
$$= \text{Rs } 48,000.$$

After the first payment the remaining principal is Rs 40,000. Therefore,

$$I_{2017-18} = 40,000 \times \frac{6}{100} = \text{Rs } 2,400,$$
$$\text{Payment on 31 March 2018} = 40,000 + 2,400 = \text{Rs } 42,400.$$

Step 3: Prepare the executor's account through final settlement **Zubin's Executors Account**

Dr.			Cr.		
Date	Particulars	Amount (Rs)	Date	Particulars	Amount (Rs)
1 Aug 2015	To Cash A/c	10,300	1 Aug 2015	By Zubin's Capital A/c	90,300
31 Mar 2016	To Balance c/d	83,200	31 Mar 2016	By Interest A/c	3,200
	Total	93,500		Total	93,500
			1 Apr 2016	By Balance b/d	83,200
31 Mar 2017	To Bank A/c	48,000	31 Mar 2017	By Interest A/c	4,800
31 Mar 2017	To Balance c/d	40,000			
	Total	88,000		Total	88,000
			1 Apr 2017	By Balance b/d	40,000
31 Mar 2018	To Bank A/c	42,400	31 Mar 2018	By Interest A/c	2,400
	Total	42,400		Total	42,400

The final year balances without any balance carried down, because the principal and all interest have been paid. Total interest is Rs $3,200 + 4,800 + 2,400 = 10,400$. Total payments are Rs $10,300 + 48,000 + 42,400 = 1,00,700$, which equals the original amount due of Rs 90,300 plus interest of Rs 10,400.

Step 4: Conclusion Zubin's executor is paid Rs 10,300 immediately, Rs 48,000 on 31 March 2017 and Rs 42,400 on 31 March 2018. The executor's account closes on 31 March 2018.

Quick Tip to Solve: The first instalment begins in March 2017, so include eight months' accrued interest from 2015-16 as well as the next full year's interest in that payment.

14. Sonu and Rajat started a partnership firm on April 1, 2017. They contributed Rs 8,00,000 and Rs 6,00,000 respectively as their capitals and decided to share profits and losses in the ratio of 3 : 2. The partnership deed provided that Sonu was to be paid a salary of Rs 20,000 per month and Rajat a commission of 5% on turnover. It also provided that interest on capital be allowed @ 8% p.a. Sonu withdrew Rs 20,000 on 1st December, 2017 and Rajat withdrew Rs 5,000 at the end of each month. Interest on drawings was charged @ 6% p.a. The net profit as per Profit and Loss Account for the year ended 31st March, 2018 was Rs 4,89,950. The turnover of the firm for the year ended 31st March, 2018 amounted to Rs 20,00,000. Pass necessary journal entries for the above transactions in the books of Sonu and Rajat. [6 marks]

Solution:

Concept:

- Interest on capital, partners' salary and commission are appropriations of profit. Interest on drawings is credited to Profit and Loss Appropriation Account.
- Interest equals principal multiplied by the annual rate and the fraction of a year. Equal drawings at each month's end have an average period of 5.5 months.
- After all deed-based appropriations, the residual profit is distributed to Sonu and Rajat in their agreed ratio of $3 : 2$. Fluctuating capital accounts are used, as fixed capitals are not specified.

Step 1: Working Notes: compute the appropriations Both partners contributed capital on 1 April, so interest is allowed for the full year. Drawings are recorded separately and do not reduce the opening capital used for this calculation.

$$\begin{aligned}\text{Sonu's capital interest} &= 8,00,000 \times 8\% = \text{Rs } 64,000,\\ \text{Rajat's capital interest} &= 6,00,000 \times 8\% = \text{Rs } 48,000,\\ \text{Sonu's salary} &= 20,000 \times 12 = \text{Rs } 2,40,000,\\ \text{Rajat's commission} &= 20,00,000 \times 5\% = \text{Rs } 1,00,000.\end{aligned}$$

Commission is calculated on turnover, as the deed requires, not on net profit.

Step 2: Working Notes: calculate drawings interest and divisible profit Sonu's withdrawal on 1 December remains outstanding for four months through 31 March. Rajat's twelve monthly withdrawals

total Rs 60,000; their periods run from eleven months to zero months, averaging 5.5 months.

$$\begin{aligned}
\text{Sonu's drawings interest} &= 20,000 \times \frac{6}{100} \times \frac{4}{12} = \text{Rs } 400,\\
\text{Rajat's drawings interest} &= 60,000 \times \frac{6}{100} \times \frac{5.5}{12} = \text{Rs } 1,650,\\
\text{Available profit} &= 4,89,950 + 400 + 1,650 = \text{Rs } 4,92,000,\\
\text{Residual profit} &= 4,92,000 - 1,12,000 - 2,40,000 - 1,00,000\\
&= \text{Rs } 40,000.
\end{aligned}$$

Sonu's share is $40,000 \times 3/5 = \text{Rs } 24,000$; Rajat's share is $40,000 \times 2/5 = \text{Rs } 16,000$.

Step 3: Journalise capital, drawings and profit transfer **Journal of Sonu and Rajat**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Apr 2017	Cash/Bank A/c Dr.		14,00,000	
	To Sonu's Capital A/c			8,00,000
	To Rajat's Capital A/c			6,00,000
	(Being capitals contributed)			
1 Dec 2017	Sonu's Drawings A/c Dr.		20,000	
	To Cash/Bank A/c			20,000
	(Being cash withdrawn by Sonu)			
2017–18	Rajat's Drawings A/c Dr.		60,000	
	To Cash/Bank A/c			60,000
	(Being twelve month-end drawings of Rs 5,000 each, summarised)			
31 Mar 2018	Sonu's Capital A/c Dr.		20,000	
	Rajat's Capital A/c Dr.		60,000	
	To Sonu's Drawings A/c			20,000
	To Rajat's Drawings A/c			60,000
	(Being drawings closed to capitals)			
31 Mar 2018	Profit and Loss A/c Dr.		4,89,950	
	To P&L Appropriation A/c			4,89,950
	(Being net profit transferred for appropriation)			

Step 4: Journalise interest and remuneration **Journal of Sonu and Rajat (continued)**

All following entries are dated 31 March 2018. The entries directly transfer each appropriation to the relevant capital account.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31 Mar	Sonu's Capital A/c Dr.		400	
	Rajat's Capital A/c Dr.		1,650	
	To P&L Appropriation A/c			2,050
	(Being interest charged on drawings)			

31 Mar	P&L Appropriation A/c Dr.	1,12,000	
	To Sonu's Capital A/c		64,000
	To Rajat's Capital A/c		48,000
	(Being interest on capitals allowed at 8% p.a.)		
31 Mar	P&L Appropriation A/c Dr.	2,40,000	
	To Sonu's Capital A/c		2,40,000
	(Being annual salary allowed to Sonu)		
31 Mar	P&L Appropriation A/c Dr.	1,00,000	
	To Rajat's Capital A/c		1,00,000
	(Being 5% commission on turnover allowed)		
31 Mar	P&L Appropriation A/c Dr.	40,000	
	To Sonu's Capital A/c		24,000
	To Rajat's Capital A/c		16,000
	(Being residual profit distributed in the ratio 3:2)		

Step 5: Conclusion The divisible profit is Rs 40,000, credited as Rs 24,000 to Sonu and Rs 16,000 to Rajat. After all entries, their capital balances are respectively Rs 11,07,600 and Rs 7,02,350. Each journal entry has equal debit and credit amounts.

Quick Tip to Solve: Add drawings interest to the net profit before deducting remuneration and capital interest. Use four months for Sonu and 5.5 months for Rajat's month-end drawings.

OR

14. Jay, Vijay and Karan were partners of an architect firm sharing profits in the ratio of 2 : 2 : 1. Their partnership deed provided the following :

(i) A monthly salary of Rs 15,000 each to Jay and Vijay.

(ii) Karan was guaranteed a profit of Rs 5,00,000 and Jay guaranteed that he will earn an annual fee of Rs 2,00,000. Any deficiency arising because of guarantee to Karan will be borne by Jay and Vijay in the ratio of 3 : 2.

During the year ended 31st March, 2018 Jay earned fee of Rs 1,75,000 and the profits of the firm amounted to Rs 15,00,000.

Showing your workings clearly prepare Profit and Loss Appropriation Account and the Capital Account of Jay, Vijay and Karan for the year ended 31st March, 2018. [6 marks]

Solution:

Concept:

- A partner's guarantee of fee income is met by debiting that partner with the shortfall and adding it to the profit available for appropriation.
- Partners' salaries are appropriated before the remaining profit is shared in the profit-sharing ratio. A guaranteed minimum share is then compared with the beneficiary's normal share.
- The deficiency in Karan's guaranteed share is borne by Jay and Vijay in the special ratio $3:2$, distinct from their normal profit-sharing ratio $2:2:1$.

Step 1: Working Notes: adjust the fee guarantee and salaries Jay guaranteed annual fee income of

Rs 2,00,000 but earned only Rs 1,75,000. His shortfall of Rs 25,000 must be debited to his capital and credited to Profit and Loss Appropriation Account. Thus the profit available becomes

$$15,00,000 + (2,00,000 - 1,75,000) = \text{Rs } 15,25,000.$$

Jay and Vijay each receive annual salary of $15,000 \times 12 = \text{Rs } 1,80,000$. After these salaries, the amount to be divided is

$$15,25,000 - 1,80,000 - 1,80,000 = \text{Rs } 11,65,000.$$

Jay's personal fee shortfall is accounted for separately from the deficiency in Karan's guaranteed profit; the two guarantees have different purposes.

Step 2: Working Notes: fulfil Karan's guaranteed profit Applying the normal ratio $2:2:1$, the initial shares are Jay Rs 4,66,000, Vijay Rs 4,66,000 and Karan Rs 2,33,000. Karan's deficiency is

$$5,00,000 - 2,33,000 = \text{Rs } 2,67,000.$$

Jay bears $2,67,000 \times 3/5 = \text{Rs } 1,60,200$, and Vijay bears $2,67,000 \times 2/5 = \text{Rs } 1,06,800$. Therefore, the final shares of the residual profit are

$$\begin{aligned} \text{Jay} &= 4,66,000 - 1,60,200 = \text{Rs } 3,05,800, \\ \text{Vijay} &= 4,66,000 - 1,06,800 = \text{Rs } 3,59,200, \\ \text{Karan} &= 2,33,000 + 2,67,000 = \text{Rs } 5,00,000. \end{aligned}$$

These total Rs 11,65,000, so the guarantee reallocates profit without changing its aggregate.

Step 3: Prepare the Profit and Loss Appropriation Account **Profit and Loss Appropriation Account for the year ended 31 March 2018**

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Jay's Capital (salary)	1,80,000	By P&L A/c (net profit)	15,00,000
To Vijay's Capital (salary)	1,80,000	By Jay's Capital (fee shortfall)	25,000
To Jay's Capital (profit)	3,05,800		
To Vijay's Capital (profit)	3,59,200		
To Karan's Capital (profit)	5,00,000		
Total	15,25,000	Total	15,25,000

The account is fully appropriated and has no balance to carry forward.

Step 4: Prepare the partners' capital accounts Opening capital amounts are not supplied. The following capital accounts show the movements arising from the stated transactions only. Their Balance c/d figures represent net additions to opening capitals, not independently known total closing capitals. No opening capital is assumed to be zero.

Jay's Capital Account (transactions for 2017–18)

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To P&L Appropriation (fee shortfall)	25,000	By P&L Appropriation (salary)	1,80,000
To Balance c/d (net addition)	4,60,800	By P&L Appropriation (profit)	3,05,800
Total	4,85,800	Total	4,85,800

Vijay's Capital Account (transactions for 2017–18)

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Balance c/d (net addition)	5,39,200	By P&L Appropriation (salary)	1,80,000
		By P&L Appropriation (profit)	3,59,200
Total	5,39,200	Total	5,39,200

Karan's Capital Account (transactions for 2017–18)

Dr. Particulars	Amount (Rs)	Cr. Particulars	Amount (Rs)
To Balance c/d (net addition)	5,00,000	By P&L Appropriation (profit)	5,00,000
Total	5,00,000	Total	5,00,000

Step 5: Conclusion The final profit shares are Jay Rs 3,05,800, Vijay Rs 3,59,200 and Karan Rs 5,00,000. After salaries and Jay's fee shortfall, the net capital additions are respectively Rs 4,60,800, Rs 5,39,200 and Rs 5,00,000, totalling the firm's reported profit of Rs 15,00,000.

Quick Tip to Solve: First add Jay's fee shortfall to profit, then deduct both salaries. Apply 2:2:1 to the remainder and use 3:2 only for Karan's deficiency.

15. From the following Receipts and Payments Account and additional information, prepare Income and Expenditure Account and Balance Sheet of Sears Club, Noida as on March 31, 2018.

Receipts and Payments Account of Sears Club for the year ended 31-3-2018

Receipts	Amount (Rs)	Payments	Amount (Rs)
To Balance b/d	20,000	By Stationery	23,400
To Subscriptions		By 12% Investments	8,000
2016–17 40,000		By Electricity expenses	10,600
2017–18 94,000		By Expenses on lectures	30,000
2018–19 7,200	1,41,200	By Sports equipment	59,000
To Donations for building	40,000	By Books	40,000
To Interest on Investments	800	By Balance c/d	50,000
To Government Grant	17,400		
To Sale of old furniture (Book value Rs 4,000)	1,600		
	2,21,000		2,21,000

Additional Information:

(i) The club has 200 members each paying an annual subscription of Rs 1,000. Rs 60,000 were in arrears for last year and 25 members paid in advance in the last year for the current year.

(ii) Stock of stationery on 1-4-2017 was Rs 3,000 and on 31-3-2018 was Rs 4,000. [6 marks]

Solution:

Concept:

- The Income and Expenditure Account records revenue income and expenses for the current year on the accrual basis; capital receipts and asset purchases belong in the Balance Sheet.
- Annual subscriptions earned equal the number of members multiplied by the annual fee. Old arrears and advance subscriptions are adjusted separately from current-year income.
- The opening capital fund equals opening assets less opening liabilities. A donation specifically for a building is credited to the Building Fund, not to unrestricted income.

- Stationery consumed equals opening stock plus purchases less closing stock. Loss on sale equals the furniture's book value less its sale proceeds.

Step 1: Calculate subscription income and outstanding subscriptions **Working Notes**

Subscription income for 2017–18 is $200 \times$ Rs $1,000 =$ Rs $2,00,000$. The opening advance for this year is $25 \times$ Rs $1,000 =$ Rs $25,000$. Therefore current-year subscriptions outstanding are

$$2,00,000 - 94,000 - 25,000 = \text{Rs } 81,000.$$

Uncollected old arrears are $60,000 - 40,000 =$ Rs $20,000$. Both amounts remain assets, so closing subscriptions outstanding are $81,000 + 20,000 =$ Rs $1,01,000$. The Rs 7,200 received for 2018–19 is a closing liability. The Rs 40,000 collected for 2016–17 clears an opening asset and does not increase this year's income.

Step 2: Adjust stationery, furniture and investment interest Stationery consumed is $3,000 + 23,400 - 4,000 =$ Rs $22,400$. The closing stationery stock of Rs 4,000 is an asset. Loss on sale of furniture is $4,000 - 1,600 =$ Rs $2,400$; the Rs 1,600 sale proceeds are not revenue income.

With no investment acquisition date specified, the following accounts use the full-year interest convention: $8,000 \times 12\% =$ Rs 960. Interest received is Rs 800, leaving accrued interest of Rs 160. This timing assumption is necessary because a shorter holding period is not stated. Sports equipment, books and investments are capital assets; no depreciation rate is supplied. The Government Grant is treated as unrestricted revenue since no specific purpose is stated.

Step 3: Determine the opening capital fund At 1 April 2017, the assets disclosed are cash Rs 20,000, subscriptions outstanding Rs 60,000, stationery Rs 3,000 and furniture subsequently sold at book value Rs 4,000. Opening subscriptions received in advance are Rs 25,000. Thus

$$\begin{aligned}\text{Opening capital fund} &= 20,000 + 60,000 + 3,000 + 4,000 - 25,000 \\ &= \text{Rs } 62,000.\end{aligned}$$

No opening sports equipment, books or investments are given. Only the assets disclosed by the question are included.

Step 4: Prepare the Income and Expenditure Account **Sears Club, Noida**
Income and Expenditure Account for the year ended 31 March 2018

Dr. Expenditure	Rs	Cr. Income	Rs
To Stationery consumed	22,400	By Subscriptions	2,00,000
To Electricity expenses	10,600	By Government Grant	17,400
To Expenses on lectures	30,000	By Interest on investments	960
To Loss on sale of furniture	2,400		
To Surplus (Capital Fund)	1,52,960		
Total	**2,18,360**	**Total**	**2,18,360**

Total revenue expenses are Rs 65,400. The difference between revenue income and these expenses is transferred to the Capital Fund. The building donation is excluded from this account because its use is restricted.

Step 5: Prepare the closing Balance Sheet **Sears Club, Noida**

Balance Sheet as at 31 March 2018

Liabilities and Funds	Rs	Assets	Rs
Capital Fund: opening	62,000	Sports equipment	59,000
Add: Surplus	1,52,960	Books	40,000
Closing Capital Fund	**2,14,960**	12% Investments	8,000
Building Fund	40,000	Stock of stationery	4,000
Subscriptions in advance	7,200	Subscriptions outstanding	1,01,000
		Accrued interest	160
		Cash/Bank balance	50,000
Total	**2,62,160**	**Total**	**2,62,160**

The Capital Fund includes its opening balance and the year's surplus only once. The Building Fund remains a separate restricted fund. The furniture sold has no closing balance, while the purchases of books and sports equipment appear at cost.

Step 6: Check the effect of the interest timing assumption The closing Balance Sheet balances independently: assets other than accrued interest total Rs 2,62,000; adding Rs 160 gives Rs 2,62,160. If the Rs 800 interest instead represents the entire interest earned during a shorter investment holding period, no accrued interest arises: income and surplus each decrease by Rs 160, and the Balance Sheet total becomes Rs 2,62,000. The printed question supplies no acquisition date; the main accounts above consistently apply full-year interest.

Step 7: Conclusion Using full-year investment interest, the surplus is $\boxed{\text{Rs } 1,52,960}$, the closing Capital Fund is $\boxed{\text{Rs } 2,14,960}$, and the Balance Sheet total is $\boxed{\text{Rs } 2,62,160}$.

Quick Tip to Solve: First calculate subscriptions as 200 times Rs 1,000; then separate the Rs 20,000 old arrears from Rs 81,000 current arrears. Keep the Rs 40,000 building donation outside revenue income.

16. DF Ltd. invited applications for issuing 50,000 shares of Rs 10 each at a premium of Rs 2 per share. The amount was payable as follows :

On Application : Rs 3 per share (including premium Rs 1)

On Allotment : Rs 3 per share (including premium Rs 1)

On First call : Rs 3 per share

On Second and Final Call : Balance amount

Application for 70,000 shares were received. Allotment was made on the following basis.

Applications for 5,000 shares – Full

Applications for 50,000 shares – 90%

Balance of the applications were rejected. Rs 1,11,000 were received on account of allotment. The amount of allotment due from the shareholders to whom shares were allotted on prorata basis was fully received. A few shareholders to whom shares were allotted in full, failed to pay the allotment money. Rs 1,20,000 were received on first call. Directors decided to forfeit those shares on which allotment and call money was due. Half of the forfeited shares were re-issued @ Rs 8 per share fully paid up. Final call was not made.

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

Solution:

Concept:

- Application receipts are allocated between share capital, securities premium, excess application money adjusted towards allotment, and refunds to rejected applicants.
- Only called-up capital is credited on a call. Securities premium due but not received must be reversed on forfeiture; the Share Forfeiture Account contains capital actually received on those shares.
- A complete set of journal entries requires a consistent number of defaulting shares. The number of defaulters in an allotment category cannot exceed the shares allotted to that category.

Step 1: Determine allotments, refund and excess application money The first category receives 5,000 shares in full. The second receives $50,000 \times 90\% = 45,000$ shares. Thus total allotment is 50,000 shares. Applications rejected are $70,000 - 5,000 - 50,000 = 15,000$ shares; their refund is $15,000 \times 3 =$ Rs $45,000$. Pro-rata applicants paid application money on 50,000 shares but receive 45,000 shares, leaving $5,000 \times 3 =$ Rs $15,000$ to adjust towards allotment. Application money retained for allotted shares is Rs 1,50,000, comprising capital Rs 1,00,000 and premium Rs 50,000.

Step 2: Record application and allotment becoming due **Journal of DF Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		2,10,000	
	To Share Application A/c			2,10,000
	(Being applications received for 70,000 shares at Rs 3)			

Journal of DF Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Application A/c Dr.		2,10,000	
	To Share Capital A/c			1,00,000
	To Securities Premium A/c			50,000
	To Share Allotment A/c			15,000
	To Bank A/c			45,000
	(Being application adjusted on 50,000 allotted shares, excess adjusted and rejected applications refunded)			
	Share Allotment A/c Dr.		1,50,000	
	To Share Capital A/c			1,00,000
	To Securities Premium A/c			50,000
	(Being allotment due at Rs 3, including premium Rs 1, on 50,000 shares)			

Step 3: Record the printed cash receipts and first call **Journal of DF Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr. To Share Allotment A/c (Being the stated allotment cash received; unpaid balance remains in Share Allotment A/c)		1,11,000	1,11,000
	Share First Call A/c Dr. To Share Capital A/c (Being first call of Rs 3 due on 50,000 shares)		1,50,000	1,50,000
	Bank A/c Dr. To Share First Call A/c (Being the stated first-call cash received; unpaid balance remains in Share First Call A/c)		1,20,000	1,20,000

Step 4: Check the printed default information before forfeiture After applying excess application money, allotment cash due is $1,50,000 - 15,000 = \text{Rs } 1,35,000$. The printed receipt therefore leaves

$$\text{Allotment unpaid} = 1,35,000 - 1,11,000 = \text{Rs } 24,000,$$
$$\text{Shares in default} = 24,000/3 = 8,000.$$

But the question states that every pro-rata allottee paid the allotment in full; hence all these defaults must belong to the full-allotment category, which contains only 5,000 shares. Its maximum possible allotment default is $5,000 \times 3 = \text{Rs } 15,000$, smaller than Rs 24,000. Equivalently, the pro-rata group alone must pay $45,000 \times 3 - 15,000 = \text{Rs } 1,20,000$ in cash, already exceeding the printed total receipt Rs 1,11,000. These two checks establish a contradiction in the printed data without changing any amount.

Step 5: Identify the consequence for forfeiture and reissue The first-call arrears, considered alone, are $1,50,000 - 1,20,000 = \text{Rs } 30,000$, or 10,000 shares at Rs 3 each. However, one cannot assign the stated allotment defaults consistently to the shareholders. Therefore the number and capital receipts of the shares to be forfeited cannot be derived from a valid allotment register. No valid numerical forfeiture, reissue or capital-reserve entry follows from all the printed conditions together. The entries above record only the amounts that can be entered before resolving that inconsistency; they do not turn the inconsistent defaults into a valid completed transaction. Final call has not been made, so no final-call entry is passed. Substituting a guessed allotment receipt would change the question and is not justified.

Step 6: Conclusion The application, allotment and first-call entries are shown above. As printed, Rs 24,000 allotment arrears require 8,000 full-allotment shares, but only 5,000 exist. Consequently a consistent numerical completion of forfeiture, reissue and capital reserve is impossible without correction of the printed data.

Quick Tip to Solve: Before calculating forfeiture, compare Rs 1,11,000 received with the pro-rata group's minimum cash payment of Rs 1,20,000; the contradiction appears immediately.

OR

16. EF Ltd. invited applications for issuing 80,000 equity shares of Rs 50 each at a premium of 20%. The amount was payable as follows :

On Application : Rs 20 per share (including premium Rs 5)

On Allotment : Rs 15 per share (including premium Rs 5)

On First Call : Rs 15 per share

On Second and Final call : Balance amount

Applications for 1,20,000 shares were received. Applications for 20,000 shares were rejected and pro-rata allotment was made to the remaining applicants.

Seema, holding 4,000 shares failed to pay the allotment money. Afterwards the first call was made. Seema paid allotment money along with the first call. Sahaj who had applied for 2,500 shares failed to pay the first call money. Sahaj's shares were forfeited and subsequently reissued to Geeta for Rs 60 per share, Rs 50 per share paid up. Final call was not made.

Pass necessary journal entries for the above transactions in the books of EF Ltd. by opening calls-in-arrears account.

[8 marks]

Solution:

Concept:

- Application money first meets the amount due on allotted shares; surplus application money is adjusted against allotment. Rejected applications are refunded. Here the allotment ratio is $80,000 : 1,00,000 = 4 : 5$.
- Calls-in-Arrears Account records unpaid amounts due. On forfeiture, debit Share Capital with called-up capital, credit arrears with unpaid calls, and credit Share Forfeiture with capital already received. Premium already received is not reversed.
- On reissue, credit Share Capital with the paid-up value and Securities Premium Reserve with any excess received. The forfeiture balance relating to shares reissued is transferred to Capital Reserve.

Step 1: Work out pro-rata allotment and individual arrears The issue price is $50 + 20\% \times 50 = \text{Rs } 60$. Capital called before forfeiture is $15 + 10 + 15 = \text{Rs } 40$ per share; the uncalled final amount is Rs 10. Applications total $1,20,000 \times 20 = \text{Rs } 24,00,000$. Refund $20,000 \times 20 = \text{Rs } 4,00,000$. For the accepted applicants, surplus application money is $(1,00,000 - 80,000) \times 20 = \text{Rs } 4,00,000$, adjusted against allotment.

Seema applied for $4,000 \times 5/4 = 5,000$ shares. Her surplus is $1,000 \times 20 = \text{Rs } 20,000$; hence unpaid allotment is $4,000 \times 15 - 20,000 = \text{Rs } 40,000$. Sahaj is allotted $2,500 \times 4/5 = 2,000$ shares and fails to pay first call of $2,000 \times 15 = \text{Rs } 30,000$.

Step 2: Record application money and allotment due

Journal of EF Ltd. (application and allotment)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		24,00,000	
	To Share Application A/c			24,00,000
	(Being application money received for 1,20,000 shares)			
	Share Application A/c Dr.		24,00,000	
	To Share Capital A/c			12,00,000
	To Securities Premium Reserve A/c			4,00,000
	To Share Allotment A/c			4,00,000
	To Bank A/c			4,00,000
	(Being application money adjusted and rejected applications refunded)			
	Share Allotment A/c Dr.		12,00,000	
	To Share Capital A/c			8,00,000
	To Securities Premium Reserve A/c			4,00,000
	(Being allotment of Rs 15 per share due, including premium of Rs 5)			

Step 3: Receive allotment and make the first call Net allotment receivable is $12,00,000 - 4,00,000 =$ Rs $8,00,000$. After Seema's default, cash received is $8,00,000 - 40,000 =$ Rs $7,60,000$.

Journal of EF Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		7,60,000	
	Calls-in-Arrears A/c Dr.		40,000	
	To Share Allotment A/c			8,00,000
	(Being allotment received except Seema's net dues)			
	Share First Call A/c Dr.		12,00,000	
	To Share Capital A/c			12,00,000
	(Being first call of Rs 15 per share made on 80,000 shares)			

Step 4: Receive first call and recover Seema's arrears First-call receipt is $12,00,000 - 30,000 =$ Rs $11,70,000$. Seema also pays her earlier Rs 40,000, so total bank receipt at this stage is Rs 12,10,000. Recording the recovery separately makes the arrears movement clear.

Journal of EF Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		11,70,000	
	Calls-in-Arrears A/c Dr.		30,000	
	To Share First Call A/c			12,00,000
	(Being first call received except Sahaj's dues)			
	Bank A/c Dr.		40,000	
	To Calls-in-Arrears A/c			40,000
	(Being Seema's allotment arrears received with first call)			

Step 5: Forfeit and reissue Sahaj's shares Capital received on Sahaj's shares is $2,000 \times (15 + 10) =$ Rs $50,000$; all Rs 10 per share of original premium has been received. Forfeiture removes called capital of $2,000 \times 40 =$ Rs $80,000$. Reissue at Rs 60, fully paid at Rs 50, gives premium of $2,000 \times 10 =$ Rs $20,000$. No reissue discount is charged, so the entire forfeiture credit is a capital profit.

Journal of EF Ltd. (forfeiture and reissue)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Capital A/c Dr.		80,000	
	To Calls-in-Arrears A/c			30,000
	To Share Forfeiture A/c			50,000
	(Being 2,000 shares forfeited for non-payment of first call)			
	Bank A/c Dr.		1,20,000	
	To Share Capital A/c			1,00,000
	To Securities Premium Reserve A/c			20,000
	(Being forfeited shares reissued to Geeta at Rs 60, fully paid at Rs 50)			
	Share Forfeiture A/c Dr.		50,000	
	To Capital Reserve A/c			50,000
	(Being profit on all reissued shares transferred to capital reserve)			

Step 6: Conclusion Sahaj's 2,000 shares are forfeited and reissued fully paid. The resulting Capital Reserve is Rs 50,000; the final call is not made on the remaining original shares. Calls-in-Arrears Account is cleared after forfeiture.

Quick Tip to Solve: For Seema, subtract her Rs 20,000 surplus application money before finding allotment arrears; for Sahaj, first convert 2,500 applications into 2,000 allotted shares.

17. Akul, Bakul and Chandan were partners in a firm sharing profits in the ratio of 2 : 2 : 1. On 31st March, 2018 their Balance Sheet was as follows :

Balance Sheet of Akul, Bakul and Chandan as on 31-3-2018

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Sundry Creditors	45,000	Cash at Bank	42,000
Employees Provident Fund	13,000	Debtors: 60,000	
General reserve	20,000	Less: Provision for doubtful debts: 2,000	58,000
Capitals:		Stock	80,000
Akul: 1,60,000		Furniture	90,000
Bakul: 1,20,000		Plant and Machinery	1,80,000
Chandan: 92,000	3,72,000		
	4,50,000		4,50,000

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

(i) Plant and Machinery was undervalued by 10%.

(ii) Provision for doubtful debts was to be increased to 15% on debtors.

(iii) Furniture was to be decreased to Rs 87,000.

(iv) Goodwill of the firm was valued at Rs 3,00,000 and Bakul's share was to be adjusted through the capital accounts of Akul and Chandan.

(v) Capital of the new firm was to be in the new profit sharing ratio of the continuing partners.

Prepare Revaluation account, Partners' Capital accounts and the Balance Sheet of the reconstituted firm. [8 marks]

Solution:

Concept:

- Revaluation profit or loss and accumulated reserves belong to all partners in their old profit-sharing ratio, here $2:2:1$. An existing provision is adjusted only by the additional amount required.
- When no new ratio is specified, continuing partners retain their relative old shares. Akul and Chandan therefore share $2:1$, which is also their gaining ratio. Bakul's goodwill share is debited to the gaining partners in this ratio.
- Transfer the retiring partner's unpaid amount to his Loan Account when immediate payment is not stipulated. Adjust the continuing partners' aggregate capital in their new ratio through cash contributions or withdrawals.

Step 1: Calculate the revaluation adjustments Plant and Machinery is undervalued by 10%, so its book value represents 90% of the correct value:

$$\text{Revised value} = 1,80,000 \times \frac{100}{90} = \text{Rs } 2,00,000.$$

The increase is Rs 20,000. Required provision for doubtful debts is $60,000 \times 15\% = \text{Rs } 9,000$; as Rs 2,000 already exists, the additional charge is Rs 7,000. Furniture falls from Rs 90,000 to Rs 87,000, a loss of Rs 3,000. Thus revaluation profit is $20,000 - 7,000 - 3,000 = \text{Rs } 10,000$, shared by Akul, Bakul and Chandan as Rs 4,000, Rs 4,000 and Rs 2,000.

Revaluation Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Provision for doubtful debts	7,000	By Plant and Machinery	20,000	
	To Furniture	3,000			
	To Akul's Capital	4,000			
	To Bakul's Capital	4,000			
	To Chandan's Capital	2,000			
	Total	20,000	**Total**	20,000	

Step 2: Distribute reserves and adjust goodwill General Reserve of Rs 20,000 is credited in the old ratio: Akul Rs 8,000, Bakul Rs 8,000 and Chandan Rs 4,000. Employees Provident Fund is an outside liability and is not distributed.

The new shares of Akul and Chandan are $2/3$ and $1/3$. Their gains are

$$\frac{2}{3} - \frac{2}{5} = \frac{4}{15}, \qquad \frac{1}{3} - \frac{1}{5} = \frac{2}{15},$$

so the gaining ratio is $2:1$. Bakul's goodwill share is $3,00,000 \times 2/5 = \text{Rs } 1,20,000$. Debit Akul's capital by Rs 80,000 and Chandan's by Rs 40,000, and credit Bakul's capital by Rs 1,20,000. Goodwill is adjusted directly; no goodwill asset is raised.

The resulting adjusted capitals are:

$$\begin{aligned} \text{Akul} &= 1,60,000 + 8,000 + 4,000 - 80,000 = 92,000, \\ \text{Bakul} &= 1,20,000 + 8,000 + 4,000 + 1,20,000 = 2,52,000, \\ \text{Chandan} &= 92,000 + 4,000 + 2,000 - 40,000 = 58,000. \end{aligned}$$

Step 3: Settle the retirement balance and align continuing capitals No immediate payment to Bakul is specified; his Rs 2,52,000 is transferred to Bakul's Loan Account. The continuing partners' aggregate adjusted capital is $92,000 + 58,000 =$ Rs $1,50,000$. Keeping this aggregate unchanged, the required capitals in $2:1$ are Akul Rs 1,00,000 and Chandan Rs 50,000. Akul brings Rs 8,000 and Chandan withdraws Rs 8,000, leaving bank at Rs 42,000.

Akul's Capital Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Bakul's Capital (goodwill)	80,000	By Balance b/d	1,60,000	
	To Balance c/d	1,00,000	By General Reserve	8,000	
			By Revaluation	4,000	
			By Bank (cash introduced)	8,000	
	Total	1,80,000	**Total**	1,80,000	

Step 4: Complete Bakul's and Chandan's capital accounts

Bakul's Capital Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Bakul's Loan	2,52,000	By Balance b/d	1,20,000	
			By General Reserve	8,000	
			By Revaluation	4,000	
			By Akul's Capital (goodwill)	80,000	
			By Chandan's Capital (goodwill)	40,000	
	Total	2,52,000	**Total**	2,52,000	

Chandan's Capital Account

Dr.	Particulars	Amount (Rs)	Particulars	Amount (Rs)	Cr.
	To Bakul's Capital (goodwill)	40,000	By Balance b/d	92,000	
	To Bank (withdrawal)	8,000	By General Reserve	4,000	
	To Balance c/d	50,000	By Revaluation	2,000	
	Total	98,000	**Total**	98,000	

Step 5: Prepare the reconstituted Balance Sheet Net debtors are $60,000 - 9,000 =$ Rs $51,000$. Stock and outside liabilities carry forward unchanged; General Reserve has been distributed and Bakul's capital has become a loan.

Balance Sheet of Akul and Chandan as at 31st March, 2018

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Sundry Creditors	45,000	Cash at Bank	42,000
Employees Provident Fund	13,000	Debtors: Rs 60,000	
Bakul's Loan	2,52,000	Less: Provision Rs 9,000	51,000
Partners' Capitals:		Stock	80,000
Akul	1,00,000	Furniture	87,000
Chandan	50,000	Plant and Machinery	2,00,000
Total	**4,60,000**	**Total**	**4,60,000**

The Rs 10,000 rise from the old Balance Sheet total of Rs 4,50,000 equals the revaluation profit. The equal capital contribution and withdrawal have no net effect on assets.

Step 6: Conclusion Revaluation profit is Rs 10,000. Bakul's loan is Rs 2,52,000. Final capitals are Akul Rs 1,00,000 and Chandan Rs 50,000, and the reconstituted Balance Sheet totals Rs 4,60,000.

Quick Tip to Solve: Increase the doubtful-debt provision by Rs 7,000, not Rs 9,000; reserve and revaluation use 2:2:1, but Bakul's goodwill is borne in 2:1.

OR

17. Sanjana and Alok were partners in a firm sharing profits and losses in the ratio 3 : 2. On 31st March, 2018 their Balance Sheet was as follows :

Balance Sheet of Sanjana and Alok as on 31-3-2018

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	60,000	Cash	1,66,000
Workmen's Compensation Fund	60,000	Debtors 1,46,000 Less : Provision for doubtful debts 2,000	1,44,000
Capitals :		Stock	1,50,000
Sanjana 5,00,000		Investments	2,60,000
Alok 4,00,000	9,00,000	Furniture	3,00,000
	10,20,000		10,20,000

On 1st April, 2018, they admitted Nidhi as a new partner for 1/4th share in the profits on the following terms :

(a) Goodwill of the firm was valued at Rs 4,00,000 and Nidhi brought the necessary amount in cash for her share of goodwill premium, half of which was withdrawn by the old partners.

(b) Stock was to be increased by 20% and furniture was to be reduced to 90%.

(c) Investments were to be valued at Rs 3,00,000. Alok took over investments at this value.

(d) Nidhi brought Rs 3,00,000 as her capital and the capitals of Sanjana and Alok were adjusted in the new profit sharing ratio.

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

Solution:

Concept:

- Revaluation profit and an accumulated reserve existing before admission belong to the old partners in their old profit-sharing ratio, Sanjana : Alok $= 3 : 2$.
- Nidhi acquires $1/4$ of profits. With no different sacrifice specified, Sanjana and Alok surrender that share in their old ratio; goodwill premium is credited in the sacrificing ratio.
- Adjust the old partners' capitals after recording revaluation, reserves, goodwill, withdrawals and assets taken over. Nidhi's capital and share determine the total capital of the new firm.

Step 1: Determine the new ratio and goodwill adjustment The old partners retain $3/4$ of the firm's profits. Their new shares are

$$S = \frac{3}{5} \times \frac{3}{4} = \frac{9}{20}, \qquad A = \frac{2}{5} \times \frac{3}{4} = \frac{6}{20}, \qquad N = \frac{1}{4} = \frac{5}{20}.$$

Thus the new ratio is $9 : 6 : 5$, and the sacrificing ratio is $3 : 2$. Nidhi brings goodwill premium of Rs $4,00,000 \times 1/4 =$ Rs $1,00,000$. Sanjana is credited Rs 60,000 and Alok Rs 40,000. Half is withdrawn: Rs 30,000 by Sanjana and Rs 20,000 by Alok. The remaining premium stays in the firm; no goodwill asset is raised.

Step 2: Prepare the Revaluation Account Stock rises by $20\% \times 1,50,000 =$ Rs $30,000$. Furniture falls by

$10\% \times 3,00,000 =$ Rs $30,000$, leaving Rs 2,70,000. Investments appreciate by $3,00,000 - 2,60,000 =$ Rs $40,000$. Consequently, revaluation profit is Rs 40,000, shared as Rs 24,000 and Rs 16,000.

Revaluation Account

Dr. Particulars	Amount (Rs)	Particulars	Amount (Rs) Cr.
To Furniture	30,000	By Stock	30,000
To Sanjana's Capital	24,000	By Investments	40,000
To Alok's Capital	16,000		
Total	70,000	Total	70,000

Alok takes over the revalued investments of Rs 3,00,000, which is debited to his capital. This transfer does not create a second revaluation gain.

Step 3: Work out the required capital adjustments No workmen's compensation claim is stated. Transfer the entire fund of Rs 60,000 to Sanjana and Alok in $3:2$: Rs 36,000 and Rs 24,000 respectively. The adjusted capitals before the final cash adjustment are

$$\begin{aligned} S &= 5,00,000 + 36,000 + 24,000 + 60,000 - 30,000 \\ &= \text{Rs } 5,90,000, \\ A &= 4,00,000 + 24,000 + 16,000 + 40,000 - 20,000 - 3,00,000 \\ &= \text{Rs } 1,60,000. \end{aligned}$$

Nidhi brings Rs 3,00,000 for a quarter share. Hence total capital is $3,00,000 \div 1/4 =$ Rs $12,00,000$. Required capitals in $9:6:5$ are Rs 5,40,000, Rs 3,60,000 and Rs 3,00,000. Sanjana withdraws Rs 50,000; Alok brings Rs 2,00,000.

Step 4: Prepare the Partners' Capital Accounts In the table, S, A and N denote Sanjana, Alok and Nidhi; WCF denotes Workmen's Compensation Fund. All amounts are in Rs.

Partners' Capital Accounts

Dr. Particulars	S	A	N	Particulars	S	A	N Cr.
To Cash (premium withdrawn)	30,000	20,000	–	By Balance b/d	5,00,000	4,00,000	–
To Investments	–	3,00,000	–	By WCF	36,000	24,000	–
To Cash (capital adjusted)	50,000	–	–	By Revaluation	24,000	16,000	–
To Balance c/d	5,40,000	3,60,000	3,00,000	By Premium for Goodwill	60,000	40,000	–
				By Cash (capital introduced)	–	2,00,000	3,00,000
Total	6,20,000	6,80,000	3,00,000	Total	6,20,000	6,80,000	3,00,000

Step 5: Find closing cash and prepare the new Balance Sheet Cash includes Nidhi's capital and premium and Alok's capital contribution, less both old partners' premium withdrawals and Sanjana's capital withdrawal:

$$\begin{aligned} \text{Cash} &= 1,66,000 + 3,00,000 + 1,00,000 + 2,00,000 \\ &\quad - 30,000 - 20,000 - 50,000 \\ &= \text{Rs } 6,66,000. \end{aligned}$$

Investments no longer appear because Alok has taken them over. Debtors remain Rs 1,46,000 less the unchanged provision of Rs 2,000, giving Rs 1,44,000.

Balance Sheet of Sanjana, Alok and Nidhi as at 1st April, 2018

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	60,000	Cash	6,66,000
Partners' capitals:		Debtors: Rs 1,46,000	
Sanjana	5,40,000	Less: Provision Rs 2,000	
Alok	3,60,000	Net debtors	1,44,000
Nidhi	3,00,000	Stock	1,80,000
		Furniture	2,70,000
Total	12,60,000	Total	12,60,000

Step 6: Conclusion Revaluation profit is Rs 40,000. Closing capitals are Sanjana Rs 5,40,000, Alok Rs 3,60,000 and Nidhi Rs 3,00,000, in the ratio $9 : 6 : 5$. Closing cash is Rs 6,66,000 and the Balance Sheet total is Rs 12,60,000.

Quick Tip to Solve: Revalue investments before debiting Alok for taking them over, then use Nidhi's Rs 3,00,000 for a quarter share to set total capital at Rs 12,00,000.

Part B (20 marks)

(OPTION – I) (Analysis of Financial Statements)

18. How will 'commission received' be treated while preparing cash-flow-statement ? [1 mark]

Solution:

Concept:

- Operating activities are the principal revenue-producing activities of an enterprise and other activities that are neither investing nor financing.
- Cash receipts from fees, royalties and commissions are operating receipts because they arise from earning revenue by providing services.

Step 1: Identify the nature of the receipt Commission is income earned for a service rendered. Receiving it increases cash, but it does not raise capital or borrowings, and it is not the disposal of a long-term asset.

Step 2: Classify the cash movement Include commission actually received among cash receipts from operating activities. Under the indirect method, ordinary commission income already included in net profit is not removed as an investing or financing item; any related outstanding or advance balance is adjusted appropriately.

Step 3: Conclusion Commission received is a cash inflow from operating activities.

Quick Tip to Solve: Link commission to services rendered: receipts from fees and commissions belong to operating activities.

19. How is 'dividend paid' treated by a financial enterprise for the purpose of preparing cash flow statement ? [1 mark]

Solution:

Concept:

- Financing activities change the size or composition of the owners' capital and borrowings of an enterprise.
- A dividend paid is a cash distribution to shareholders, who provide the enterprise's equity finance; it is not a receipt from providing financial services.

Step 1: Identify what the payment represents Dividend paid distributes earnings to the owners. It is a return on the funds shareholders have supplied, so it relates to the financing of the enterprise rather than to its revenue-earning operations.

Step 2: Apply the classification to a financial enterprise For a financial enterprise also, show the cash amount of dividend paid as an outflow under cash flow from financing activities. Do not confuse dividend paid with dividend received: dividend received by a financial enterprise is classified as an operating cash flow.

Step 3: Conclusion Dividend paid by a financial enterprise is a cash outflow from financing activities.

Quick Tip to Solve: First read whether dividend is paid or received: dividend paid goes under financing activities even for a financial enterprise.

20. Prepare a comparative statement of Profit and Loss from the information extracted from the statement of Profit and Loss for the year ended 31st March, 2017 and 2018.

Particulars	2017-18	2016-17
Revenue from operations	Rs 15,00,000	Rs 10,00,000
Other income (% of Revenue from operations)	60%	50%
Employee benefit expenses (% of total revenue)	40%	30%
Tax-Rate	40%	40%

[4 marks]

Solution:

Concept:

- An absolute change is the current-year amount less the previous-year amount. Percentage change equals $\frac{\text{Absolute change}}{\text{Previous-year amount}} \times 100$. The base year here is 2016-17.
- Total revenue equals revenue from operations plus other income. Employee benefit expenses are calculated on total revenue, whereas other income is calculated on revenue from operations. Tax is calculated on profit before tax.

Step 1: Calculate the supporting amounts For 2016-17, other income is $10,00,000 \times 50\% =$ Rs $5,00,000$. Total revenue is therefore Rs 15,00,000. Employee benefit expenses are $15,00,000 \times 30\% =$ Rs $4,50,000$. Thus profit before tax is Rs 10,50,000; tax at 40% is Rs 4,20,000 and profit after

tax is Rs 6,30,000.

For 2017-18, other income is $15,00,000 \times 60\% =$ Rs $9,00,000$. Total revenue is Rs 24,00,000. Employee benefit expenses are $24,00,000 \times 40\% =$ Rs $9,60,000$. Thus profit before tax is Rs 14,40,000; tax at 40% is Rs 5,76,000 and profit after tax is Rs 8,64,000.

Step 2: Prepare the comparative statement **Comparative Statement of Profit and Loss**

For the years ended 31st March, 2017 and 2018

Particulars	2016-17 (Rs)	2017-18 (Rs)	Increase (Rs)	Change (%)
Revenue from operations	10,00,000	15,00,000	5,00,000	50.00
Other income	5,00,000	9,00,000	4,00,000	80.00
Total revenue	15,00,000	24,00,000	9,00,000	60.00
Less: Employee benefit expenses	4,50,000	9,60,000	5,10,000	113.33
Profit before tax	10,50,000	14,40,000	3,90,000	37.14
Less: Tax at 40%	4,20,000	5,76,000	1,56,000	37.14
Profit after tax	6,30,000	8,64,000	2,34,000	37.14

Percentage changes are rounded to two decimal places. For example, the increase in expenses is $\frac{5,10,000}{4,50,000} \times 100 = 113.33\%$; it is not merely the difference between the two given expense percentages.

Step 3: Conclusion Profit after tax increased from Rs 6,30,000 to Rs 8,64,000, an increase of Rs 2,34,000 or 37.14%.

Quick Tip to Solve: Use revenue from operations for other income, total revenue for employee expenses, and the previous year as the denominator of every comparative percentage.

21. (a) Calculate Revenue from operations of BN Ltd. From the following information :

Current assets	**Rs 8,00,000.**
Quick ratio is	**1.5 : 1**
Current ratio is	**2 : 1.**
Inventory turnover ratio is	**6 times.**

Goods were sold at a profit of 25% on cost.

(b) The Operating ratio of a company is 60%. State whether 'Purchase of goods costing Rs 20,000' will increase, decrease or not change the operating ratio. [4 marks]

Solution:

Concept:

- Current ratio = current assets/current liabilities; quick ratio = quick assets/current liabilities. In the absence of prepaid expenses, inventory = current assets minus quick assets.
- Inventory turnover ratio = cost of revenue from operations/average inventory. When only one inventory figure is supplied, use that inventory for turnover. A profit of 25% on cost makes sales equal to 125% of cost.
- Operating ratio $= \dfrac{\text{Cost of revenue from operations} + \text{Operating expenses}}{\text{Revenue from operations}} \times 100$. Purchases of

unsold inventory increase purchases and closing inventory equally.

Step 1: (a) Calculate current liabilities and inventory Let current liabilities be L. From the current ratio,

$$2 = \frac{8,00,000}{L} \quad \Rightarrow \quad L = \text{Rs } 4,00,000.$$

Quick assets are $1.5 \times 4,00,000 = \text{Rs } 6,00,000$. Therefore,

$$\text{Inventory} = 8,00,000 - 6,00,000 = \text{Rs } 2,00,000.$$

No separate opening or closing inventories are given, so this inventory figure is used in the inventory turnover formula.

Step 2: (a) Calculate cost and revenue from operations Applying the inventory turnover ratio,

$$\begin{aligned} \text{Cost of revenue from operations} &= 6 \times 2,00,000 \\ &= \text{Rs } 12,00,000. \\ \text{Gross profit} &= 12,00,000 \times \frac{25}{100} \\ &= \text{Rs } 3,00,000. \\ \text{Revenue from operations} &= 12,00,000 + 3,00,000 \\ &= \text{Rs } 15,00,000. \end{aligned}$$

The profit percentage is on cost, so multiplying cost by $125/100$ gives sales directly. It would be incorrect to treat 25% as a margin on sales.

Step 3: (b) Examine the purchase of goods A purchase of goods costing Rs 20,000 increases purchases by Rs 20,000 and, since the goods have merely been purchased, increases closing inventory by the same amount. In the expression

$$\text{Cost of revenue from operations} = \text{Opening inventory} + \text{Net purchases} - \text{Closing inventory},$$

the additional purchase and additional closing inventory cancel. Neither operating expenses nor revenue from operations changes. Hence both the numerator and denominator of the operating ratio remain unchanged, and the operating ratio continues to be 60%.

Step 4: Conclusion (a) Revenue from operations of BN Ltd. is $\boxed{\text{Rs } 15,00,000}$. (b) Purchase of the goods causes no change in the operating ratio; it remains 60%.

Quick Tip to Solve: First find liabilities using the current ratio, then quick assets using those same liabilities. Convert a profit on cost to sales by multiplying cost by 1.25.

OR

21. (a) Calculate 'Total Assets to Debt ratio' from the following information :

	Rs
Equity Share Capital	4,00,000
Long Term Borrowings	1,80,000
Surplus i.e. Balance in statement of Profit and Loss	1,00,000
General Reserve	70,000
Current Liabilities	30,000
Long Term Provisions	1,20,000

(b) The Debt Equity ratio of a company is 1 : 2. State whether 'Issue of bonus shares' will increase, decrease or not change the Debt Equity Ratio. [4 marks]

Solution:

Concept:

- Total assets to debt ratio measures the coverage of long-term debt by total assets. Divide total assets by long-term debt to obtain this ratio.
- Total assets equal shareholders' funds plus all liabilities. Long-term debt includes long-term borrowings and long-term provisions, but excludes current liabilities.
- Bonus shares capitalise reserves: share capital increases and reserves decrease by an equal amount, leaving total shareholders' funds unchanged.

Step 1: (a) Calculate shareholders' funds and long-term debt Shareholders' funds comprise equity share capital, the balance in the Statement of Profit and Loss and general reserve:

$$\begin{aligned}\text{Shareholders' Funds} &= 4,00,000 + 1,00,000 + 70,000\\ &= \text{Rs } 5,70,000.\\ \text{Long-term Debt} &= 1,80,000 + 1,20,000\\ &= \text{Rs } 3,00,000.\end{aligned}$$

Long-term provisions are non-current liabilities and therefore belong in long-term debt for this ratio. The current liabilities of Rs 30,000 are excluded from its denominator.

Step 2: (a) Find total assets and the coverage ratio By the accounting equation, total assets equal the aggregate of shareholders' funds, non-current liabilities and current liabilities. Thus,

$$\begin{aligned}\text{Total Assets} &= 5,70,000 + 3,00,000 + 30,000\\ &= \text{Rs } 9,00,000.\\ \text{Total Assets to Debt Ratio} &= \frac{9,00,000}{3,00,000} = 3:1.\end{aligned}$$

Current liabilities are included when reconstructing total assets even though they are excluded from long-term debt. Each rupee of long-term debt is covered by three rupees of total assets.

Step 3: (b) Assess the effect of issuing bonus shares The debt equity ratio uses long-term debt divided

by shareholders' funds. On a bonus issue, the company transfers an amount from its available reserves to share capital. If that amount is B, shareholders' funds change by $+B - B = 0$. No borrowing is raised or repaid, so long-term debt also stays unchanged. Both numerator and denominator of the debt equity ratio therefore remain the same; considering share capital alone would incorrectly suggest an increase in equity.

Step 4: Conclusion (a) Total Assets to Debt Ratio is $\boxed{3:1}$. (b) Issue of bonus shares causes $\boxed{\text{no change}}$ in the Debt Equity Ratio; it remains $1:2$.

Quick Tip to Solve: Include long-term provisions in debt, but include current liabilities only while calculating total assets; a bonus issue merely rearranges shareholders' funds.

22. Explain briefly any four objectives of 'Analysis of Financial Statements'. [4 marks]

Solution:

Concept:

- Analysis of financial statements means systematically examining financial figures and the relationships between them to assess the enterprise's performance and financial position.
- Comparisons over time and between comparable enterprises help users interpret the figures in the Balance Sheet and Statement of Profit and Loss for economic decisions.

Step 1: 1. Assess earning capacity and profitability Analysis determines whether the enterprise earns an adequate profit in relation to its revenue, capital employed and owners' investment. Studying profit margins and returns helps identify changes in earning capacity and judge whether performance is improving or deteriorating. Investors and management can use this information to evaluate the enterprise's ability to generate future earnings.

Step 2: 2. Assess short-term financial position Analysis examines the enterprise's ability to meet its current obligations as they fall due. It studies current assets, current liabilities and the liquidity of individual assets to judge whether sufficient resources are available for timely payment. This is useful to suppliers and short-term lenders when deciding whether to grant credit and on what terms.

Step 3: 3. Assess long-term solvency Analysis evaluates whether the enterprise can meet its long-term commitments, including repayment of loans and payment of interest. The relationship between debt, shareholders' funds and assets, together with the adequacy of earnings, indicates the financial risk borne by long-term lenders. It helps assess the stability of the capital structure and the safety of funds advanced to the enterprise.

Step 4: 4. Assess operating efficiency Analysis measures how effectively management uses the enterprise's resources to generate revenue and control costs. For example, examination of inventory turnover, collection of receivables and asset utilisation helps locate inefficient operations. Comparison with earlier periods or comparable enterprises reveals strengths and weaknesses and provides a basis for corrective action and better resource allocation.

Step 5: Conclusion Any four objectives are assessment of earning capacity and profitability, short-term financial position, long-term solvency and operating efficiency.

Quick Tip to Solve: Explain each objective through the decision it supports: earning profits, paying current dues, servicing long-term debt or using resources efficiently.

OR

22. State under which major headings and 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) Prepaid Insurance

(ii) Investment in Debentures

(iii) Calls-in-arrears

(iv) Unpaid dividend

(v) Capital Reserve

(vi) Loose Tools

(vii) Capital work-in-progress

(viii) Patents being developed by the company. [4 marks]

Solution:

Concept:

- Schedule III groups equity and liabilities separately from assets, with assets divided into current and non-current categories.
- The major heading identifies the broad group, while the sub-heading identifies the line under which the item is disclosed. Calls-in-arrears reduce subscribed share capital rather than becoming an asset.

Step 1: Classify the eight items The required presentation is as follows. The last column specifies the detailed placement within the sub-heading.

Balance Sheet classification under Schedule III

Item	Major heading	Sub-heading	Detailed placement
(i) Prepaid insurance	Current assets	Other current assets	Prepaid expenses
(ii) Investment in debentures	Non-current assets	Non-current investments	Investments in debt instruments
(iii) Calls-in-arrears	Shareholders' funds	Share capital	Deduct from subscribed capital
(iv) Unpaid dividend	Current liabilities	Other current liabilities	Unpaid dividend
(v) Capital reserve	Shareholders' funds	Reserves and surplus	Capital reserve
(vi) Loose tools	Current assets	Inventories	Loose tools
(vii) Capital work-in-progress	Non-current assets	Fixed assets	Capital work-in-progress
(viii) Patents being developed	Non-current assets	Fixed assets	Intangible assets under development

Step 2: Explain the distinguishing classifications Prepaid insurance represents a future service benefit and is therefore an asset. Unpaid dividend is an obligation to shareholders and is a current liability. Loose tools form part of inventories. Construction expenditure on an unfinished tangible asset is capital work-in-progress, whereas expenditure on patents still being developed belongs to intangible assets under development. Debenture investments are placed under non-current investments in the

absence of an indication that they are held for short-term realisation; an investment expressly held as current would instead appear under current investments.

Step 3: Conclusion The eight items are presented under the headings and sub-headings shown in the classification table. Calls-in-arrears are deducted from subscribed share capital; unfinished patents are disclosed as intangible assets under development.

Quick Tip to Solve: Distinguish an unfinished tangible asset from an unfinished intangible asset before choosing the fixed-asset line.

23. From the following Balance Sheet of Kiero Ltd. and the additional information as on 31-3-2018, prepare a Cash Flow Statement :

Kiero Ltd.
Balance Sheet as at 31-3-2018

Particulars	Note No.	31-3-18 (Rs)	31-3-17 (Rs)
I Equity and Liabilities			
(1) Shareholders Funds			
(a) Share Capital		7,90,000	5,80,000
(b) Reserves and Surplus	1	4,60,000	1,20,000
(2) Non-Current Liabilities			
Long term Borrowings	2	5,00,000	3,00,000
(3) Current Liabilities			
(a) Short term borrowings	3	1,15,000	42,000
(b) Short term Provisions	4	1,18,000	46,000
Total		19,83,000	10,88,000
II. Assets			
(1) Non-Current Assets			
Fixed Assets			
(i) Tangible Assets	5	9,80,000	6,35,000
(ii) Intangible Assets	6	2,68,000	1,70,000
(2) Current Assets			
(a) Current Investments		1,40,000	70,000
(b) Trade Receivables		4,40,000	1,50,000
(c) Cash and Cash Equivalents		1,55,000	63,000
Total		19,83,000	10,88,000

Notes to Accounts

Note	Particulars	31-3-18 (Rs)	31-3-17 (Rs)
1.	Reserves and Surplus		
	Surplus (Balance in Statement of Profit & Loss)	3,20,000	60,000
	General Reserve	1,40,000	60,000
	Total	4,60,000	1,20,000
2.	Long-term Borrowings		
	12% Debentures	5,00,000	3,00,000
	Total	5,00,000	3,00,000
3.	Short-term Borrowings		
	Bank Overdraft	1,15,000	42,000
	Total	1,15,000	42,000
4.	Short-term Provisions		
	Provision for Tax	1,18,000	46,000
	Total	1,18,000	46,000
5.	Tangible Assets		
	Plant and Machinery	11,00,000	7,50,000
	Less: Accumulated Depreciation	(1,20,000)	(1,15,000)
	Total	9,80,000	6,35,000
6.	Intangible Assets		
	Goodwill	2,68,000	1,70,000
	Total	2,68,000	1,70,000

Additional Information :

12% debentures were issued on 1st September, 2017. [6 marks]

Solution:

Concept:

- The indirect method starts with profit before tax, adds non-cash expenses and financing costs, adjusts operating working capital, and deducts tax actually paid.
- Purchases of fixed assets, goodwill and current investments are investing cash flows. Issues of shares and debentures, bank overdraft movements and debenture interest are financing cash flows for this non-financial company.
- The increase in general reserve is an appropriation of profit and must be added back when deriving profit from the change in the Statement of Profit and Loss balance.

Step 1: Determine profit, interest and income tax Increase in surplus is Rs $3,20,000 - 60,000 = 2,60,000$. Transfer to general reserve is Rs $1,40,000 - 60,000 = 80,000$. Hence profit after tax is Rs $2,60,000 + 80,000 = 3,40,000$.

With no separate tax information, the closing provision of Rs 1,18,000 is treated as the current year's tax charge and the opening provision of Rs 46,000 as tax paid during the year. Thus profit before tax is Rs $3,40,000 + 1,18,000 = 4,58,000$.

Existing debentures carry interest for twelve months; the fresh issue of Rs 2,00,000 on 1 September carries interest for seven months:

$$I = 3,00,000 \times \frac{12}{100} + 2,00,000 \times \frac{12}{100} \times \frac{7}{12} = 50,000.$$

There is no interest payable balance, so interest expense equals interest paid.

Step 2: Calculate depreciation, acquisitions and working-capital movements No disposal of plant is given. Depreciation is the increase in accumulated depreciation, Rs $1,20,000 - 1,15,000 = 5,000$. Plant purchased is the increase in its gross cost, Rs $11,00,000 - 7,50,000 = 3,50,000$. Goodwill purchased is Rs $2,68,000 - 1,70,000 = 98,000$, and current investments purchased are Rs $1,40,000 - 70,000 = 70,000$.

Trade receivables increase by Rs $4,40,000 - 1,50,000 = 2,90,000$, an operating cash deduction. Share capital rises by Rs 2,10,000; debentures rise by Rs 2,00,000; bank overdraft rises by Rs $1,15,000 - 42,000 = 73,000$. These are financing inflows. Current investments are treated as investments, since the question separately reports cash and cash equivalents.

Step 3: Prepare the statement

Kiero Ltd.

Cash Flow Statement for the year ended 31 March 2018

Particulars	Amount (Rs)
A. Cash flows from operating activities	
Net profit before tax	4,58,000
Add: Depreciation	5,000
Add: Interest on debentures	50,000
Operating profit before working-capital changes	5,13,000
Less: Increase in trade receivables	(2,90,000)
Cash generated from operations	2,23,000
Less: Income tax paid	(46,000)
Net cash from operating activities (A)	**1,77,000**
B. Cash flows from investing activities	
Purchase of plant and machinery	(3,50,000)
Purchase of goodwill	(98,000)
Purchase of current investments	(70,000)
Net cash used in investing activities (B)	**(5,18,000)**
C. Cash flows from financing activities	
Proceeds from issue of shares	2,10,000
Proceeds from issue of debentures	2,00,000
Increase in bank overdraft	73,000
Interest on debentures paid	(50,000)
Net cash from financing activities (C)	**4,33,000**
Net increase in cash and cash equivalents (A+B+C)	92,000
Add: Opening cash and cash equivalents	63,000
Closing cash and cash equivalents	**1,55,000**

Step 4: Conclusion Net operating cash inflow is Rs 1,77,000, investing cash outflow is Rs 5,18,000 and financing cash inflow is Rs 4,33,000. Their net inflow of Rs 92,000 reconciles opening cash of Rs 63,000 to closing cash of Rs 1,55,000.

Quick Tip to Solve: Use gross plant cost for purchases, accumulated depreciation for the expense, and seven months for new debenture interest.

Part B (OPTION – II) (Computerised Accounting)

18. What is meant by 'Mixed Reference' ? [1 mark]

Solution:

Concept:

- A cell reference identifies a spreadsheet cell by its column letter and row number. A mixed reference fixes one of these components and leaves the other relative.
- The dollar sign fixes the component immediately following it: $\$A1$ fixes column A, whereas $A\$1$ fixes row 1.

Step 1: Define mixed reference A mixed reference is a cell reference in which either the column or the row is absolute (fixed), while the other component is relative and changes when the formula is copied.

Step 2: Illustrate the two forms For example, copying $\$A1$ one column right and one row down gives $\$A2$: column A stays fixed. Copying $A\$1$ by the same displacement gives $B\$1$: row 1 stays fixed. Thus a mixed reference differs from a fully absolute reference such as $\$A\$1$, which fixes both components.

Step 3: Conclusion A mixed reference combines one absolute component and one relative component, for example $\$A1$ or $A\$1$.

Quick Tip to Solve: Place the dollar sign immediately before the row or column that must stay fixed when copying.

19. List any four attributes of information to be stored in Payroll data base ? [1 mark]

Solution:

Concept:

- A payroll database stores employee details and pay-related fields. An attribute is a named field describing an employee or the employee's remuneration.

Step 1: Identify employee details Two suitable attributes are (i) Employee code and (ii) Employee name. The employee code uniquely identifies the employee, while the name identifies the person to whom the payroll record relates.

Step 2: Identify pay details Two further attributes are (iii) Basic pay and (iv) Dearness allowance. Basic pay records the fixed base salary and dearness allowance records the corresponding allowance used in calculating salary.

Step 3: Conclusion Any four attributes are: Employee code, Employee name, Basic pay and Dearness allowance.

Quick Tip to Solve: List actual database fields, including employee identification and salary components.

20. Differentiate between 'Generic Softwares' and 'Specific Softwares' on any four bases. [4 marks]

Solution:

Concept:

- Generic software is developed for the common requirements of many users or organisations.
- Specific software is developed or tailored to meet the particular requirements of one user or organisation.

Step 1: Compare purpose and availability The following distinctions explain the scope and procurement of the two types:

Basis	Generic software	Specific software
Purpose	Meets common requirements shared by many users or businesses.	Meets the particular requirements of an identified user or business.
Availability	Generally available as a ready-made package in the market.	Developed or customised after studying the user's requirements.

For example, a standard accounting package serves businesses with broadly similar accounting needs; a package designed around a particular organisation's unusual reporting and control procedures is specific software.

Step 2: Compare cost and implementation The remaining two bases concern the resources needed to adopt the software:

Basis	Generic software	Specific software
Cost	Generally cheaper per user because development cost is spread over many purchasers.	Generally more expensive because development and customisation costs are borne by a limited user base.
Implementation time	Usually quicker to acquire and implement because the package already exists.	Usually takes longer because requirements must be analysed and the software developed, tested and installed.

These differences follow from standardisation versus tailoring: a ready-made package may require the organisation to adapt some procedures, while a specific package is designed around its requirements.

Step 3: Conclusion Generic and specific software differ on purpose, availability, cost and implementation time, as shown above.

Quick Tip to Solve: Use the same comparison basis for both columns; explain why tailoring changes cost and time.

21. Explain "Null Values and Complex attributes". [4 marks]

Solution:

Concept:

- An attribute describes a property of an entity; its stored value provides information about that property.
- A null value represents missing or inapplicable information. A complex attribute combines composite and multivalued characteristics.

Step 1: Explain null values A null value is used when an attribute has no recorded value for a

particular entity. The value may be unknown, unavailable at the time of entry, or not applicable to that entity. For example, an employee's telephone number may be unknown when the record is created, or a spouse-name field may be inapplicable to an unmarried employee. Null must not be confused with numeric zero: zero is a known number, whereas null indicates absence of an ordinary value. Similarly, an empty character string does not, by itself, express all the meanings of null. This distinction prevents missing information from being interpreted as an actual amount or fact.

Step 2: Explain complex attributes A composite attribute can be divided into meaningful smaller components; for example, an address can contain house number, street, city and PIN code. A multivalued attribute can have more than one value for the same entity; for example, an employee may have several addresses. A complex attribute combines these two features: each of its multiple values has component attributes. Thus an employee's Addresses attribute may contain both a home address and a correspondence address, with each address further divided into house number, street, city and PIN code. The multiple addresses make it multivalued, while the internal address fields make it composite. Merely having several simple fields does not by itself make an attribute complex.

Step 3: Conclusion Null values indicate missing, unknown or inapplicable data; complex attributes combine composite and multivalued attributes.

Quick Tip to Solve: For a complex attribute, give an example with multiple values and show the components within each value.

OR

21. Explain closing entries and adjusting entries. [4 marks]

Solution:

Concept:

- Period-end accounting assigns income and expenses to the correct accounting period and determines that period's profit or loss.
- Adjusting entries implement the accrual and matching principles; closing entries transfer the balances of temporary accounts to the appropriate final accounts.

Step 1: Explain closing entries Closing entries are entries passed at the end of an accounting period to close nominal accounts by transferring their balances to the Trading Account or the Profit and Loss Account. Revenue and expense accounts relate to one period, so their balances must not be carried forward as opening revenue or expense balances for the next period.

For example, the balances of purchases and direct expenses are transferred to the Trading Account, while indirect expenses and other incomes are transferred to the Profit and Loss Account. The resulting net profit or net loss is then transferred to the appropriate capital or equity account. After closing, the temporary accounts begin the next accounting period with nil balances. Asset and liability balances, on the other hand, are carried forward to the next period.

Step 2: Explain adjusting entries Adjusting entries are entries passed at the end of an accounting period to bring the account balances up to date before preparing the final accounts. They record expenses incurred or incomes earned that have not yet been recorded, and correct the period allocation

of amounts already recorded.

Examples include outstanding expenses, prepaid expenses, accrued income, income received in advance and depreciation. If salary has been incurred but remains unpaid, an adjustment increases salary expense and recognises outstanding salary as a liability. If insurance paid includes a future period, the adjustment reduces the current period's insurance expense and recognises prepaid insurance as an asset.

Thus, adjustments ensure that the profit or loss includes the income and expenses belonging to the current period, and that assets and liabilities show the appropriate closing balances. They are made before the final closing transfers.

Step 3: Conclusion Closing entries close temporary accounts by transferring their balances to final accounts; adjusting entries update account balances so that income, expenses, assets and liabilities are correctly stated for the accounting period.

Quick Tip to Solve: Ask whether the entry corrects the period's income or expense, or transfers an already adjusted balance: the former is an adjustment and the latter is a closing entry.

22. Explain 'Transparency control' and 'Scalability' as features of Computerized Accounting System.

[4 marks]

Solution:

Concept:

- A computerised accounting system records, processes and reports accounting data using accounting software and a computer-based database.
- Transparency control supports monitoring and accountability, while scalability allows the system to accommodate growth in business activity.

Step 1: Explain transparency control Transparency control means that a computerised accounting system makes accounting information and the processing of transactions sufficiently clear and traceable for authorised users to monitor and control operations. Reports can be obtained promptly and the details supporting a reported figure can be examined, making it easier to review the work and identify errors or irregularities.

Suitable access rights and controls specify which users may enter, alter or approve transactions. A system that maintains an audit trail records the user and the changes made, allowing transactions to be traced back to their source. These facilities strengthen accountability and help management exercise effective control over accounting activities. Transparency does not mean unrestricted public access: information remains available according to the user's authorised role.

Step 2: Explain scalability Scalability means the capacity of the computerised accounting system to accommodate an increase in the volume and complexity of accounting work as the business grows. Additional transactions, users, accounts, branches or reporting requirements can be handled by expanding or upgrading the system's resources and facilities.

For example, a business that initially uses the system at one location may later add branches and require consolidated accounting information. A scalable system can support this expansion through

suitable additional capacity or modules, while continuing to provide reliable and timely accounting information. Consequently, the business does not need to replace the entire accounting arrangement merely because its operations have increased. Appropriate hardware and software upgrades may still be necessary as the workload rises.

Step 3: Conclusion Transparency control makes accounting operations traceable and easier to supervise; scalability enables the system to grow with the organisation's accounting requirements.

Quick Tip to Solve: Link transparency control with tracing and supervising transactions, and scalability with handling more transactions, users and branches as a business expands.

OR

22. Explain 'Payroll Accounting Subsystem' & 'Costing Subsystem'. [4 marks]

Solution:

Concept:

- A subsystem is a specialised part of an accounting information system which processes related transactions and produces information for a particular activity.
- Payroll deals with employee remuneration, while costing deals with the cost of products, services, jobs or processes. Both provide inputs to the main accounting system.

Step 1: Explain the Payroll Accounting Subsystem The **Payroll Accounting Subsystem** records and processes information required to calculate and account for employees' salaries and wages. Its database maintains employee particulars such as employee identification, designation, pay rates, allowances and applicable deductions. Attendance, leave and overtime records supply the period's variable inputs.

It calculates gross earnings by adding basic pay, allowances and eligible overtime or other earnings. It then calculates deductions such as provident fund, tax deducted at source, employee insurance contributions and recoveries of advances. The amount payable is determined as

$$\text{Net pay} = \text{Gross earnings} - \text{Total deductions}.$$

It prepares payroll registers, individual payslips and payment statements, and supplies information for recording salary expense, employee liabilities and payments in the general ledger. Thus, it supports timely and accurate employee payments and the accounting of related deductions.

Step 2: Explain the Costing Subsystem The **Costing Subsystem** collects, classifies and processes expenditure to determine the cost of producing goods or providing services. It uses data concerning material consumption, labour and other expenses, classifying them by cost element and assigning them to appropriate cost centres and cost units.

Direct material, direct labour and direct expenses are traced to the relevant product, job or service. Indirect expenses are allocated or apportioned to cost centres and absorbed into the cost of output using suitable bases. The subsystem can then determine total cost and cost per unit and prepare cost sheets or job and process cost reports.

By providing information about the components of cost, it helps management control expenditure, compare actual costs with budgets or standards, investigate differences and make pricing and production decisions. Payroll labour-cost data can also become an input to the costing subsystem, linking the two specialised activities.

Step 3: Conclusion The Payroll Accounting Subsystem calculates and records employee earnings, deductions and net pay. The Costing Subsystem determines and analyses the costs of products or services and provides information for cost control and managerial decisions.

Quick Tip to Solve: For each subsystem, explain its purpose, principal inputs, processing and reports; link payroll to net pay and costing to the cost of output.

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23. Name and explain the function which returns the future value of an investment which has constant payment and interest. [6 marks]

Solution:

Concept:

- The spreadsheet financial function `FV` calculates the future value of an investment using a constant interest rate and equal periodic payments.
- Future value is the accumulated amount at the end of the investment period: the initial investment and subsequent payments grow with compound interest.
- The interest rate and the number of periods must use the same time unit. Money paid out and money received are entered with opposite signs.

Step 1: Identify the function and its syntax The required function is **FV (Future Value)**. Its spreadsheet syntax is

`=FV(rate,nper,pmt,[pv],[type])`.

The arguments in square brackets are optional; the square brackets themselves are not typed into the formula. The function is useful for finding the maturity value of regular savings or another investment with a fixed periodic payment and a fixed periodic interest rate.

Step 2: Explain the compulsory arguments **rate** is the interest rate for one payment period. For example, an annual rate of 12% with monthly payments is entered as `12%/12`.

nper is the total number of payment periods. For monthly payments over five years, it is $5 \times 12 = 60$, rather than 5.

pmt is the equal amount paid in each period. This payment remains constant throughout the investment. For a regular saving paid by the investor, a negative value is used so that the accumulated sum received is returned as a positive value.

Step 3: Explain the optional arguments **pv** is the present value, namely the initial lump-sum investment at the start. If omitted, it is taken as zero. A lump sum paid by the investor has the same negative sign as the periodic deposits. For a lump-sum investment without periodic payments, enter zero for `pmt` and give the initial amount as `pv`.

type specifies when payments are made: `0` means the end of each period and `1` means the beginning.

If omitted, `type` is taken as zero. A payment made at the beginning earns interest for one additional period compared with the corresponding end-of-period payment.

Step 4: Demonstrate the function with equal annual deposits As an illustration, suppose Rs 1,000 is deposited at the end of each year for three years at 10% interest per year, with no initial investment. Enter

$$\texttt{=FV(10\%,3,-1000,0,0)}.$$

Here, `rate`$=10\%$, `nper`$=3$, `pmt`$=-1000$, `pv`$=0$ and `type`$=0$. The first deposit earns interest for two years, the second for one year, and the final deposit for no additional year before the maturity value is measured. Therefore,

$$\begin{aligned}\text{Future value} &= 1,000(1.10)^2 + 1,000(1.10) + 1,000 \\ &= 1,210 + 1,100 + 1,000 = \text{Rs } 3,310.\end{aligned}$$

This checks the spreadsheet result and shows why the timing of the payments matters.

Step 5: Conclusion The function is **FV**, with syntax `=FV(rate,nper,pmt,[pv],[type])`. It returns the accumulated value of an investment at a constant periodic interest rate with constant periodic payments, allowing for an initial investment and the timing of payments.

Quick Tip to Solve: Before using FV, make rate and nper consistent with the payment period, enter deposits as negative cash flows, and choose type 0 or 1 for end or beginning payments.