CBSE Class 12 Accountancy Question Paper 2020 with Solution PDF-Set 67-3-1

Question Paper with Solutions

Conducted by the Central Board of Secondary Education (CBSE)

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

General Instructions

(i) This question paper comprises **two** Parts – **A** and **B**. There are **32** questions in the question paper. **All** questions are compulsory.

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

(iii) **Part B** has two options i.e. (1) Analysis of Financial Statements and (2) Computerized Accounting. You have to attempt only **one** of the given options.

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

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

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

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

(viii) Question nos. **19, 20** and **32** are long answer type–I questions carrying **6** marks each.

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

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

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

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

Part A (60 marks)

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

1. Puneet and Deepak were in partnership sharing profits and losses in the ratio of 2 : 1. They admitted Manya as a new partner. Manya brought ₹ 1,00,000 as her share of goodwill premium, which was entirely credited to Puneet's capital account. On the date of admission, goodwill of the firm was valued at ₹ 3,00,000. Calculate the new profit sharing ratio of Puneet, Deepak and Manya. [1 mark]

Solution:

Concept:

- Goodwill premium compensates the old partners for the profit share sacrificed by them.
- New partner's share equals the premium brought divided by the goodwill of the whole firm; an old partner's new share equals old share less sacrifice.

Step 1: Find Manya's share Manya brings Rs 1,00,000 against total goodwill of Rs 3,00,000. Therefore her share is

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

Step 2: Identify the sacrifice and revised shares The entire premium is credited to Puneet, so Puneet alone sacrifices Manya's share. Deepak makes no sacrifice. Their revised shares are

$$\text{Puneet} = \frac{2}{3} - \frac{1}{3} = \frac{1}{3},$$
$$\text{Deepak} = \frac{1}{3}, \qquad \text{Manya} = \frac{1}{3}.$$

The three shares add to one, confirming that the entire profit has been allocated.

Step 3: Conclusion The new profit sharing ratio of Puneet, Deepak and Manya is $1 : 1 : 1$.

Quick Tip to Solve: First identify who receives the goodwill premium: only that partner sacrifices here, so Deepak's share stays unchanged.

2. Which of the following is a capital receipt? [1 mark]

(A) Subscriptions

(B) Sale of used sports material

(C) Endowment fund

(D) Entrance fees

Correct Answer: (C) Endowment fund

Solution:

Concept:

- A capital receipt adds to a capital or specific fund and is not ordinary recurring income of the organisation.
- An endowment fund is created from money provided to establish a permanent fund; income earned from that fund is distinct from its principal.

Step 1: Identify the permanent fund The amount received for an endowment fund is the principal contributed to a permanent fund. It is therefore capital in nature and is shown as a fund in the balance sheet.

Step 2: Check the other receipts Subscriptions and sale of used sports material are normally revenue receipts. Entrance fees are ordinarily treated as revenue in this context unless a specific instruction requires capitalisation. The endowment fund is the clear capital receipt among the options.

Step 3: Conclusion Endowment fund is a capital receipt. Hence, the correct option is (C).

Quick Tip to Solve: Distinguish the endowment principal from interest on it: the fund is capital, whereas its earnings are income.

3. Subscribed capital is: [1 mark]

(A) That part of authorised capital which is issued to the public for subscription.

(B) That part of issued capital which has been actually subscribed by the public.

(C) That part of subscribed capital which has been called up on the shares.

(D) That part of subscribed capital which has not yet been called up on the shares.

Correct Answer: (B) That part of issued capital which has been actually subscribed by the public.

Solution:

Concept:

- Authorised capital is the maximum share capital permitted; issued capital is the portion offered for subscription.
- Subscribed capital is the part of issued capital actually taken up by subscribers. Calling and payment are later stages.

Step 1: Locate subscribed capital in the sequence A company may offer shares to the public, but the public need not subscribe for the entire issue. Only the portion actually subscribed is called subscribed capital, which is exactly the definition in option (B).

Step 2: Distinguish the other definitions Option (A) describes issued capital, since it refers only to the offer. Option (C) describes called-up capital, the amount demanded on subscribed shares. Option (D) describes uncalled capital, the amount on subscribed shares not yet demanded.

Step 3: Conclusion Subscribed capital is that part of issued capital actually subscribed by the public. Hence, the correct option is (B).

Quick Tip to Solve: Track the order: authorised, issued, subscribed, called-up and paid-up; actual subscription identifies subscribed capital.

4. Ashok and Sudha were partners in a firm sharing profits and losses in the ratio of 3 : 1. They admitted Bani as a new partner. Ashok sacrificed 1/4th of his share and Sudha sacrificed 1/4th of her share is favour of Bani. Bani's share in the profits of the firm will be : [1 mark]

(A) 5/8

(B) 1/8

(C) 1/4

(D) 7/16

Correct Answer: (C) 1/4

Solution:

Concept:

- A sacrifice expressed as a fraction of a partner's own share must be multiplied by that partner's old share.
- The incoming partner's share is the sum of the fractions sacrificed by all old partners.

Step 1: Calculate each sacrifice Ashok's old share is $3/4$, and Sudha's is $1/4$. Each sacrifices one-fourth of that individual share:

$$\text{Ashok's sacrifice} = \frac{1}{4} \times \frac{3}{4} = \frac{3}{16}, \qquad \text{Sudha's sacrifice} = \frac{1}{4} \times \frac{1}{4} = \frac{1}{16}.$$

Step 2: Add the shares received by Bani Bani receives both sacrifices, so

$$\text{Bani's share} = \frac{3}{16} + \frac{1}{16} = \frac{4}{16} = \frac{1}{4}.$$

The other options, $5/8$, $1/8$ and $7/16$, do not equal the combined sacrifice. In particular, one-fourth of each old share is not one-fourth of the whole firm's profit twice.

Step 3: Conclusion Bani's share of profits is $1/4$. Hence, the correct option is (C).

Quick Tip to Solve: When every old partner sacrifices the same fraction of their own share, that fraction itself becomes the incoming partner's total share.

5. Which of the following statements is not true for Receipts and Payments Account? [1 mark]

(A) It is a summary of the Cash Book.

(B) It records receipts and payments of revenue nature only.

(C) The receipts and payments may relate to current, preceding, or succeeding accounting periods.

(D) Depreciation is not shown in it.

Correct Answer: (B) It records receipts and payments of revenue nature only.

Solution:

Concept:

- The Receipts and Payments Account summarises actual cash and bank receipts and payments during the accounting period.
- It includes both capital and revenue cash flows, irrespective of the accounting period to which they relate; non-cash expenses are excluded.

Step 1: Test the restriction to revenue items Option (B) is false because the account records capital receipts and payments as well as revenue receipts and payments. For example, cash paid to buy equipment appears alongside cash paid for wages.

Step 2: Verify the remaining statements Option (A) is true: the account is a summary of the Cash Book. Option (C) is true: actual receipts or payments may relate to a preceding, current or succeeding year. Option (D) is true because depreciation does not involve a cash or bank payment.

Step 3: Conclusion The statement that only revenue receipts and payments are recorded is not true. Hence, the correct option is (B).

Quick Tip to Solve: For this account ask whether cash or bank moved, not whether the item is capital, revenue or related to the current year.

6. That part of the subscribed capital which has not yet been called is known as _____. [1 mark]

Solution:

Concept:

- Subscribed capital is the capital represented by shares taken up by shareholders.
- Called-up capital is the part demanded by the company; the balance not yet demanded is uncalled capital.

Step 1: Identify the amount not demanded The wording says that this part of subscribed capital has not yet been called. The company has therefore not requested shareholders to pay this portion of their subscribed share value.

Step 2: Separate it from unpaid calls The relationship is

$$\text{Uncalled capital} = \text{Subscribed capital} - \text{Called-up capital}.$$

Calls in arrears are different: they have already been demanded but remain unpaid. Reserve capital is a specially designated portion callable only on winding up; the question gives no such restriction.

Step 3: Conclusion The blank is **uncalled capital**.

Quick Tip to Solve: Use the timing of the demand: not demanded means uncalled capital; demanded but unpaid means calls in arrears.

7. Rajat, Mishi and Tanvi were partners in a firm sharing profits and losses in the ratio of 5 : 3 : 2. Tanvi died on 31st October, 2019. According to the partnership agreement, her share of profits from the closure of last accounting year till the date of her death was to be calculated on the basis of aggregate profits of two completed years before death. Profits of the firm for the years ending 31st March, 2018 and 31st March, 2019 were ₹ 57,000 and ₹ 63,000 respectively. The firm closes its books on 31st March every year. Tanvi's share of profits till the date of her death will be: [1 mark]

(A) ₹ 24,000

(B) ₹ 7,000

(C) ₹ 14,000

(D) ₹ 12,000

Correct Answer: (C) ₹ 14,000

Solution:

Concept:

- A deceased partner's profit up to death is calculated using the basis specified in the partnership agreement.
- For a time-based allocation, multiply the stipulated annual profit basis by the fraction of the year and the deceased partner's profit share.

Step 1: Find the stipulated profit basis and time The question specifies the **aggregate**, rather than the average, of the two completed years' profits. Hence the stipulated basis is

$$57,000 + 63,000 = \text{Rs } 1,20,000.$$

From 1st April to 31st October, 2019, the elapsed period is seven months.

Step 2: Apply Tanvi's share and compare options Tanvi's share in the ratio $5 : 3 : 2$ is $2/10$. Accordingly,

$$\text{Profit share} = 1,20,000 \times \frac{7}{12} \times \frac{2}{10} = \text{Rs } 14,000.$$

Rs 7,000 would result from averaging the profits, contrary to the stated aggregate basis. Rs 24,000 omits the seven-month adjustment, while Rs 12,000 is an annual share based on average profit.

Step 3: Conclusion Tanvi's share of profit till death is Rs 14,000. Hence, the correct option is (C).

Quick Tip to Solve: Underline aggregate before calculating: use Rs 1,20,000 as the stipulated basis and then apply seven months and Tanvi's share.

8. Excess value of net assets over purchase consideration at the time of purchase of business is:

[1 mark]

(A) Credited to the Capital Reserve.

(B) Debited to the Goodwill Account.

(C) Credited to the General Reserve Account.

(D) Credited to the Vendor's Account.

Correct Answer: (A) Credited to the Capital Reserve.

Solution:

Concept:

- Net assets acquired equal agreed assets taken over less agreed liabilities assumed.
- When net assets exceed purchase consideration, the difference is a capital gain credited to Capital Reserve; the reverse difference is goodwill.

Step 1: Compare the acquired value and price The purchaser obtains net assets worth more than the consideration payable. The difference is

$$\text{Capital reserve} = \text{Net assets acquired} - \text{Purchase consideration}.$$

This surplus arises on acquisition, so it is capital in nature.

Step 2: Rule out the other treatments Goodwill is debited only when purchase consideration exceeds net assets, which is the reverse situation. General Reserve represents an appropriation of profits, not this acquisition surplus. The Vendor's Account is credited with the agreed purchase consideration payable, not with the excess net assets.

Step 3: Conclusion The excess is credited to Capital Reserve. Hence, the correct option is (A).

Quick Tip to Solve: Compare the purchase price with net assets: a lower price gives capital reserve; a higher price gives goodwill.

9. First call amount received in advance from the shareholders before it is actually called up by the directors is:

[1 mark]

(A) Debited to calls-in-advance account.

(B) Credited to share allotment account.

(C) Debited to first call account.

(D) Credited to calls-in-advance account.

Correct Answer: (D) Credited to calls-in-advance account.

Solution:

Concept:

- Calls in advance arise when shareholders pay an amount before the company makes the corresponding call.
- The advance is a liability until the call becomes due, so it is credited to Calls-in-Advance Account

on receipt.

Step 1: Identify the timing of receipt The first call has not yet been made by the directors. Therefore the amount received cannot be treated as a currently due first-call receipt. It is money received in advance from shareholders.

Step 2: Determine the correct account and side Receipt increases the bank balance and also creates a liability for the advance. The bank account is debited and Calls-in-Advance Account is credited. Option (A) reverses the liability entry; option (B) wrongly treats the amount as allotment money; option (C) uses the first-call account before the call is due.

Step 3: Conclusion The amount is credited to Calls-in-Advance Account. Hence, the correct option is (D).

Quick Tip to Solve: Before a call is made, credit the advance liability; transfer it against the relevant call only when that call becomes due.

---

10. Premier Ltd. issued 2,000, 9% Debentures of ₹ 100 each at par, redeemable after five years at a premium of 10%. The minimum amount invested in Debenture Redemption Investments will be: [1 mark]

(A) ₹ 30,000

(B) ₹ 33,000

(C) ₹ 50,000

(D) ₹ 2,00,000

Correct Answer: (A) ₹ 30,000

Solution:

Concept:

- The minimum Debenture Redemption Investment is 15% of the nominal value of debentures to be redeemed.
- The redemption premium is a separate obligation; the coupon rate determines interest and does not determine this investment.

Step 1: Calculate the nominal amount The company issued 2,000 debentures with a face value of Rs 100 each. Thus the nominal amount falling due for redemption is

$$2,000 \times 100 = \text{Rs } 2,00,000.$$

Step 2: Apply the investment percentage The required minimum investment is

$$\frac{15}{100} \times 2,00,000 = \text{Rs } 30,000.$$

Option (B), Rs 33,000, incorrectly includes the 10% redemption premium in the base. Option (C), Rs 50,000, uses 25% instead of 15%. Option (D) is the entire face value, not the prescribed minimum investment.

Step 3: Conclusion The minimum Debenture Redemption Investment is Rs 30,000. Hence, the correct option is (A).

Quick Tip to Solve: For this DRI calculation, take 15% of face value and keep redemption premium and annual interest out of the base.

11. Fill in the blanks for the transaction 'Interest on drawings' ₹ 4,000.

Journal

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
	_____ Dr.		**4,000**	
	To _____			**4,000**
	(Being Interest on drawings charged)			

[1 mark]

Solution:

Concept:

- Interest on drawings is charged to the partner for withdrawing funds from the firm.
- The charge reduces the partner's capital or current balance and is credited to Interest on Drawings Account.

Step 1: Identify the debit and credit Debit Partners' Capital Account by Rs 4,000 because the charge reduces the amount owed to the partners. Credit Interest on Drawings Account by the same amount because it is income of the firm. Under the fixed capital method the debit is instead to Partners' Current Account.

Step 2: Complete the journal entry **Journal**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Partners' Capital A/c Dr.		4,000	
	To Interest on Drawings A/c			4,000
	(Being interest on drawings charged)			

Step 3: Conclusion The blanks are Partners' Capital A/c (or Partners' Current A/c under fixed capitals) and Interest on Drawings A/c, respectively.

Quick Tip to Solve: Interest on drawings is a charge to the partner: debit the partner and credit Interest on Drawings, not Drawings Account.

12. On 1st April, 2018, Maitreyi Club had a Prize Fund of ₹ 8,00,000. It incurred expenses on prizes amounting to ₹ 8,70,000 during the year. The balance of Prize Fund in the Balance Sheet as at 31st March, 2019 will be: [1 mark]

(A) ₹ 70,000

(B) ₹ 8,00,000

(C) (₹ 70,000)

(D) Zero

Correct Answer: (D) Zero

Solution:

Concept:

- Expenses for a specific purpose are first charged against the fund created for that purpose.
- If the expenditure exceeds the available specific fund, the excess is charged to the Income and Expenditure Account; the fund is exhausted.

Step 1: Use the prize fund The fund available is Rs 8,00,000, whereas prize expenses are Rs 8,70,000. The whole Rs 8,00,000 is used for prizes, leaving no unspent fund.

Step 2: Treat the excess expenditure The excess is

$$8,70,000 - 8,00,000 = \text{Rs } 70,000.$$

This is an expense in the Income and Expenditure Account. Option (A) mistakes this excess for a fund balance; option (B) ignores utilisation of the fund; option (C) incorrectly presents a negative specific fund instead of charging the excess as an expense.

Step 3: Conclusion The Prize Fund balance in the Balance Sheet on 31st March, 2019 is zero. Hence, the correct option is (D).

Quick Tip to Solve: Use a specific fund only up to its available balance; transfer any excess related expense to Income and Expenditure Account.

13. Vashya Ltd. issued 30,000, 10% Debentures of ₹ 100 each as collateral security for a loan of ₹ 25,00,000 taken from Bank of India. Fill in the blanks for the journal entry for issue of debentures as a collateral security :

Vashya Ltd.

Journal

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
	..... A/c Dr.		.....	
	To ..... A/c			.....
	(Being ₹ 30,00,000; 10% debentures issued as collateral security for a loan of ₹ 25,00,000)			

[1 mark]

Solution:

Concept:

- Collateral security is additional security for a loan. Its issue does not produce a second cash receipt.
- When a journal entry is passed for collateral debentures, debit Debenture Suspense Account and credit the relevant Debentures Account at face value.

Step 1: Calculate the amount of collateral debentures The face value of the debentures issued is

$$30,000 \times 100 = \text{Rs } 30,00,000.$$

The collateral entry records this amount, not the Rs 25,00,000 loan. The 10% rate is part of the debentures' description; it does not alter their face value.

Step 2: Complete the collateral issue entry **Journal of Vashya Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Debenture Suspense A/c Dr. To 10% Debentures A/c (Being Rs 30,00,000, 10% debentures issued as collateral security for a loan of Rs 25,00,000 from Bank of India)		30,00,000	30,00,000

Step 3: Conclusion Debenture Suspense A/c is debited and 10% Debentures A/c is credited with Rs 30,00,000 each.

Quick Tip to Solve: For collateral debentures, use number of debentures times face value; record the bank loan separately from the collateral entry.

14. From the following particulars relating to Shyamji Charitable Society, prepare a Receipts and Payments Account for the year ending 31st March, 2019:

Particulars	Amount (₹)
Cash in hand as on 1.4.2018	16,000
Cash at bank as on 1.4.2018	28,000
Subscriptions (including ₹ 11,000 for 2017-18)	60,000
Donations for building	2,90,000
Miscellaneous expenses	98,000
Locker rent	32,000
Entrance fees	41,000

[3 marks]

Solution:

Concept:

- A Receipts and Payments Account summarises actual cash and bank receipts and payments during the year, irrespective of the period to which they relate.
- Both capital and revenue receipts are included. Opening cash and bank balances appear on the debit side; the closing combined balance is the balancing figure.

Step 1: Classify the actual receipts and payment Opening cash and bank together are Rs 44,000. Record the entire Rs 60,000 subscriptions received, including Rs 11,000 for 2017–18: this account follows the cash basis. Donations for building, locker rent and entrance fees are also receipts. The building donation is included even though it is a capital receipt. Miscellaneous expenses of Rs 98,000 are the only payment given.

Step 2: Find the balancing figure Total funds available are

$$16,000 + 28,000 + 60,000 + 2,90,000 + 32,000 + 41,000 = \text{Rs } 4,67,000.$$

Deduct the actual payment:

$$4,67,000 - 98,000 = \text{Rs } 3,69,000.$$

The particulars do not give the closing split between cash and bank. Accordingly, show one combined cash and bank balance rather than assigning an unsupported amount to either.

Step 3: Prepare the Receipts and Payments Account **Shyamji Charitable Society**
Receipts and Payments Account for the year ended 31st March, 2019

Dr. Receipts	Amount (Rs)	Payments Cr.	Amount (Rs)
To Balance b/d:		By Miscellaneous expenses	98,000
Cash in hand	16,000	By Balance c/d:	
Cash at bank	28,000	Cash and bank	3,69,000
To Subscriptions	60,000		
To Donations for building	2,90,000		
To Locker rent	32,000		
To Entrance fees	41,000		
Total	4,67,000	Total	4,67,000

Step 4: Conclusion The Receipts and Payments Account totals Rs 4,67,000 on each side and shows a

closing combined cash and bank balance of Rs 3,69,000.

Quick Tip to Solve: In Receipts and Payments, include subscriptions from earlier years and capital receipts when cash is received in the current year.

OR

14. From the given information of a hospital, calculate the amount of medicines consumed during the year 2018-19:

Particulars	Amount (₹)
Payment for purchase of medicines	5,10,000
Creditors for medicines purchased on 1.4.2018	34,000
Creditors for medicines purchased on 31.3.2019	29,000
Stock of Medicines on 1.4.2018	86,000
Stock of Medicines on 31.3.2019	39,000
Advance to suppliers of medicines on 1.4.2018	26,000
Advance to suppliers of medicines on 31.3.2019	32,000

[3 marks]

Solution:

Concept:

- Medicines consumed equals opening stock plus purchases for the year minus closing stock.
- Convert cash payments into purchases by adding closing creditors and subtracting opening creditors; add opening advances and subtract closing advances.

Step 1: Adjust payments for creditors The payment of Rs 5,10,000 includes settlement of opening creditors of Rs 34,000, which relates to earlier purchases. Remove this amount. Closing creditors of Rs 29,000 represent current purchases not yet paid for, so add them. The amount after creditor adjustments is

$$5,10,000 - 34,000 + 29,000 = \text{Rs } 5,05,000.$$

Step 2: Adjust for advances to suppliers Opening advances of Rs 26,000 represent earlier payments applied to current purchases, so add them. Closing advances of Rs 32,000 represent payment for medicines not yet received, so deduct them. Therefore, purchases for 2018–19 are

$$5,05,000 + 26,000 - 32,000 = \text{Rs } 4,99,000.$$

This adjustment prevents treating an advance payment as medicine purchased before the supply is received.

Step 3: Calculate medicines consumed Add opening stock, which was available for use during the

year, and remove closing stock, which remains unused at year end:

$$\begin{aligned}\text{Medicines consumed} &= \text{Opening stock} + \text{Purchases} - \text{Closing stock}\\ &= 86,000 + 4,99,000 - 39,000\\ &= \text{Rs } 5,46,000.\end{aligned}$$

As a check, stock declined by Rs 47,000, so consumption exceeds current purchases by exactly Rs 47,000. Thus consumption is not equal to the cash paid: creditors, advances and stocks each explain a different timing difference.

Step 4: Conclusion The amount of medicines consumed during 2018–19 is Rs 5,46,000.

Quick Tip to Solve: First convert cash payments into purchases using creditors and advances; only then add opening stock and deduct closing stock.

15. Veena and Somesh were partners in a firm with capitals of ₹ 1,00,000 and ₹ 80,000 respectively. They admitted Nisha on 1st April, 2019 as a new partner for 1/4th share in the future profits of the firm. Nisha brought ₹ 90,000 as her capital. Nisha acquired her share as 1/12th from Veena and the remaining from Somesh. Calculate the value of goodwill of the firm and pass the necessary journal entries on Nisha's admission. [4 marks]

Solution:

Concept:

- Hidden goodwill is the excess of the total capital implied by the incoming partner's contribution over the actual combined capitals after admission.
- The incoming partner compensates the old partners for goodwill in their sacrificing ratio. Where no separate goodwill premium is brought, debit the incoming partner's capital account and credit the sacrificing partners' capital accounts.

Step 1: Calculate the implied total capital and hidden goodwill Nisha brings Rs 90,000 for a $\frac{1}{4}$ share. Thus her capital implies the following value of the firm:

$$\begin{aligned}\text{Implied total capital} &= 90,000 \times 4 = \text{Rs } 3,60,000,\\ \text{Actual combined capitals} &= 1,00,000 + 80,000 + 90,000\\ &= \text{Rs } 2,70,000,\\ \text{Hidden goodwill} &= 3,60,000 - 2,70,000 = \text{Rs } 90,000.\end{aligned}$$

Include Nisha's contribution when finding the actual combined capitals; comparing only the old partners' capitals with the implied capital would overstate goodwill.

Step 2: Determine the sacrificing ratio and compensation Veena sacrifices $\frac{1}{12}$. Somesh supplies the rest of Nisha's share:

$$\text{Somesh's sacrifice} = \frac{1}{4} - \frac{1}{12} = \frac{1}{6}.$$

Hence the sacrificing ratio is $\frac{1}{12} : \frac{1}{6} = 1 : 2$. Nisha's share of goodwill is $90,000 \times \frac{1}{4} = \text{Rs } 22,500$. Veena

receives $22,500 \times \frac{1}{3} = \text{Rs } 7,500$, and Somesh receives $22,500 \times \frac{2}{3} = \text{Rs } 15,000$. The question specifies only capital brought in by Nisha, so her goodwill obligation is adjusted through her capital account.

Step 3: Record the admission entries Journal of the Firm (1st April, 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	Bank A/c Dr. To Nisha's Capital A/c (Being capital brought in by Nisha on admission)		90,000	 90,000
1-4-2019	Nisha's Capital A/c Dr. To Veena's Capital A/c To Somesh's Capital A/c (Being Nisha's share of goodwill adjusted in the sacrificing ratio of 1:2)		22,500	 7,500 15,000

Each entry has equal debits and credits. No goodwill asset is raised in the books by this adjustment.

Step 4: Conclusion Goodwill of the firm is Rs 90,000. Nisha's goodwill obligation is Rs 22,500, credited to Veena and Somesh as Rs 7,500 and Rs 15,000 respectively; the sacrificing ratio is 1:2.

Quick Tip to Solve: Multiply Nisha's capital by 4, subtract all three capitals, and allocate her one-fourth share of the difference in the sacrificing ratio 1:2.

OR

15. Asha, Rina and Chahat were partners in a firm sharing profits and losses in the ratio of 2:2:1. Their Balance Sheet as at 31st March, 2019 was as follows:

Balance Sheet of Asha, Rina and Chahat as at 31st March, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	12,00,000	Plant and Machinery	14,80,000
General Reserve	2,00,000	Stock	2,20,000
Capitals:		Sundry Debtors 2,60,000	
Asha 3,00,000		Less Provision for	
Rina 2,00,000		doubtful debts 20,000	2,40,000
Chahat 1,00,000	6,00,000	Bank	60,000
	20,00,000		20,00,000

Asha, Rina and Chahat decided to share future profits equally with effect from 1st April, 2019. For this, it was agreed that:

(i) Goodwill of the firm be valued at Rs 1,50,000.

(ii) Bad debts amounted to Rs 40,000. A provision for doubtful debts was to be made @ 5% on debtors.

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

Solution:

Concept:

- On a change in the profit-sharing ratio, accumulated reserves and revaluation profit or loss belong to partners in their old ratio, here 2:2:1.
- A gaining partner compensates sacrificing partners for goodwill. Provision for doubtful debts is calculated on debtors remaining after writing off bad debts.

Step 1: Calculate the goodwill adjustment and distribute the reserve The new share of each partner is $\frac{1}{3}$. Asha and Rina each sacrifice $\frac{2}{5} - \frac{1}{3} = \frac{1}{15}$, whereas Chahat gains $\frac{1}{3} - \frac{1}{5} = \frac{2}{15}$. Thus Chahat is debited with $1,50,000 \times \frac{2}{15} =$ Rs $20,000$; Asha and Rina are each credited with Rs 10,000. The existing general reserve of Rs 2,00,000 is distributed as Rs 80,000, Rs 80,000 and Rs 40,000 in the old ratio.

Journal of the Firm (1st April, 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	General Reserve A/c Dr.		2,00,000	
	To Asha's Capital A/c			80,000
	To Rina's Capital A/c			80,000
	To Chahat's Capital A/c			40,000
	(Being general reserve distributed in the old ratio of 2:2:1)			
1-4-2019	Chahat's Capital A/c Dr.		20,000	
	To Asha's Capital A/c			10,000
	To Rina's Capital A/c			10,000
	(Being goodwill adjusted for Chahat's gain and Asha's and Rina's sacrifices)			

Step 2: Determine the reduction in the value of debtors Gross debtors are Rs 2,60,000 and the existing provision is Rs 20,000. After writing off Rs 40,000, debtors are $2,60,000 - 40,000 =$ Rs $2,20,000$. The required new provision is $2,20,000 \times 5\% =$ Rs $11,000$.

$$\begin{aligned}\text{Revaluation loss} &= 40,000 + 11,000 - 20,000 \\ &= \text{Rs } 31,000.\end{aligned}$$

The old net debtors of Rs 2,40,000 become $2,20,000 - 11,000 =$ Rs $2,09,000$, independently confirming the Rs 31,000 reduction. Asha and Rina bear $31,000 \times \frac{2}{5} =$ Rs $12,400$ each; Chahat bears $31,000 \times \frac{1}{5} =$ Rs $6,200$.

Step 3: Record bad debts, the new provision and the revaluation loss The old provision first absorbs Rs 20,000 of the bad debts; the remaining Rs 20,000 is debited to Revaluation Account. A fresh Rs 11,000 provision is then created.

Journal of the Firm (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1-4-2019	Provision for Doubtful Debts A/c Dr. Revaluation A/c Dr. To Sundry Debtors A/c (Being bad debts written off against the existing provision and revaluation)		20,000 20,000	 40,000
1-4-2019	Revaluation A/c Dr. To Provision for Doubtful Debts A/c (Being provision created at 5% on remaining debtors of Rs 2,20,000)		11,000	 11,000
1-4-2019	Asha's Capital A/c Dr. Rina's Capital A/c Dr. Chahat's Capital A/c Dr. To Revaluation A/c (Being revaluation loss transferred in the old profit-sharing ratio of 2:2:1)		12,400 12,400 6,200	 31,000

Step 4: Conclusion Chahat compensates Asha and Rina by Rs 10,000 each for goodwill. The general reserve is distributed as Rs 80,000, Rs 80,000 and Rs 40,000. The revaluation loss of Rs 31,000 is borne as Rs 12,400, Rs 12,400 and Rs 6,200 respectively; the closing provision is Rs 11,000.

Quick Tip to Solve: Deduct the Rs 40,000 bad debts before applying 5%, and deduct the old Rs 20,000 provision when calculating the revaluation loss.

16. Neena and Sara were partners in a firm with fixed capitals of ₹ 5,00,000 and ₹ 4,00,000 respectively. It was discovered that interest on capital @ 6% p.a. was credited to the partners for the two years ending 31st March, 2018 and 31st March, 2019 whereas there was no such provision in the partnership deed. Their profit sharing ratio during the last two years was:

2017-18: 4 : 5

2018-19: 5 : 1

Showing your workings clearly, pass the necessary adjustment entry to rectify the error. [4 marks]

Solution:

Concept:

- Interest on partners' capitals is an appropriation of profit and is allowed only when the partnership deed provides for it. The interest credited here must therefore be reversed.
- Reversing interest increases the profit available for distribution. This increase is credited in the profit-sharing ratio applicable to each year, not in a single ratio for both years.
- Under the fixed-capital method, interest and profit adjustments are made through partners' current accounts; the fixed capital balances remain unchanged.

Step 1: Calculate the interest wrongly credited **Working Notes** The fixed capitals are unchanged in

both years. Consequently, the erroneous annual interest credits were:

$$\text{Neena} = \text{Rs } 5,00,000 \times \frac{6}{100} = \text{Rs } 30,000,$$
$$\text{Sara} = \text{Rs } 4,00,000 \times \frac{6}{100} = \text{Rs } 24,000.$$

Total interest of Rs 54,000 per year must be withdrawn and redistributed as profit. Thus each partner is debited with the interest wrongly received and credited with her correct share of the additional profit.

Step 2: Compute the correction separately for each year For 2017–18, the profit-sharing ratio is $4:5$. Neena's additional profit share is $54,000 \times 4/9 = \text{Rs } 24,000$, while Sara's is $54,000 \times 5/9 = \text{Rs } 30,000$. For 2018–19, the ratio is $5:1$. Their additional profit shares are $54,000 \times 5/6 = \text{Rs } 45,000$ and $54,000 \times 1/6 = \text{Rs } 9,000$, respectively.

Particulars	Neena (Rs)	Sara (Rs)
2017–18: interest withdrawn (Dr.)	30,000	24,000
2017–18: profit restored (Cr.)	24,000	30,000
Net correction for 2017–18	6,000 Dr.	6,000 Cr.
2018–19: interest withdrawn (Dr.)	30,000	24,000
2018–19: profit restored (Cr.)	45,000	9,000
Net correction for 2018–19	15,000 Cr.	15,000 Dr.
Combined net adjustment	9,000 Cr.	9,000 Dr.

The combined debit equals the combined credit, so one transfer between the current accounts rectifies both years without reopening their profit appropriation accounts.

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

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Sara's Current A/c Dr.		9,000	
	To Neena's Current A/c			9,000
	(Being the net correction of interest on capital wrongly allowed for 2017–18 and 2018–19, after restoring profit shares in the respective ratios)			

Step 4: Conclusion Debit Sara's Current Account and credit Neena's Current Account by **Rs 9,000** each. The fixed capitals remain Rs 5,00,000 and Rs 4,00,000 respectively.

Quick Tip to Solve: Prepare a separate adjustment for each year's profit-sharing ratio, then combine the net balances; use current accounts when capitals are fixed.

17. Aditi, Kartik and Tina were partners in a firm sharing profits and losses in the ratio of 5 : 3 : 2. On 31st March, 2019, their Balance Sheet was as follows:

Balance Sheet as at 31st March, 2019

Liabilities		Amount (Rs)	Assets	Amount (Rs)
Creditors		96,000	Furniture	4,30,000
Capitals:			Stock	1,50,000
Aditi	3,00,000		Debtors	83,000
Kartik	2,00,000		Cash	33,000
Tina	1,00,000	6,00,000		
Total		6,96,000	Total	6,96,000

Aditi died on 1st November, 2019. It was agreed that:

(i) Goodwill of the firm be valued at ₹ 1,00,000.

(ii) Profit for the year 2019-20 be taken as having accrued at the same rate as the previous year 2018-19. Profit for the year 2018-19 was ₹ 96,000.

(iii) Half the amount was paid to Aditi's executors immediately and the remaining half will be paid in two equal annual instalments with interest @ 6% p.a.

Pass the necessary journal entries to record the above transactions in the books of the firm on the date of her death. [4 marks]

Solution:

Concept:

- On a partner's death, her capital account is credited with her share of goodwill and the estimated profit earned up to the date of death. The final amount is transferred to her executor's account.
- The continuing partners compensate the deceased partner for goodwill in their gaining ratio. When no new ratio is specified, Kartik and Tina continue in their relative old ratio of $3:2$, which is also their gaining ratio.
- Estimated profit for the period equals the previous year's profit multiplied by the fraction of the year elapsed. The deceased partner receives her old profit share; future loan interest is recognised only when it accrues.

Step 1: Determine goodwill and profit due to Aditi **Working Notes** Aditi's share of goodwill is Rs $1,00,000 \times 5/10 = \text{Rs } 50,000$. Kartik and Tina bear this in the ratio $3:2$:

$$\text{Kartik's debit} = 50,000 \times 3/5 = \text{Rs } 30,000,$$
$$\text{Tina's debit} = 50,000 \times 2/5 = \text{Rs } 20,000.$$

Goodwill is adjusted through capital accounts without raising a goodwill asset. From 1st April to 1st November, seven months have elapsed. Therefore:

$$\text{Firm's estimated profit} = 96,000 \times 7/12 = \text{Rs } 56,000,$$
$$\text{Aditi's share} = 56,000 \times 5/10 = \text{Rs } 28,000.$$

Since the year's accounts have not yet been closed, Aditi's profit share is debited to Profit and Loss

Suspense Account.

Step 2: Calculate the executor's entitlement and settlement No revaluation, drawings or other adjustments are specified. The amount payable is therefore:

$$\begin{aligned} \text{Amount due} &= 3,00,000 + 50,000 + 28,000 \\ &= \text{Rs } 3,78,000, \\ \text{Immediate payment} &= 3,78,000/2 = \text{Rs } 1,89,000, \\ \text{Loan balance} &= \text{Rs } 1,89,000. \end{aligned}$$

The unpaid principal is repayable in two annual instalments of Rs 94,500 each, with interest at 6% p.a. on the outstanding balance. No interest has accrued on this loan at its creation on 1st November, 2019; hence there is no interest entry on the date of death.

Step 3: Record goodwill and accrued profit **Journal of the Firm**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Nov. 2019	Kartik's Capital A/c Dr.		30,000	
	Tina's Capital A/c Dr.		20,000	
	To Aditi's Capital A/c			50,000
	(Being Aditi's share of goodwill adjusted through continuing partners' capitals in the gaining ratio of 3:2)			
1 Nov. 2019	Profit and Loss Suspense A/c Dr.		28,000	
	To Aditi's Capital A/c			28,000
	(Being Aditi's estimated profit share for seven months to the date of death credited to her capital)			

Step 4: Transfer the amount due and record its settlement **Journal of the Firm (continued)**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1 Nov. 2019	Aditi's Capital A/c Dr.		3,78,000	
	To Aditi's Executor's A/c			3,78,000
	(Being the total amount due to Aditi transferred to her executor's account)			
1 Nov. 2019	Aditi's Executor's A/c Dr.		3,78,000	
	To Bank A/c			1,89,000
	To Aditi's Executor's Loan A/c			1,89,000
	(Being half the amount paid immediately and the unpaid half transferred to a loan repayable in two equal annual instalments with interest at 6% p.a.)			

Step 5: Conclusion Aditi's executor is entitled to **Rs 3,78,000**, including goodwill of Rs 50,000 and profit of Rs 28,000. Rs 1,89,000 is paid immediately and Rs 1,89,000 remains as the executor's loan at 6% p.a.

Quick Tip to Solve: Count seven months from April to October, apply Aditi's old share of 5/10, and add goodwill before halving the executor's total entitlement.

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

Receipts and Payments Account of Friends Club for the year ending 31st March, 2019

Receipts	Amount (₹)	Payments	Amount (₹)
To Balance b/d	50,400	By Furniture (Purchased on 1.12.2018)	1,20,000
To Donations	44,000	By Salaries	1,00,000
To Sale of old sports material	2,000	By Secretary's honorarium	4,000
To Subscriptions : 2017-18 1,600 2018-19 60,000 2019-20 5,000	66,600	By Books	44,000
To Entrance fees	1,20,000	By Balance c/d	15,000
	2,83,000		2,83,000

Additional Information :

(i) On 1st April, 2018 the Club had the following balances of assets and liabilities :

Furniture ₹ 1,00,000; Subscriptions in arrears ₹ 2,000 and Outstanding Salary ₹ 6,000.

(ii) The Club had 75 members each paying an annual subscription of ₹ 1,000.

(iii) Charge depreciation on Furniture @ 10% p.a. [4 marks]

Solution:

Concept:

- The Income and Expenditure Account records revenue income and revenue expenses of the current year on the accrual basis, irrespective of when cash is received or paid.
- Capital expenditure on furniture and books creates assets and is excluded. Depreciation of furniture is a revenue expense; opening and closing cash balances are excluded.
- General donations and entrance fees are treated as revenue income when no specific purpose or capitalisation instruction is given. Sale proceeds of old sports material are also revenue income.

Step 1: Calculate current-year subscriptions and salary **Working Notes**

All 75 members owe the stated annual subscription of Rs 1,000. Therefore current-year subscription income is

$$75 \times 1,000 = \text{Rs } 75,000.$$

Of this, Rs 60,000 has been received and Rs 15,000 remains outstanding for 2018–19. The Rs 1,600 collected for 2017–18 reduces opening arrears and is not current-year income; the uncollected Rs 400 of those opening arrears remains an asset. The Rs 5,000 received for 2019–20 is advance subscription and a liability, not current-year income.

$$\text{Salary expense} = 1,00,000 - 6,000 = \text{Rs } 94,000.$$

The opening outstanding salary relates to the previous year and is deducted from cash salaries paid.

No closing outstanding salary is given.

Step 2: Compute depreciation for the actual period of use Opening furniture is depreciated for a full year. Furniture purchased on 1st December, 2018 is depreciated for four months, December to March:

$$\text{Opening furniture depreciation} = 1,00,000 \times 10\% = 10,000,$$
$$\text{New furniture depreciation} = 1,20,000 \times 10\% \times \frac{4}{12} = 4,000,$$
$$\text{Total depreciation} = \text{Rs } 14,000.$$

The furniture purchase of Rs 1,20,000 and books purchase of Rs 44,000 are capital expenditure. Only furniture depreciation is charged; no depreciation rate for books is specified.

Step 3: Prepare the Income and Expenditure Account **Friends Club**

Income and Expenditure Account for the year ended 31st March, 2019

Dr. Expenditure	Rs	Income Cr.	Rs
To Salaries	94,000	By Donations	44,000
To Secretary's honorarium	4,000	By Sale of old sports material	2,000
To Depreciation on furniture	14,000	By Subscriptions	75,000
To Surplus (transferred to Capital Fund)	1,29,000	By Entrance fees	1,20,000
Total	**2,41,000**	**Total**	**2,41,000**

Revenue income totals Rs 2,41,000 and revenue expenses total Rs 1,12,000. The difference is transferred to the Capital Fund; it is not a closing cash balance.

Step 4: Conclusion Friends Club earns a surplus of $2,41,000 - 1,12,000 =$ **Rs 1,29,000** for the year ended 31st March, 2019.

Quick Tip to Solve: Use members multiplied by annual fee to obtain subscriptions, deduct opening salary arrears from cash paid, and depreciate the December furniture for only four months.

19. Vasudha and Dewan were partners in a firm sharing profits and losses in the ratio of 2 : 3. The firm was dissolved on 31st March, 2019. After transfer of assets (other than cash) and external liabilities to Realization Account, the following transactions took place:

(i) Investments of the face value of ₹ 60,000 were sold in the open market for ₹ 63,000 for which a commission of ₹ 700 was paid to the broker.

(ii) Creditors worth ₹ 65,000 were settled by handing over the entire stock to them along with a payment of ₹ 23,000 by cheque.

(iii) There was old furniture which had been completely written off from the books of the firm. It was taken over by Vasudha at ₹ 2,000.

(iv) Dewan undertook to pay Ms. Dewan's loan of ₹ 45,000.

(v) Dewan was appointed to look after the process of dissolution for which he was allowed a remuneration of ₹ 7,000. He agreed to bear the dissolution expenses. Actual expenses incurred by Dewan were ₹ 11,000, which were paid by the firm.

(vi) Loss on realisation amounted to ₹ 9,000.

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

Solution:

Concept:

- Once assets and external liabilities have been transferred to Realisation Account, sale proceeds credit Realisation and cash payments for settlement or firm-borne dissolution costs debit Realisation.
- An asset taken over by a partner debits that partner's Capital Account and credits Realisation. An external liability assumed by a partner debits Realisation and credits that partner's Capital Account.
- A partner who agrees to bear expenses is personally responsible for them. Expenses paid by the firm on that partner's behalf debit the partner's Capital Account. Realisation loss is debited to partners in their profit-sharing ratio.

Step 1: Record sale of investments and broker's commission The sale is recorded at the actual proceeds of Rs 63,000, not the face value of Rs 60,000. Commission of Rs 700 is a separate realisation expense. The net bank receipt is consequently Rs 62,300.

Journal of Vasudha and Dewan (31st March, 2019)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Bank A/c Dr. To Realisation A/c (Being investments sold in the open market)		63,000	63,000
	Realisation A/c Dr. To Bank A/c (Being commission paid to the broker)		700	700

Step 2: Record settlement of creditors Stock and creditors have already been transferred to Realisation. No separate entry is made for handing over the stock to creditors. Only the additional payment of Rs 23,000 by cheque is recorded; the creditors' original Rs 65,000 balance is not debited again.

Journal (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Realisation A/c Dr. To Bank A/c (Being creditors settled by stock and an additional cheque payment)		23,000	23,000

Step 3: Record unrecorded furniture taken over by Vasudha The furniture has no book value because it was completely written off. Nevertheless its agreed takeover value of Rs 2,000 is a realisation receipt in kind: it reduces Vasudha's capital entitlement and credits Realisation. No Bank Account is involved.

Journal (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Vasudha's Capital A/c Dr. To Realisation A/c (Being unrecorded furniture taken over by Vasudha)		2,000	2,000

Step 4: Record Ms. Dewan's loan assumed by Dewan Ms. Dewan's loan is an external liability, already transferred to Realisation. Dewan assumes responsibility for paying it, so his Capital Account is credited by Rs 45,000 and Realisation is debited. The firm makes no bank payment for this assumption of liability.

Journal (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Realisation A/c Dr. To Dewan's Capital A/c (Being Ms. Dewan's loan undertaken by Dewan)		45,000	 45,000

Step 5: Separate remuneration from expenses borne by Dewan The agreed remuneration of Rs 7,000 is charged to Realisation and credited to Dewan. Since he agreed to bear the expenses, the Rs 11,000 paid by the firm is recoverable from his capital; it must not be charged to Realisation a second time.

Journal (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Realisation A/c Dr. To Dewan's Capital A/c (Being remuneration allowed to Dewan for dissolution work)		7,000	 7,000
	Dewan's Capital A/c Dr. To Bank A/c (Being expenses borne by Dewan paid by the firm on his behalf)		11,000	 11,000

Step 6: Transfer realisation loss in the profit-sharing ratio **Working Note**

The given loss of Rs 9,000 is shared by Vasudha and Dewan in the ratio $2:3$:

$$\text{Vasudha} = 9,000 \times \frac{2}{5} = \text{Rs } 3,600, \qquad \text{Dewan} = 9,000 \times \frac{3}{5} = \text{Rs } 5,400.$$

Journal (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
31.3.2019	Vasudha's Capital A/c Dr. Dewan's Capital A/c Dr. To Realisation A/c (Being realisation loss transferred to partners' Capital Accounts in the ratio 2:3)		3,600 5,400	 9,000

Step 7: Conclusion All six transactions are recorded above. Realisation loss reduces Vasudha's capital by Rs 3,600 and Dewan's capital by Rs 5,400; the Rs 11,000 expenses paid on Dewan's behalf separately debit his Capital Account.

Quick Tip to Solve: For dissolution expenses, identify who bears them and who pays them separately: when Dewan bears the cost but the firm pays, debit Dewan's Capital Account, not Realisation.

20. Pass the necessary journal entries for the issue of debentures for the following transactions:

(i) Anand Ltd. issued 800, 9% Debentures of ₹ 500 each at a premium of 20%, to the vendors for machinery purchased from them costing ₹ 4,80,000.

(ii) Dawar Ltd. issued 5,000, 7% Debentures of ₹ 200 each at a premium of 5%, redeemable at a premium of 10%.

(iii) Novelty Ltd. issued 1,000, 8% Debentures of ₹ 100 each at a discount of 5%, redeemable at a premium of 10%. [6 marks]

Solution:

Concept:

- Debentures are credited at their nominal value. An issue premium is credited to Securities Premium Reserve; a discount on issue is debited to Loss on Issue of Debentures.
- A premium payable on redemption is a liability recognised when the debentures are issued. Its corresponding debit is to Loss on Issue of Debentures, even when the issue itself is at a premium.
- For a non-cash issue to a vendor, first record the asset and the amount payable to the vendor; then discharge that payable by crediting debentures and any securities premium.

Step 1: (i) Anand Ltd.: machinery acquired and vendor paid Nominal value of the debentures is $800 \times$ Rs $500 =$ Rs $4,00,000$. The issue premium is $20\% \times$ Rs $4,00,000 =$ Rs $80,000$; hence the total issue value is Rs 4,80,000, exactly equal to the machinery cost. No bank entry is required because the debentures settle the vendor's claim.

Journal of Anand Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Machinery A/c Dr. To Vendors A/c (Being machinery purchased on credit)		4,80,000	 4,80,000
	Vendors A/c Dr. To 9% Debentures A/c To Securities Premium Reserve A/c (Being 800 debentures of Rs 500 each issued at a premium of 20% to settle the vendor's account)		4,80,000	 4,00,000 80,000

Step 2: (ii) Dawar Ltd.: issue and redemption both at a premium The face value is $5,000 \times$ Rs $200 =$ Rs $10,00,000$. Issue premium is Rs 50,000, so bank receives Rs 10,50,000. Redemption premium is $10\% \times$ Rs $10,00,000 =$ Rs $1,00,000$, recognised separately as a liability and as loss on issue. The issue premium is not netted against the redemption premium in this issue entry.

Journal of Dawar Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		10,50,000	
	Loss on Issue of Debentures A/c Dr.		1,00,000	
	To 7% Debentures A/c			10,00,000
	To Securities Premium Reserve A/c			50,000
	To Premium on Redemption of Debentures A/c			1,00,000
	(Being 5,000 debentures of Rs 200 each issued at 5% premium, redeemable at 10% premium)			

Both sides total Rs 11,50,000.

Step 3: (iii) Novelty Ltd.: issue at a discount, redemption at a premium Face value is $1,000 \times$ Rs $100 =$ Rs $1,00,000$. Discount on issue is Rs 5,000 and redemption premium is Rs 10,000. Thus cash received is Rs 95,000 and total loss on issue is Rs $5,000 +$ Rs $10,000 =$ Rs $15,000$.

Journal of Novelty Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		95,000	
	Loss on Issue of Debentures A/c Dr.		15,000	
	To 8% Debentures A/c			1,00,000
	To Premium on Redemption of Debentures A/c			10,000
	(Being 1,000 debentures of Rs 100 each issued at 5% discount, redeemable at 10% premium)			

Both sides total Rs 1,10,000. The stated interest rates identify the debenture accounts; no interest entry is required at issue.

Step 4: Conclusion Anand Ltd. settles Rs 4,80,000 by issuing Rs 4,00,000 debentures with Rs 80,000 securities premium. Dawar Ltd. receives Rs 10,50,000 and records Rs 1,00,000 loss on issue; Novelty Ltd. receives Rs 95,000 and records Rs 15,000 loss on issue. The journal entries above recognise each company's debentures at face value and its redemption premium separately.

Quick Tip to Solve: In each issue entry, credit debentures at face value first; then calculate cash, issue premium or discount, and redemption premium separately before checking the debit and credit totals.

OR

20. (i) On 1st April, 2019, Bright Ltd. issued ₹ 4,00,000, 6% Debentures of ₹ 100 each at a discount of 5%, redeemable after three years. The amount per debenture was payable as follows: On Application – ₹ 80 per debenture; On Allotment – Balance. The debentures were fully subscribed and all money was duly received. Pass necessary journal entries for issue of debentures.

(ii) Disha Ltd. took over assets of ₹ 8,00,000 and liabilities of ₹ 3,00,000 from Kriti Ltd. for a purchase consideration of ₹ 6,00,000. The payment was made by issue of 9% Debentures of ₹ 100 each at 20% premium. Pass the necessary journal entries for the above transactions in the books of Disha Ltd. [6 marks]

Solution:

Concept:

- Debentures issued at a discount are credited at face value. Cash instalments together equal the issue price; the difference between face value and issue price is debited to Discount on Issue of Debentures.
- On acquiring a business, debit the assets taken over and credit liabilities assumed and the vendor's purchase consideration. Purchase consideration exceeding net assets is goodwill.
- Debentures issued to settle purchase consideration are counted at their issue price, including premium, while the Debentures Account is credited only at face value.

Step 1: (i) Bright Ltd.: calculate the application and allotment amounts Number of debentures is Rs $4,00,000/\text{Rs } 100 = 4,000$. Each debenture is issued for Rs $100 -$ Rs $5 =$ Rs 95. After Rs 80 on application, the balance payable on allotment is therefore Rs 15, not Rs 20. Total application money is Rs 3,20,000, allotment money Rs 60,000, and discount Rs 20,000. The issue proceeds total Rs 3,80,000. Redemption after three years carries no stated premium, so the issue entry recognises no redemption-premium liability.

Step 2: (i) Bright Ltd.: record receipt and transfer of application money **Journal of Bright Ltd.**

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1.4.19	Bank A/c Dr. To Debenture Application A/c (Being application money received on 4,000 debentures at Rs 80 each)		3,20,000	3,20,000
1.4.19	Debenture Application A/c Dr. To 6% Debentures A/c (Being application money transferred to the debentures account)		3,20,000	3,20,000

Step 3: (i) Bright Ltd.: record allotment due and its receipt The nominal amount remaining to be credited is Rs 80,000. It consists of Rs 60,000 payable in cash and Rs 20,000 discount, recognised at allotment.

Journal of Bright Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
1.4.19	Debenture Allotment A/c Dr. Discount on Issue of Debentures A/c Dr. To 6% Debentures A/c (Being allotment due at Rs 15 per debenture and discount of Rs 5 per debenture recorded)		60,000 20,000	 80,000
1.4.19	Bank A/c Dr. To Debenture Allotment A/c (Being full allotment money received)		60,000	 60,000

The Application and Allotment Accounts close. Credits to 6% Debentures total Rs 4,00,000, equal to the stated nominal issue.

Step 4: (ii) Disha Ltd.: calculate goodwill and record the takeover Net assets acquired are Rs $8,00,000$ − Rs $3,00,000$ = Rs $5,00,000$. Purchase consideration is Rs 6,00,000, so goodwill equals Rs $6,00,000$ − Rs $5,00,000$ = Rs $1,00,000$. The excess is an asset, not capital reserve.

Journal of Disha Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Sundry Assets A/c Dr. Goodwill A/c Dr. To Sundry Liabilities A/c To Kriti Ltd. A/c (Being assets and liabilities of Kriti Ltd. taken over for Rs 6,00,000, with the excess consideration recorded as goodwill)		8,00,000 1,00,000	 3,00,000 6,00,000

Step 5: (ii) Disha Ltd.: discharge the purchase consideration Issue price per debenture is Rs 100×1.20 = Rs 120. Hence Rs $6,00,000$/Rs 120 = $5,000$ debentures are issued. Their face value is Rs 5,00,000 and premium is Rs 1,00,000.

Journal of Disha Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Kriti Ltd. A/c Dr. To 9% Debentures A/c To Securities Premium Reserve A/c (Being 5,000 debentures of Rs 100 each issued at 20% premium to settle the purchase consideration)		6,00,000	 5,00,000 1,00,000

The vendor's Rs 6,00,000 credit is fully cancelled by this debit; no cash is paid for the acquisition.

Step 6: Conclusion Bright Ltd. receives Rs 3,20,000 on application and Rs 60,000 on allotment, recording Rs 4,00,000 debentures and Rs 20,000 discount. Disha Ltd. records Rs 1,00,000 goodwill and issues 5,000 debentures with a face value of Rs 5,00,000 and securities premium of Rs 1,00,000 to settle Kriti Ltd.'s Rs 6,00,000 consideration.

Quick Tip to Solve: For Bright, subtract the discount before finding the allotment balance; for Disha, divide purchase consideration by Rs 120, the issue price, rather than the Rs 100 face value.

21. Rathi Ltd. invited applications for issuing 1,00,000 shares of ₹ 10 each at a premium of ₹ 2 per share. Amount per share was payable as follows: On Application – ₹ 4 (including premium ₹ 1); On Allotment – ₹ 4 (including premium ₹ 1); On First and Final Call – Balance.

Applications were received for 1,50,000 shares and allotment was made to the applicants as follows:

(i) Applicants of 80,000 shares were allotted 60,000 shares.

(ii) Applicants of 50,000 shares were allotted 40,000 shares.

(iii) No shares were allotted to the remaining applicants and their application money was returned.

Yatin, who belonged to category (ii) and who had applied for 5,000 shares failed to pay the allotment and call money. His shares were forfeited. Later, half of Yatin's forfeited shares were reissued @ ₹ 18 per share as fully paid up. Pass the necessary journal entries to record the above transactions in the books of Rathi Ltd. [8 marks]

Solution:

Concept:

- Under pro-rata allotment, excess application money is adjusted against allotment. With premium due on allotment, adjust this excess first against the capital portion, then against premium.
- On forfeiture, debit Share Capital with the called-up capital and reverse only unpaid premium; credit Share Forfeiture with capital actually received.
- On reissue, credit Share Capital with the paid-up value. Transfer only the surplus forfeiture amount relating to shares actually reissued to Capital Reserve.

Step 1: Working Notes: allocate applications and determine Yatin's default The first and final call is $12 - 4 - 4 =$ Rs 4 per share. Application receipts are $1,50,000 \times 4 =$ Rs $6,00,000$. The rejected $20,000$ shares require a refund of Rs 80,000.

Category (i): excess application money is $(80,000 - 60,000) \times 4 =$ Rs $80,000$. Category (ii): excess is $(50,000 - 40,000) \times 4 =$ Rs $40,000$. Thus Rs 1,20,000 is adjusted towards allotment.

Yatin receives $5,000 \times 40,000/50,000 = 4,000$ shares. Of his Rs 20,000 application payment, Rs 12,000 is capital, Rs 4,000 is application premium and Rs 4,000 is excess. The excess is adjusted against the Rs 12,000 capital portion of allotment. Therefore allotment arrears are Rs 8,000 capital plus Rs 4,000 premium, or Rs 12,000. Call arrears are $4,000 \times 4 =$ Rs $16,000$.

Capital received on his shares is $12,000 + 4,000 =$ Rs $16,000$; this is the forfeiture credit. His Rs 4,000 application premium remains in Securities Premium Reserve, whereas the unpaid Rs 4,000 allotment premium is reversed.

Step 2: Record application and allotment Journal of Rathi Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		6,00,000	
	To Share Application A/c			6,00,000
	(Being application money received on 1,50,000 shares)			
	Share Application A/c Dr.		6,00,000	
	To Share Capital A/c			3,00,000
	To Securities Premium Reserve A/c			1,00,000
	To Share Allotment A/c			1,20,000
	To Bank A/c			80,000
	(Being application money transferred, excess adjusted and rejected applications refunded)			
	Share Allotment A/c Dr.		4,00,000	
	To Share Capital A/c			3,00,000
	To Securities Premium Reserve A/c			1,00,000
	(Being allotment due on 1,00,000 shares including premium)			
	Bank A/c Dr.		2,68,000	
	To Share Allotment A/c			2,68,000
	(Being allotment received after Rs 1,20,000 adjustment and Rs 12,000 default)			

Step 3: Record the call and forfeiture Journal of Rathi Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share First and Final Call A/c Dr.		4,00,000	
	To Share Capital A/c			4,00,000
	(Being first and final call due on 1,00,000 shares)			
	Bank A/c Dr.		3,84,000	
	To Share First and Final Call A/c			3,84,000
	(Being call received except Rs 16,000 due from Yatin)			
	Share Capital A/c Dr.		40,000	
	Securities Premium Reserve A/c Dr.		4,000	
	To Share Allotment A/c			12,000
	To Share First and Final Call A/c			16,000
	To Share Forfeiture A/c			16,000
	(Being Yatin's 4,000 fully called shares forfeited and unpaid allotment premium reversed)			

Step 4: Record reissue and the realised capital profit Half the forfeited shares, i.e. 2,000 shares, are reissued for $2,000 \times 18 =$ Rs $36,000$. Their paid-up capital is Rs 20,000 and the reissue premium is Rs 16,000. Since reissue is above face value, no forfeiture balance is used as discount. The forfeiture attributable to these shares is $16,000 \times 2,000/4,000 =$ Rs $8,000$.

Journal of Rathi Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		36,000	
	To Share Capital A/c			20,000
	To Securities Premium Reserve A/c			16,000
	(Being 2,000 forfeited shares reissued as fully paid at Rs 18 each)			
	Share Forfeiture A/c Dr.		8,000	
	To Capital Reserve A/c			8,000
	(Being forfeiture surplus on the 2,000 reissued shares transferred)			

Step 5: Conclusion The journal records all transactions above. Capital Reserve is credited with Rs 8,000; Rs 8,000 remains in Share Forfeiture for the 2,000 shares not yet reissued.

Quick Tip to Solve: For Yatin, first convert 5,000 applications into 4,000 allotted shares. Keep application premium separate from capital and transfer forfeiture profit only for the half reissued.

OR

21. Eiko Ltd. invited applications for issuing 2,00,000 equity shares of ₹ 10 each at a premium of ₹ 3 per share. The amount was payable as follows: On Application – ₹ 4 per share; On Allotment – ₹ 6 per share (including premium ₹ 3); On First and Final Call – Balance.

Applications were received for 3,00,000 shares and allotment was made on pro-rata basis to all the applicants. Money overpaid on applications was utilised towards sums due on allotment. Sunil, who applied for 6,000 shares failed to pay the allotment money while Rishab holding 2,000 shares paid the first and final call money with allotment. Sunil's shares were forfeited immediately after allotment. Thereafter, first and final call was made and was duly received. Half of the forfeited shares were reissued to Varsha as fully paid for ₹ 9 per share. Pass the necessary journal entries to record the above transactions in the books of Eiko Ltd. [8 marks]

Solution:

Concept:

- Under pro-rata allotment, excess application money is adjusted against allotment. With premium due on allotment, adjust this excess first against the capital portion, then against premium.
- On forfeiture, debit Share Capital with the called-up capital and reverse only unpaid premium; credit Share Forfeiture with capital actually received.
- On reissue, credit Share Capital with the paid-up value. Transfer only the surplus forfeiture amount relating to shares actually reissued to Capital Reserve.

Step 1: Working Notes: compute allotment, arrears and advance The allotment ratio is $2,00,000 : 3,00,000 = 2 : 3$, and the final call is $13 - 4 - 6 =$ Rs 3 per share. Application money received is Rs 12,00,000, of which Rs 8,00,000 is capital and Rs 4,00,000 is excess adjusted towards allotment.

Sunil is allotted $6,000 \times 2/3 = 4,000$ shares. He pays Rs 24,000 on application: Rs 16,000 relates to allotted capital and Rs 8,000 is excess. His allotment due is $4,000 \times 6 =$ Rs $24,000$, comprising Rs 12,000 capital and Rs 12,000 premium. Adjusting excess first against capital leaves Rs 4,000 capital and Rs 12,000 premium unpaid: total arrears Rs 16,000.

Called-up capital at forfeiture is only $4,000 \times 7 =$ Rs $28,000$, since the final call has not been made. Capital received is Rs 24,000 and the unpaid premium to reverse is Rs 12,000.

Rishab's call advance is $2,000 \times 3 =$ Rs $6,000$. Allotment cash received is $12,00,000 - 4,00,000 - 16,000 + 6,000 =$ Rs $7,90,000$.

Step 2: Record application and allotment Journal of Eiko Ltd.

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		12,00,000	
	To Share Application A/c			12,00,000
	(Being application money received on 3,00,000 shares)			
	Share Application A/c Dr.		12,00,000	
	To Share Capital A/c			8,00,000
	To Share Allotment A/c			4,00,000
	(Being application capital transferred and excess adjusted towards allotment)			
	Share Allotment A/c Dr.		12,00,000	
	To Share Capital A/c			6,00,000
	To Securities Premium Reserve A/c			6,00,000
	(Being allotment due including premium of Rs 3 per share)			
	Bank A/c Dr.		7,90,000	
	To Share Allotment A/c			7,84,000
	To Calls in Advance A/c			6,000
	(Being allotment received except Sunil's arrears, with Rishab's call advance)			

Step 3: Record forfeiture and collect the final call Sunil's shares are forfeited before the call. Consequently the call is made on $2,00,000 - 4,000 = 1,96,000$ shares: Rs 5,88,000. Of this, Rs 6,000 is already held as calls in advance, leaving Rs 5,82,000 to be received in cash.

Journal of Eiko Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Share Capital A/c Dr.		28,000	
	Securities Premium Reserve A/c Dr.		12,000	
	To Share Allotment A/c			16,000
	To Share Forfeiture A/c			24,000
	(Being Sunil's 4,000 shares forfeited immediately after allotment)			
	Share First and Final Call A/c Dr.		5,88,000	
	To Share Capital A/c			5,88,000
	(Being final call of Rs 3 per share due on 1,96,000 shares)			
	Bank A/c Dr.		5,82,000	
	Calls in Advance A/c Dr.		6,000	
	To Share First and Final Call A/c			5,88,000
	(Being call received and the advance adjusted in full)			

Step 4: Record reissue and transfer the capital profit The reissued half consists of 2,000 shares. The Rs 1 discount per share is debited to Share Forfeiture, totalling Rs 2,000. Forfeiture related to these shares is $24,000 \times 2,000/4,000 =$ Rs $12,000$. The realised surplus is therefore $12,000 - 2,000 =$ Rs $10,000$.

Journal of Eiko Ltd. (continued)

Date	Particulars	L.F.	Dr. (Rs)	Cr. (Rs)
	Bank A/c Dr.		18,000	
	Share Forfeiture A/c Dr.		2,000	
	To Share Capital A/c			20,000
	(Being 2,000 forfeited shares reissued to Varsha at Rs 9 each as fully paid)			
	Share Forfeiture A/c Dr.		10,000	
	To Capital Reserve A/c			10,000
	(Being surplus on the reissued shares transferred to capital reserve)			

Step 5: Conclusion The entries above credit Capital Reserve with Rs 10,000. Share Forfeiture retains

Rs 12,000 for the 2,000 shares still unreissued, and Calls in Advance is fully adjusted.

Quick Tip to Solve: Forfeiture precedes the final call here: debit Sunil's capital at Rs 7 per share and make the Rs 3 call on only 1,96,000 shares. Deduct the reissue discount only from the forfeiture of reissued shares.

22. Ashish and Nimish were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 31st March, 2019 their Balance Sheet was as follows:

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capitals: Ashish 3,10,000 Nimish 2,90,000	6,00,000	Plant and Machinery	2,90,000
General Reserve	50,000	Furniture	2,20,000
Workmen's Compensation Fund	20,000	Debtors 90,000 Less provision for doubtful debts 1,000	89,000
Creditors	1,10,000	Stock	1,40,000
		Cash	41,000
Total	7,80,000	Total	7,80,000

On 1st April, 2019, Geeta was admitted into the partnership for 1/4th share in the profits on the following terms:

(i) Goodwill of the firm was valued at ₹ 2,00,000.

(ii) Geeta brought ₹ 3,00,000 as her capital and her share of goodwill premium in cash.

(iii) Bad debts amounted to ₹ 2,000. Create a provision for doubtful debts @ 5% on debtors.

(iv) Furniture was found undervalued by ₹ 65,400.

(v) Stock was taken over by Nimish for ₹ 1,30,000.

(vi) The liability against workmen's compensation fund was determined at ₹ 30,000.

(vii) After the above adjustments, the capitals of Ashish and Nimish were to be adjusted taking Geeta's capital as the base. Excess or shortage was to be adjusted by opening current accounts.

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

Solution:

Concept:

- In the absence of a different arrangement, Ashish and Nimish retain their old relative ratio of $3:2$ in the remaining $3/4$ share. Their new shares are $9/20$ and $6/20$, while Geeta has $5/20$. The sacrificing ratio is $3:2$.
- Revaluation profit and accumulated reserve belong to the old partners in their old ratio. The incoming partner's goodwill premium is credited to the sacrificing partners.
- Capital required for a partner equals total capital multiplied by the new profit share. Here differences are transferred to current accounts, so they do not change cash.

Step 1: Calculate goodwill and revaluation adjustments Geeta brings goodwill premium of Rs $2,00,000 \times 1/4 =$ Rs $50,000$, credited to Ashish and Nimish as Rs 30,000 and Rs 20,000. She also brings capital of Rs 3,00,000.

After writing off bad debts, debtors are $90,000 - 2,000 =$ Rs $88,000$. Required provision is $88,000 \times 5\% =$ Rs $4,400$; the increase over Rs 1,000 is Rs 3,400. Nimish takes stock with book value Rs 1,40,000 for Rs 1,30,000, causing a Rs 10,000 loss and a Rs 1,30,000 debit to his capital. The compensation liability exceeds the fund by $30,000 - 20,000 =$ Rs $10,000$; only this excess is a revaluation loss.

Step 2: Prepare Revaluation Account **Revaluation Account as at 1st April, 2019**

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Bad debts	2,000	By Furniture	65,400
To Provision for doubtful debts	3,400		
To Stock	10,000		
To Workmen's compensation liability	10,000		
To Ashish's Capital (profit)	24,000		
To Nimish's Capital (profit)	16,000		
Total	65,400	Total	65,400

Revaluation profit is $65,400 - 2,000 - 3,400 - 10,000 - 10,000 =$ Rs $40,000$, shared in the old ratio $3:2$. The Rs 50,000 general reserve is also credited to their capitals as Rs 30,000 and Rs 20,000.

Step 3: Determine capitals and current account balances Taking Geeta's capital as the base, total capital is $3,00,000 \div (1/4) =$ Rs $12,00,000$. Required capitals are Ashish: $12,00,000 \times 9/20 =$ Rs $5,40,000$; Nimish: $12,00,000 \times 6/20 =$ Rs $3,60,000$; Geeta: Rs 3,00,000.

Ashish's adjusted capital is $3,10,000 + 30,000 + 30,000 + 24,000 =$ Rs $3,94,000$. His shortage of Rs 1,46,000 is debited to his current account and credited to capital. Nimish's adjusted capital is $2,90,000 + 20,000 + 20,000 + 16,000 - 1,30,000 =$ Rs $2,16,000$. His shortage is Rs 1,44,000, treated similarly. Both current accounts therefore have debit balances.

Step 4: Prepare the partners capital accounts **Partners' Capital Accounts**

Dr.				Cr.			
Particulars	Ashish Rs	Nimish Rs	Geeta Rs	Particulars	Ashish Rs	Nimish Rs	Geeta Rs
To Stock	–	1,30,000	–	By Balance b/d	3,10,000	2,90,000	–
To Balance c/d	5,40,000	3,60,000	3,00,000	By General reserve	30,000	20,000	–
				By Goodwill premium	30,000	20,000	–
				By Revaluation	24,000	16,000	–
				By Cash	–	–	3,00,000
				By Current A/c	1,46,000	1,44,000	–
Total	5,40,000	4,90,000	3,00,000	Total	5,40,000	4,90,000	3,00,000

Step 5: Prepare the balance sheet after admission Cash is $41,000 + 3,00,000 + 50,000 =$ Rs $3,91,000$. Furniture is $2,20,000 + 65,400 =$ Rs $2,85,400$, and net debtors are $88,000 - 4,400 =$ Rs $83,600$. No stock remains because Nimish has taken it over.

Balance Sheet of the Firm as at 1st April, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Partners' capitals:		Plant and machinery	2,90,000
Ashish	5,40,000	Furniture	2,85,400
Nimish	3,60,000	Debtors: 88,000	
Geeta	3,00,000	Less: Provision: 4,400	83,600
Creditors	1,10,000	Cash	3,91,000
Workmen's compensation liability	30,000	Partners' current accounts:	
		Ashish	1,46,000
		Nimish	1,44,000
Total	13,40,000	Total	13,40,000

Step 6: Conclusion Revaluation profit is **Rs 40,000**; closing capitals are **Rs 5,40,000, Rs 3,60,000 and Rs 3,00,000** for Ashish, Nimish and Geeta. The Balance Sheet totals **Rs 13,40,000**.

Quick Tip to Solve: Compute provision after deducting bad debts; debit Nimish for the takeover price and charge only the stock shortfall to revaluation.

OR

22. Radha, Manas and Arnav were partners in a firm sharing profits and losses in the ratio of 3 : 1 : 1. Their Balance Sheet as at 31st March, 2019 was as follows:

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capitals: Radha 4,00,000 Manas 3,00,000 Arnav 2,00,000	9,00,000	Furniture	4,60,000
Investment Fluctuation Fund	1,10,000	Investments	2,00,000
Creditors	2,50,000	Stock	2,40,000
		Debtors 2,20,000 Less provision for doubtful debts 10,000	2,10,000
		Cash	1,50,000
Total	12,60,000	Total	12,60,000

Manas retired on 1st April, 2019. It was agreed that:

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

(ii) Provision for doubtful debts was to be increased to ₹ 15,000.

(iii) Value of furniture was to be reduced by ₹ 3,000.

(iv) Market value of investments was ₹ 1,90,000.

(v) Goodwill of the firm was valued at ₹ 2,00,000 and Manas's share was adjusted in the accounts of Radha and Arnav.

(vi) Manas was paid ₹ 68,000 in cash and the balance was transferred to his loan account.

(vii) Capitals of Radha and Arnav were to be in proportion to their new profit sharing ratio. Surplus/deficit, if any, in their capital accounts was to be adjusted through current accounts.

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

Solution:

Concept:

- When continuing partners retain their relative shares, Radha and Arnav share future profits in $3:1$. Their gains are $3/4 - 3/5 = 3/20$ and $1/4 - 1/5 = 1/20$, giving the gaining ratio $3:1$.
- Revaluation profit and the unused investment fluctuation fund are distributed among all old partners in $3:1:1$. The fund first absorbs the fall in investment value.
- The retiring partner's goodwill entitlement is borne by the continuing partners in the gaining ratio. Capital differences transferred to current accounts do not cause cash movements.

Step 1: Calculate investment fund and revaluation adjustments Investments fall by $2,00,000 - 1,90,000 =$ Rs $10,000$. This loss is absorbed by the Rs 1,10,000 investment fluctuation fund. Its unused balance of Rs 1,00,000 is credited to Radha, Manas and Arnav in the old ratio as Rs 60,000, Rs 20,000 and Rs 20,000. The investment loss is therefore not charged again to revaluation.

Stock appreciation is $2,40,000 \times 20\% =$ Rs $48,000$. Additional doubtful-debt provision is $15,000 - 10,000 =$ Rs $5,000$. Furniture decreases by Rs 3,000. Thus revaluation profit is $48,000 - 5,000 - 3,000 =$ Rs $40,000$.

Step 2: Prepare Revaluation Account **Revaluation Account as at 1st April, 2019**

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Provision for doubtful debts	5,000	By Stock	48,000
To Furniture	3,000		
To Radha's Capital (profit)	24,000		
To Manas's Capital (profit)	8,000		
To Arnav's Capital (profit)	8,000		
Total	48,000	Total	48,000

Step 3: Adjust goodwill and settle the retiring partner Manas's goodwill entitlement is $2,00,000 \times 1/5 =$ Rs $40,000$. Debit Radha's capital by $40,000 \times 3/4 =$ Rs $30,000$ and Arnav's by $40,000 \times 1/4 =$ Rs $10,000$, and credit Manas's capital by Rs 40,000. No goodwill asset is raised.

Manas's amount due is $3,00,000 + 20,000 + 8,000 + 40,000 =$ Rs $3,68,000$. After payment of Rs 68,000, his loan is $3,68,000 - 68,000 =$ Rs $3,00,000$.

Radha's adjusted capital is $4,00,000 + 60,000 + 24,000 - 30,000 =$ Rs $4,54,000$. Arnav's is $2,00,000 + 20,000 + 8,000 - 10,000 =$ Rs $2,18,000$. Their combined adjusted capital, Rs 6,72,000, is the base for proportionate capitals. In $3:1$, the required amounts are Rs 5,04,000 and Rs 1,68,000. Radha's shortage of Rs 50,000 is debited to her current account; Arnav's surplus of Rs 50,000 is credited to his current account.

Step 4: Prepare the partners capital accounts **Partners' Capital Accounts**

Dr.							Cr.
Particulars	Radha Rs	Manas Rs	Arnav Rs	Particulars	Radha Rs	Manas Rs	Arnav Rs
To Manas's Capital (goodwill)	30,000	–	10,000	By Balance b/d	4,00,000	3,00,000	2,00,000
To Cash	–	68,000	–	By Investment fluctuation fund	60,000	20,000	20,000
To Manas's Loan	–	3,00,000	–	By Revaluation	24,000	8,000	8,000
To Current A/c	–	–	50,000	By Radha's Capital (goodwill)	–	30,000	–
To Balance c/d	5,04,000	–	1,68,000	By Arnav's Capital (goodwill)	–	10,000	–
				By Current A/c	50,000	–	–
Total	5,34,000	3,68,000	2,28,000	Total	5,34,000	3,68,000	2,28,000

Step 5: Prepare the reconstituted balance sheet Closing cash is $1,50,000 - 68,000 =$ Rs $82,000$. Stock is Rs 2,88,000, furniture is Rs 4,57,000 and net debtors are $2,20,000 - 15,000 =$ Rs $2,05,000$. Show Radha's debit current balance as an asset and Arnav's credit current balance as a liability.

Balance Sheet of Radha and Arnav as at 1st April, 2019

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Partners' capitals:		Furniture	4,57,000
Radha	5,04,000	Investments	1,90,000
Arnav	1,68,000	Stock	2,88,000
Arnav's current account	50,000	Debtors: 2,20,000	
Manas's loan	3,00,000	Less: Provision: 15,000	2,05,000
Creditors	2,50,000	Cash	82,000
		Radha's current account	50,000
Total	12,72,000	Total	12,72,000

Step 6: Conclusion Revaluation profit is **Rs 40,000**; Manas's loan is **Rs 3,00,000**. Radha and Arnav's closing capitals are **Rs 5,04,000 and Rs 1,68,000**, and the Balance Sheet totals **Rs 12,72,000**.

Quick Tip to Solve: Absorb the investment loss against its fluctuation fund first; distribute only the unused fund and avoid charging the same loss twice.

Part B (20 marks)

OPTION 1 (Analysis of Financial Statements)

23. For a company manufacturing garments, procurement of raw material, incurrence of manufacturing expenses, sale of garments are classified as _____ activities.

[1 mark]

Solution:

Concept:

- Operating activities are the principal revenue-producing activities of an enterprise and other activities that are neither investing nor financing.

- Classification depends on the nature of the business: making and selling garments constitutes the regular business of a garment manufacturer.

Step 1: Identify the business cycle The company purchases raw material, incurs manufacturing expenses to convert it into garments, and sells those garments to earn revenue. These transactions form its normal production and sales cycle.

Step 2: Apply the activity classification Procurement of raw material and manufacturing expenses relate to routine operations, as do receipts from sales. They do not involve acquiring long-term investments or raising or repaying owners' capital or borrowings. Thus all three fall in the same operating category.

Step 3: Conclusion The blank is **operating** activities.

Quick Tip to Solve: Classify the activities by the company's main business: making and selling garments is its operating cycle.

24. Paid ₹ 4,00,000 to acquire shares in R.V. Ltd. and received a dividend of ₹ 40,000 after acquisition. These transactions will result in: [1 mark]

(A) Cash used in investing activities ₹ 4,00,000.

(B) Cash generated from financing activities ₹ 4,40,000.

(C) Cash used in investing activities ₹ 3,60,000.

(D) Cash generated from financing activities ₹ 3,60,000.

Correct Answer: (C) Cash used in investing activities ₹ 3,60,000.

Solution:

Concept:

- For a non-financial enterprise, buying another company's shares is an investing cash outflow.
- Dividend received on investments is an investing cash inflow; net cash flow is inflows less outflows.

Step 1: Classify both transactions The Rs 4,00,000 paid acquires an investment in R.V. Ltd.; it does not raise the investor's own share capital. The Rs 40,000 dividend is a return received on that investment. Therefore both amounts belong to investing activities, with opposite cash-flow signs.

Step 2: Calculate the net cash used

$$\text{Net investing cash flow} = 40,000 - 4,00,000 = -3,60,000.$$

Option (A) ignores the dividend receipt. Options (B) and (D) wrongly classify the transactions as financing activities; (B) also adds an outflow to an inflow as though both were receipts.

Step 3: Conclusion Cash used in investing activities is Rs 3,60,000. Hence, the correct option is (C).

Quick Tip to Solve: Buying another company's shares is investing; subtract the dividend received from the purchase payment to find net cash used.

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

(A) Balance Sheet

(B) Cash Flow Statement

(C) Statement of Profit and Loss

(D) All of the above

Correct Answer: Both (A) Balance Sheet and (C) Statement of Profit and Loss are basic financial statements, not tools of analysis; no unique option is correct.

Solution:

Concept:

- Financial statements provide the underlying financial data; tools of analysis examine relationships, trends and changes in those data.
- Tools include comparative statements, common-size statements, ratio analysis, trend analysis and cash flow analysis.

Step 1: Distinguish statements from analytical tools A Balance Sheet reports financial position and a Statement of Profit and Loss reports financial performance. In their ordinary form these are the basic statements to be analysed, rather than analytical tools themselves. Thus both option (A) and option (C) satisfy the printed wording "not a tool".

Step 2: Check the remaining options A Cash Flow Statement is included among the tools used for financial statement analysis in the CBSE classification, so option (B) does not satisfy the negative wording. Option (D), "All of the above", would include (B), and therefore cannot be correct. The printed choices do not provide a combined "(A) and (C)" option.

Step 3: Conclusion The printed question has no unique correct option: both (A) and (C) are defensible answers; (B) and (D) are not.

Quick Tip to Solve: For "not a tool" questions, distinguish the original Balance Sheet and Statement of Profit and Loss from methods used to analyse them.

26. While preparing Cash Flow Statement, if net cash flow from operating, investing and financing activities is negative the same is _____ to opening cash balance to obtain _____ cash balance.

[1 mark]

Solution:

Concept:

- The combined cash flows from operating, investing and financing activities give the net change in cash and cash equivalents.
- Closing cash equals opening cash plus the signed net change; a negative change means a net decrease.

Step 1: Identify the effect of a negative total A negative combined net cash flow means that cash payments exceed cash receipts during the period. Therefore the available cash balance falls rather than rises, and the magnitude of the net decrease must be deducted from opening cash.

Step 2: Reconcile opening and closing balances

$$\text{Closing cash} = \text{Opening cash} - \text{Net decrease in cash.}$$

Equivalently, the signed negative cash flow is added algebraically to opening cash. In the usual fill-in wording, the decrease is "deducted" and the balance obtained is the "closing" cash balance.

Step 3: Conclusion The blanks are **deducted** and **closing**, respectively.

Quick Tip to Solve: Treat a negative total cash flow as a decrease: subtract its absolute amount once, avoiding a double negative.

27. 'Public Deposits' appear in the company's Balance Sheet under the head/subhead: [1 mark]

(A) Intangible Assets

(B) Current Liabilities

(C) Shareholders' Funds

(D) Non-Current Liabilities

Correct Answer: (D) Non-Current Liabilities

Solution:

Concept:

- Public deposits are amounts borrowed by a company from the public and represent an obligation to repay, not ownership capital.
- In the standard Schedule III classification used in this question, public deposits are shown under long-term borrowings within non-current liabilities.

Step 1: Identify the nature of public deposits Deposit holders are creditors of the company. Their deposits finance the company through borrowing and are repayable according to the deposit terms. They are consequently liabilities, rather than intangible assets or shareholders' funds. This eliminates options (A) and (C).

Step 2: Select the prescribed heading The usual classification of public deposits here is Non-Current Liabilities, under the sub-head Long-term Borrowings. Option (B) would apply to deposits classified as short-term, or amounts due within the current classification period; no such short-term maturity is specified in the question.

Step 3: Conclusion Public deposits appear under **Non-Current Liabilities**, within Long-term Borrowings. Hence, the correct option is (D).

Quick Tip to Solve: Public deposits are borrowed funds: use Long-term Borrowings unless a short-term repayment condition is explicitly given.

28. 'Income received in advance' appears in the Balance Sheet of a company under the sub-head _____. [1 mark]

Solution:

Concept:

- Under accrual accounting, income is recognised when earned, rather than merely when cash is received.
- Income received before it is earned creates an obligation to supply goods or services, and is reported as a liability.

Step 1: Identify the unearned amount Income received in advance relates to a future accounting period. Receipt of cash increases the company's cash balance, but the associated amount is not yet income of the current period because the earning obligation remains unfulfilled.

Step 2: Place the obligation under its sub-head In the company's Balance Sheet, such advance income is shown under Current Liabilities, in the sub-head Other Current Liabilities. It is not a trade payable arising from a purchase and is not a borrowing. The question asks for the sub-head, so giving only Current Liabilities is incomplete.

Step 3: Conclusion The blank is **Other Current Liabilities**.

Quick Tip to Solve: For income received in advance, identify the unearned obligation and write the precise sub-head: Other Current Liabilities.

29. 'Purchase of goods ₹ 35,000 for cash will increase the operating ratio.' Is the statement correct? Give reasons. [1 mark]

Solution:

Concept:

- Operating ratio is operating cost divided by revenue from operations, multiplied by 100. Operating cost comprises cost of revenue from operations and operating expenses.
- Cost of revenue from operations includes opening inventory plus net purchases and direct expenses, less closing inventory.

Step 1: Trace the cash purchase through inventory Buying goods for Rs 35,000 increases purchases and inventory by Rs 35,000 while reducing cash by the same amount. The purchase alone does not generate a sale; the goods purchased therefore increase the inventory held.

Step 2: Assess the numerator and denominator In the cost calculation, the Rs 35,000 increase in purchases is offset by the equal increase in closing inventory. Thus cost of revenue from operations does not change. Operating expenses and revenue from operations also remain unchanged, so neither component of the operating ratio changes.

Step 3: Conclusion The statement is **incorrect**. A cash purchase of goods for Rs 35,000, by itself, leaves the operating ratio unchanged.

Quick Tip to Solve: Do not treat every purchase as an immediate cost of sales: an equal increase in unsold closing inventory offsets it.

30. Calculate the Current Ratio and Debt-Equity Ratio from the following information:

Non-Current Assets	**₹ 16,00,000**
Current Assets	**₹ 4,00,000**
Working Capital	**₹ 2,00,000**
Non-Current Liabilities	**₹ 12,00,000**

[3 marks]

Solution:

Concept:

- Working capital is current assets minus current liabilities; the current ratio is current assets divided by current liabilities.
- Debt-equity ratio compares long-term debt with shareholders' funds. Shareholders' funds equal total assets less total outside liabilities.

Step 1: Derive current liabilities from working capital Working capital is the excess of current assets over current liabilities. Rearranging this relationship gives the missing current liabilities:

$$\begin{aligned}\text{Current liabilities} &= \text{Current assets} - \text{Working capital}\\ &= 4,00,000 - 2,00,000\\ &= \text{Rs } 2,00,000.\end{aligned}$$

Step 2: Calculate the current ratio Divide current assets by current liabilities, using the liability amount just derived:

$$\text{Current Ratio} = \frac{4,00,000}{2,00,000} = 2:1.$$

Thus there are Rs 2 of current assets for each Re 1 of current liabilities. Working capital itself is not the denominator of this ratio, even though it happens to equal current liabilities in this question.

Step 3: Determine shareholders' funds Total assets consist of both non-current and current assets. Deduct both classes of outside liabilities to obtain the owners' funds:

$$\begin{aligned}\text{Total assets} &= 16,00,000 + 4,00,000 = 20,00,000,\\ \text{Outside liabilities} &= 12,00,000 + 2,00,000 = 14,00,000,\\ \text{Shareholders' funds} &= 20,00,000 - 14,00,000\\ &= \text{Rs } 6,00,000.\end{aligned}$$

Step 4: Calculate the debt-equity ratio Taking the given non-current liabilities as long-term debt, compare Rs 12,00,000 with shareholders' funds of Rs 6,00,000:

$$\text{Debt-Equity Ratio} = \frac{12,00,000}{6,00,000} = 2:1.$$

Current liabilities are deducted to calculate equity, but they are not included in the long-term debt numerator of this ratio.

Step 5: Conclusion $\boxed{\text{Current Ratio} = 2:1}$ and $\boxed{\text{Debt-Equity Ratio} = 2:1}$.

Quick Tip to Solve: First recover current liabilities from working capital, then subtract all outside liabilities from total assets to find equity.

OR

30. From the following information, determine the opening inventory and the closing inventory:

Inventory Turnover Ratio = 5 times

Revenue from Operations = ₹ 8,00,000

Gross Profit Ratio = 25%

Closing inventory was ₹ 20,000 more than the opening inventory. [3 marks]

Solution:

Concept:

- Gross profit ratio expresses gross profit as a percentage of revenue from operations. Thus, cost of revenue from operations equals revenue from operations less gross profit.
- Inventory turnover ratio equals cost of revenue from operations divided by average inventory, where average inventory is half the sum of opening and closing inventories.

Step 1: Calculate cost of revenue from operations Gross profit is calculated on revenue from operations, which is Rs 8,00,000. Therefore,

$$\begin{aligned} \text{Gross profit} &= 8,00,000 \times \frac{25}{100} = \text{Rs } 2,00,000, \\ \text{Cost of revenue from operations} &= 8,00,000 - 2,00,000 \\ &= \text{Rs } 6,00,000. \end{aligned}$$

Inventory is valued at cost, so the turnover ratio uses Rs 6,00,000 as its numerator, rather than the sales figure.

Step 2: Determine average inventory The stated turnover of 5 times means that the cost of revenue from operations is five times the average inventory.

$$\text{Average inventory} = \frac{6,00,000}{5} = \text{Rs } 1,20,000.$$

Hence, opening inventory plus closing inventory equals $2 \times 1,20,000 = \text{Rs } 2,40,000$.

Step 3: Solve for the two inventories Let opening inventory be Rs x. As closing inventory exceeds it by Rs 20,000, closing inventory is Rs $(x + 20,000)$. Substituting into the average inventory formula gives

$$\begin{aligned} \frac{x + (x + 20,000)}{2} &= 1,20,000, \\ 2x + 20,000 &= 2,40,000, \\ x &= 1,10,000. \end{aligned}$$

Closing inventory is therefore $1,10,000 + 20,000 = \text{Rs } 1,30,000$. As a check, their average is Rs 1,20,000 and $6,00,000 \div 1,20,000 = 5$ times, matching the given ratio.

Step 4: Conclusion Opening inventory is $\boxed{\text{Rs } 1,10,000}$ and closing inventory is $\boxed{\text{Rs } 1,30,000}$.

Quick Tip to Solve: Once average inventory is found, subtract half the Rs 20,000 difference to obtain opening inventory and add half the difference to obtain closing inventory.

31. From the following information obtained from the books of Vichar Ltd., prepare a Comparative Statement of Profit and Loss for the year ending 31st March, 2019:

Particulars	2018–19	2017–18
Revenue from operations	300% of cost of materials consumed	200% of cost of materials consumed
Cost of materials consumed	₹ 4,00,000	₹ 2,00,000
Other expenses	20% of cost of materials consumed	20% of cost of materials consumed
Tax rate	50%	50%

[4 marks]

Solution:

Concept:

- A comparative statement presents the previous and current years' figures alongside their absolute and percentage changes. Absolute change equals the current-year amount minus the previous-year amount.
- Percentage change equals absolute change divided by the previous-year amount, multiplied by 100. Profit before tax equals revenue less expenses; profit after tax equals profit before tax less tax.

Step 1: Compute revenue and other expenses **Working Notes**

The revenue percentages and other-expense percentages are based on cost of materials consumed in the respective year. They are not percentages of sales.

$$\begin{aligned}\text{Revenue, 2017–18} &= 2,00,000 \times 200\% = \text{Rs } 4,00,000,\\ \text{Revenue, 2018–19} &= 4,00,000 \times 300\% = \text{Rs } 12,00,000,\\ \text{Other expenses, 2017–18} &= 2,00,000 \times 20\% = \text{Rs } 40,000,\\ \text{Other expenses, 2018–19} &= 4,00,000 \times 20\% = \text{Rs } 80,000.\end{aligned}$$

Total expenses are Rs 2,40,000 for 2017–18 and Rs 4,80,000 for 2018–19. Subtracting these from the respective revenues gives profit before tax of Rs 1,60,000 and Rs 7,20,000. Tax at 50% is Rs 80,000 and Rs 3,60,000 respectively.

Step 2: Calculate the comparative changes Treat 2017–18 as the base year for each row. For example, revenue rises by $12,00,000 - 4,00,000 = \text{Rs } 8,00,000$, so its percentage increase is

$$\frac{8,00,000}{4,00,000} \times 100 = 200\%.$$

Profit before tax increases by $7,20,000 - 1,60,000 = \text{Rs } 5,60,000$, giving

$$\frac{5,60,000}{1,60,000} \times 100 = 350\%.$$

Apply the same calculation to every row. As both years have the same tax rate, tax expense and profit after tax also increase by 350%.

Step 3: Prepare the comparative statement **Vichar Ltd.**
Comparative Statement of Profit and Loss
for the year ended 31st March, 2019

Particulars	2017–18 (Rs)	2018–19 (Rs)	Increase (Rs)	Increase (%)
I. Revenue from operations	4,00,000	12,00,000	8,00,000	200
II. Other income	–	–	–	–
III. Total revenue	**4,00,000**	**12,00,000**	**8,00,000**	**200**
IV. Expenses:				
Cost of materials consumed	2,00,000	4,00,000	2,00,000	100
Other expenses	40,000	80,000	40,000	100
Total expenses	**2,40,000**	**4,80,000**	**2,40,000**	**100**
V. Profit before tax (III–IV)	1,60,000	7,20,000	5,60,000	350
VI. Tax expense (50%)	80,000	3,60,000	2,80,000	350
VII. Profit after tax (V–VI)	**80,000**	**3,60,000**	**2,80,000**	**350**

Other income is not given; revenue from operations is therefore the total revenue used in this statement. Dashes indicate no other income figure or applicable percentage change.

Step 4: Conclusion Vichar Ltd.'s profit after tax increased from Rs 80,000 to Rs 3,60,000, an increase of $\boxed{\text{Rs } 2,80,000 \text{ or } 350\%}$, as shown in the comparative statement.

Quick Tip to Solve: Calculate revenue from each year's materials cost first, then use the previous year's amount as the denominator for every percentage change.

OR

31. From the following Balance Sheet of Sanchi Ltd., as at 31st March, 2019, prepare a common size Balance Sheet:

Sanchi Ltd.

Balance Sheet as at 31st March, 2019

Particulars	Note No.	31.3.2019 (₹)	31.3.2018 (₹)
I - Equity and Liabilities:			
1. Shareholders Funds: (a) Share Capital		4,00,000	2,00,000
(b) Reserves and Surplus		1,00,000	70,000
2. Non-Current Liabilities: Long-term Borrowings		3,00,000	4,30,000
3. Current Liabilities: Trade Payables		2,00,000	3,00,000
Total		10,00,000	10,00,000
II - Assets: 1. Non-Current Assets: Fixed Assets: Tangible Assets		6,00,000	5,00,000
2. Current Assets: (a) Inventories		2,50,000	2,00,000
(b) Cash and Cash Equivalents		1,50,000	3,00,000
Total		10,00,000	10,00,000

[4 marks]

Solution:

Concept:

- A common size Balance Sheet expresses each item as a percentage of the total of its own side for that year. Total assets and total equity and liabilities each form the base of 100%.
- The percentage of an item is Item amount/Balance Sheet total $\times 100$. Amounts remain unchanged; percentages reveal the composition of assets and financing.

Step 1: Calculate the common size percentages **Working Notes:** The total is Rs 10,00,000 in both years. Therefore, divide each amount by Rs 10,00,000 and multiply by 100. For example, share capital in 2019 is $4,00,000/10,00,000 \times 100 = 40\%$, whereas in 2018 it is $2,00,000/10,00,000 \times 100 = 20\%$. Reserves are 10% and 7%; long-term borrowings are 30% and 43%; trade payables are 20% and 30%. Tangible assets are 60% and 50%, inventories are 25% and 20%, and cash and cash equivalents are 15% and 30%, respectively.

Step 2: Prepare the common size Balance Sheet **Sanchi Ltd.**

Common Size Balance Sheet as at 31st March, 2019

Particulars	Note No.	2019 (Rs)	2018 (Rs)	2019 (%)	2018 (%)
I. Equity and Liabilities					
1. Shareholders' Funds					
(a) Share Capital		4,00,000	2,00,000	40	20
(b) Reserves and Surplus		1,00,000	70,000	10	7
Shareholders' Funds subtotal		5,00,000	2,70,000	50	27
2. Non-Current Liabilities					
Long-term Borrowings		3,00,000	4,30,000	30	43
3. Current Liabilities					
Trade Payables		2,00,000	3,00,000	20	30
Total		**10,00,000**	**10,00,000**	**100**	**100**
II. Assets					
1. Non-Current Assets					
Fixed Assets: Tangible Assets		6,00,000	5,00,000	60	50
2. Current Assets					
(a) Inventories		2,50,000	2,00,000	25	20
(b) Cash and Cash Equivalents		1,50,000	3,00,000	15	30
Current Assets subtotal		4,00,000	5,00,000	40	50
Total		**10,00,000**	**10,00,000**	**100**	**100**

Step 3: Conclusion The common size Balance Sheet balances at 100% on each side in each year. Shareholders' funds increased from 27% to 50% of total financing, while the proportion represented by long-term borrowings decreased from 43% to 30%.

Quick Tip to Solve: Since both totals are Rs 10,00,000, every Rs 10,000 represents 1%; check that the component percentages on each side sum to 100%.

32. There was 'Nil' net cash flow from operating activities of Ashok Ltd. during the year ending 31st March, 2019. From the following Balance Sheet of Ashok Ltd. as at 31st March, 2019, prepare a Cash Flow Statement:

Ashok Ltd. — Balance Sheet as at 31st March, 2019

Particulars	Note No.	31.3.2019 (₹)	31.3.2018 (₹)
I - Equity and Liabilities:			
1. Shareholders Funds: (a) Share Capital		19,00,000	11,00,000
(b) Reserves and Surplus	1	1,60,000	2,00,000
2. Non-Current Liabilities: Long-term Borrowings	2	1,00,000	4,00,000
3. Current Liabilities: (a) Short-Term Borrowings	3	2,50,000	2,30,000
(b) Short-Term Provisions	4	1,90,000	2,70,000
Total		26,00,000	22,00,000
II - Assets:			
1. Non-Current Assets: Fixed Assets: (i) Tangible Assets	5	15,00,000	11,00,000
(ii) Intangible Assets	6	2,80,000	1,70,000
2. Current Assets: (a) Current Investments		1,30,000	2,90,000
(b) Trade Receivables		3,90,000	4,10,000
(c) Cash and Cash Equivalents		3,00,000	2,30,000
Total		26,00,000	22,00,000

Notes to Accounts:

Note No.	Particulars	31.3.2019 (Rs)	31.3.2018 (Rs)
1	Reserves and Surplus: Surplus (Balance in the Statement of Profit and Loss)	1,60,000	2,00,000
2	Long-term Borrowings: 8% Debentures	1,00,000	4,00,000
3	Short-term Borrowings: Bank overdraft	2,50,000	2,30,000
4	Short-term Provisions: Provision for Tax	1,90,000	2,70,000
5	Tangible Assets: Plant and Machinery Accumulated Depreciation	 16,30,000 (1,30,000) 15,00,000	 11,70,000 (70,000) 11,00,000
6	Intangible Assets: Goodwill	2,80,000	1,70,000

Additional information:

(i) A machinery of the book value of ₹ 60,000, (depreciation provided thereon ₹ 20,000) was sold at a loss of ₹ 6,000.

(ii) 8% Debentures were redeemed on 1st July, 2018. [6 marks]

Solution:

Concept:

- A Cash Flow Statement classifies cash movements into operating, investing and financing activities. The net movement reconciles opening cash and cash equivalents with their closing balance.
- For a non-financial company, purchases and sales of fixed assets and investments are investing activities. Issue of shares, redemption of debentures, changes in bank overdraft and interest paid are financing activities under the CBSE treatment.

- Sale proceeds equal book value less loss on sale. Asset purchases must be calculated from gross asset balances after allowing for the original cost of assets disposed of.

Step 1: Calculate machinery purchase and sale proceeds **Working Notes**

The machinery sold had book value Rs 60,000 and accumulated depreciation Rs 20,000. Its original cost was therefore Rs 80,000. The loss on sale is deducted from book value, not from original cost:

$$\text{Sale proceeds} = 60,000 - 6,000 = \text{Rs } 54,000.$$

Use the gross Plant and Machinery balances from Note 5:

$$\begin{aligned}\text{Purchases} &= \text{Closing gross value} - \text{Opening gross value} \\ &\quad + \text{Original cost of machinery sold} \\ &= 16,30,000 - 11,70,000 + 80,000 \\ &= \text{Rs } 5,40,000.\end{aligned}$$

The depreciation charge is $1,30,000 - 70,000 + 20,000 = \text{Rs } 80,000$. This is non-cash; it is not a separate investing outflow. Operating cash flow is already supplied as nil, so a fresh indirect-method operating calculation is unnecessary.

Step 2: Determine the remaining investing and financing amounts Goodwill purchased is $2,80,000 - 1,70,000 = \text{Rs } 1,10,000$, an investing outflow. The reduction in current investments gives sale proceeds of $2,90,000 - 1,30,000 = \text{Rs } 1,60,000$. No gain or loss on this sale is given. Share capital increased by $19,00,000 - 11,00,000 = \text{Rs } 8,00,000$, giving cash proceeds from issue of shares. Debentures redeemed equal $4,00,000 - 1,00,000 = \text{Rs } 3,00,000$. The bank overdraft increased by $2,50,000 - 2,30,000 = \text{Rs } 20,000$, a financing inflow. Interest runs on Rs 4,00,000 for April to June and Rs 1,00,000 for July to March, because redemption took place on 1st July, 2018:

$$\begin{aligned}\text{Interest paid} &= 4,00,000 \times \frac{8}{100} \times \frac{3}{12} \\ &\quad + 1,00,000 \times \frac{8}{100} \times \frac{9}{12} \\ &= 8,000 + 6,000 = \text{Rs } 14,000.\end{aligned}$$

Current investments are treated as investments; the question does not identify them as cash equivalents. The separately stated bank overdraft is treated as short-term financing. No non-cash share issue, unpaid interest or other non-cash acquisition is stated.

Step 3: Prepare and reconcile the Cash Flow Statement **Ashok Ltd.**
Cash Flow Statement for the year ended 31st March, 2019

Particulars	Amount (Rs)
A. Cash Flow from Operating Activities	
Net cash flow from operating activities (given)	Nil
B. Cash Flow from Investing Activities	
Proceeds from sale of machinery	54,000
Purchase of plant and machinery	(5,40,000)
Purchase of goodwill	(1,10,000)
Proceeds from sale of current investments	1,60,000
Net cash used in investing activities	**(4,36,000)**
C. Cash Flow from Financing Activities	
Proceeds from issue of share capital	8,00,000
Redemption of 8% debentures	(3,00,000)
Increase in bank overdraft	20,000
Interest paid on debentures	(14,000)
Net cash from financing activities	**5,06,000**
Net increase in cash and cash equivalents (A+B+C)	70,000
Add: Cash and cash equivalents, 1st April, 2018	2,30,000
Cash and cash equivalents, 31st March, 2019	**3,00,000**

Parentheses indicate cash outflows. The changes in surplus, trade receivables and tax provision would enter an operating cash flow calculation; they must not be added again to the supplied net operating cash flow of nil.

Step 4: Conclusion Net cash used in investing activities is Rs 4,36,000 and net cash from financing activities is Rs 5,06,000. With nil operating cash flow, cash and cash equivalents increase by Rs 70,000 to Rs 3,00,000, agreeing with the closing Balance Sheet.

Quick Tip to Solve: Add back the Rs 80,000 original cost of the machinery sold when deriving purchases, and split debenture interest at 1st July before reconciling the Rs 70,000 cash increase.

OPTION 2 (Computerised Accounting)

23. The data is classified for creating groups of accounts in the heads of: [1 mark]

(A) Assets, Liabilities and Capital

(B) Assets, Owners' equity, Revenue and Expenses

(C) Assets, Capital, Liabilities, Revenue and Expenses

(D) Capital, Revenue and Expenses

Correct Answer: (C) Assets, Capital, Liabilities, Revenue and Expenses

Solution:

Concept:

- A chart of accounts groups accounting data under assets, liabilities, capital, revenue and expenses. These heads cover both the financial position and the operating performance of an entity.
- Assets, liabilities and capital belong to the Balance Sheet, while revenue and expenses determine

profit or loss.

Step 1: Identify the complete classification Account groups must include the resources owned (assets), amounts owed (liabilities), the owner's interest (capital), earnings (revenue) and costs incurred (expenses). Option (C) includes all five categories, even though their order differs from a usual listing.

Step 2: Eliminate incomplete lists Option (A) omits revenue and expenses. Option (B) includes owners' equity, which corresponds to capital, but omits liabilities. Option (D) omits both assets and liabilities. Consequently, none of these three lists provides the complete classification required for grouping accounts.

Step 3: Conclusion The heads are Assets, Capital, Liabilities, Revenue and Expenses. Hence, the correct option is (C).

Quick Tip to Solve: Check that an option contains all three Balance Sheet groups and both income-statement groups; merely including capital or owners' equity is insufficient.

24. A1 : E2 in Excel refers to: [1 mark]

(A) Column on Excel sheet

(B) Row on Excel sheet

(C) Column between start and end points of Excel sheet

(D) Alphabets between A to E on Excel sheet

Correct Answer: No printed option is technically correct. A1:E2 is a rectangular range of cells, not a single column or row; option (C) prints "Column", not "Cells".

Solution:

Concept:

- A cell address consists of a column letter and a row number. A colon joins the addresses of the first and last cells of a rectangular range.
- A1:E2 includes every cell in columns A through E and rows 1 through 2.

Step 1: Interpret the two endpoints A1 is the upper-left cell and E2 is the lower-right cell. The range contains A1, B1, C1, D1, E1 and A2, B2, C2, D2, E2: $5 \times 2 = 10$ cells.

Step 2: Check all printed alternatives Option (A) describes one column and (B) one row; neither describes this two-row, five-column block. Option (C) literally says "Column between start and end points", whereas the reference denotes cells across several columns and rows. Option (D) describes alphabetic labels alone and ignores the row numbers. Thus none states the correct meaning precisely.

Step 3: Conclusion A1:E2 denotes a rectangular range of 10 cells. None of the printed options correctly states this meaning.

Quick Tip to Solve: Read the letters as column limits and the numbers as row limits; a colon includes both endpoints.

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

(A) Table

(B) Query

(C) Form

(D) Report

Correct Answer: (D) Report

Solution:

Concept:

- A database report presents selected information in an organised, formatted output suitable for printing.
- Tables store data, queries retrieve or process data, and forms assist data entry and screen-based interaction.

Step 1: Identify the required output The question requires well-formatted printable information. A report can arrange records, headings, groups, totals and page layout into a readable printed document.

Step 2: Distinguish the other objects A table is primarily for storing records, while a query selects or summarises records. A form provides a convenient interface for entering or viewing data. Although data may be printed from other objects, the Access object designed for formatted print output is a report.

Step 3: Conclusion A Report provides well-formatted printable data. Hence, the correct option is (D).

Quick Tip to Solve: Link "formatted printable output" to Report; link data entry to Form and data selection to Query.

26. Which of the following is not a limitation of Computerised Accounting system? [1 mark]

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

(B) Data is prone to hacking.

(C) Data is not made available to everybody.

(D) Unprogrammed and un-specified reports cannot be generated.

Correct Answer: (C) Data is not made available to everybody.

Solution:

Concept:

- A limitation is a weakness or restriction that adversely affects the operation of a computerised accounting system.
- Access controls restrict accounting information to authorised persons and help maintain confidentiality.

Step 1: Examine the risks and restrictions Power interruptions may cause loss or corruption of data, and hacking threatens security. A system also cannot automatically produce reports whose requirements have not been specified or programmed. Thus (A), (B) and (D) describe limitations in

the stated context.

Step 2: Identify the protective feature Data not being available to everybody means access can be restricted to authorised users. This is a security and confidentiality feature rather than a limitation: accounting information need not be disclosed indiscriminately.

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

Quick Tip to Solve: Underline "not": restricted access protects confidentiality, whereas data loss and hacking are risks.

---

27. A cell reference that holds either row or column constant when the formula or function is copied to another location is known as: [1 mark]

(A) Absolute cell reference

(B) Ranges

(C) Relative cell reference

(D) Mixed cell reference

Correct Answer: (D) Mixed cell reference

Solution:

Concept:

- A relative reference changes both its row and column as appropriate when copied; an absolute reference fixes both.
- A mixed reference fixes only one component, using a dollar sign before the fixed row number or column letter.

Step 1: Recognise the one-component lock In $A1 the column A is fixed while the row can change. In A$1 the row 1 is fixed while the column can change. Each combines one absolute component and one relative component.

Step 2: Eliminate the other reference types An absolute reference such as A1 holds both components constant, so (A) is too restrictive. A range is a group of cells, not the reference behaviour described. A relative reference such as A1 fixes neither component. Only a mixed reference fixes either the row or the column.

Step 3: Conclusion The reference is a Mixed cell reference. Hence, the correct option is (D).

Quick Tip to Solve: Count the dollar signs: one fixes a single component (mixed); two fix both components (absolute).

---

28. Computerised Accounting system takes (i) _____ as inputs which are processed through (ii) _____ to generate reports. [1 mark]

Solution:

Concept:

- A computerised accounting system follows the input-process-output sequence.
- Transaction data enter the system; accounting software applies programmed accounting rules to produce information.

Step 1: Identify the input The input consists of accounting data, such as the amounts, dates and account details of financial transactions. These raw facts must be entered before meaningful accounting reports can be prepared.

Step 2: Identify the processing medium Accounting software classifies, records and processes the entered data according to programmed procedures. It then generates outputs such as ledgers, trial balances and financial reports. Thus software performs the processing between data entry and report generation.

Step 3: Conclusion (i) Data (accounting transaction data); (ii) Accounting software.

Quick Tip to Solve: Remember the sequence: transaction data enter, accounting software processes, and reports emerge.

29. A code which consists of alphabet or abreviation as symbol to codify a piece of information is known as _____ . [1 mark]

Solution:

Concept:

- Coding assigns a short symbol or code to identify a particular item of information.
- A mnemonic code uses meaningful letters or abbreviations that help the user remember the item represented.

Step 1: Recognise the defining feature The question specifically describes alphabets or abbreviations as symbols. When these letters suggest the name or meaning of the item, the code acts as a memory aid rather than merely indicating a serial position.

Step 2: Illustrate the coding method For example, BNK may identify Bank and PUR may identify Purchases. The letters suggest the relevant account name, making the code easier to recall. This distinguishes a mnemonic code from a purely sequential numeric code such as 001, 002 and 003.

Step 3: Conclusion The code is known as a Mnemonic code.

Quick Tip to Solve: When letters or an abbreviation suggest the item name, identify the code as mnemonic (a memory aid).

30. Explain 'Null Values' and 'Complex Attributes'. [3 marks]

Solution:

Concept:

- An attribute is a property used to describe an entity in a database, such as an employee's name or telephone number.
- Attributes may have missing values, or may combine several component values and multiple occurrences.

Step 1: Explain null values A null value represents the absence of an actual value for an attribute. It may arise because the value is unknown, has not yet been supplied, or does not apply to that entity. For example, the telephone-number attribute may be null if an employee has not provided a telephone number. A null is not the number zero or a recorded empty string: those are specified values, while null signals missing or inapplicable information.

Step 2: Explain complex attributes A complex attribute combines the characteristics of composite and multivalued attributes. A composite attribute can be divided into meaningful components; a multivalued attribute can have more than one value for the same entity. For example, an employee may have several addresses, and each address may contain house number, street, city and PIN code. The collection of addresses is multivalued, and each address is composite, so their combination forms a complex attribute.

Step 3: Distinguish the two ideas Null concerns whether an attribute value is available for an entity. Complexity concerns how an attribute is structured. An address divided only into components is composite; several simple telephone numbers form a multivalued attribute. An attribute combining multiple occurrences with internal components is complex.

Step 4: Conclusion Null values indicate absent, unknown or inapplicable attribute values. Complex attributes combine composite and multivalued features.

Quick Tip to Solve: Test separately: no supplied value indicates null; repeated values with internal subparts indicate a complex attribute.

OR

30. Explain any two types of vouchers used for entry in Tally software with the help of examples. [3 marks]

Solution:

Concept:

- A voucher is the record used to enter a business transaction in accounting software. Its type identifies the nature of the transaction and the accounts affected.
- Receipt and payment vouchers record money received and money paid, respectively, through cash or bank. Supporting documents establish the amount, date and purpose of the transaction.

Step 1: Explain a receipt voucher with an example A **receipt voucher** records an inflow of money

into the business, either in cash or through a bank. It is used, for example, for collections from customers, interest received or capital introduced in cash. The appropriate cash or bank account is debited, while the account explaining the receipt is credited.

For example, if a customer, Ravi, pays Rs 10,000 in cash against an outstanding bill, a receipt voucher records Rs 10,000 received in Cash and reduces Ravi's outstanding balance by the same amount. The receipt is a collection of an existing debt; it is not a fresh sale.

Step 2: Explain a payment voucher with an example A **payment voucher** records an outflow of money from the business, either in cash or through a bank. It is used for payments such as rent, salaries, electricity charges and amounts due to suppliers. The account for the expense or liability settled is debited and the cash or bank account used for payment is credited.

For example, rent of Rs 5,000 paid by cheque is entered through a payment voucher. The transaction records rent expense of Rs 5,000 and a reduction of Rs 5,000 in the bank balance. The voucher contains the transaction date, relevant ledger accounts, amount and a narration identifying the payment.

Step 3: Conclusion Two types are **receipt vouchers**, such as Rs 10,000 collected from a customer, and **payment vouchers**, such as Rs 5,000 rent paid by cheque.

Quick Tip to Solve: First ask whether money is entering or leaving the business: choose Receipt for an inflow and Payment for an outflow, then identify whether Cash or Bank is affected.

31. Explain any two subsystems of accounting information system. [4 marks]

Solution:

Concept:

- An accounting information system (AIS) collects, processes and reports financial transaction data to provide useful accounting information.
- A subsystem handles a particular group of related transactions. The subsystems share relevant data with one another and with the general ledger so that the complete accounting records remain consistent.

Step 1: Explain the cash and bank subsystem The **cash and bank subsystem** records and controls all cash and bank receipts and payments. Its inputs include receipt vouchers, payment vouchers, deposit details and cheque details. It processes these transactions to update cash and bank balances and maintains the cash book and bank-related records.

It provides reports showing money received, money paid and the balance available on a particular date. These records help management monitor liquidity and help in comparing the bank records with the bank statement for reconciliation. For example, a receipt of Rs 20,000 from a customer increases the relevant cash or bank balance; a cheque payment of Rs 8,000 to a supplier reduces the bank balance. Information about these settlements is also passed to the relevant customer or supplier records.

Step 2: Explain the sales and accounts receivable subsystem The **sales and accounts receivable subsystem** records sales and maintains information about amounts due from customers. It uses

sales invoices, credit notes for sales returns and details of receipts from customers. It updates sales records and individual customer accounts so that the amount outstanding from each customer can be determined.

Its outputs include sales summaries, customer statements and ageing reports that group unpaid amounts according to how long they have been outstanding. These reports help management follow up overdue debts and monitor credit granted to customers. For example, a credit sale of Rs 30,000 creates a customer receivable of Rs 30,000. When Rs 18,000 is subsequently collected and communicated by the cash and bank subsystem, the customer's balance falls to Rs 12,000. The collection settles part of the receivable; it does not create another sale.

Step 3: Conclusion The **cash and bank subsystem** manages receipts, payments and available funds, while the **sales and accounts receivable subsystem** manages sales and amounts recoverable from customers. Their linked records support complete and consistent accounting information.

Quick Tip to Solve: Explain each subsystem through its transactions, the records it updates and the reports it produces; use a credit sale followed by collection to show how the two subsystems connect.

OR

31. What is meant by a graph? Explain any three of its advantages. [4 marks]

Solution:

Concept:

- A graph is a visual representation of numerical data, using plotted points, lines, bars or other graphical forms to communicate values and relationships.
- Graphs convert figures in a worksheet into a form that makes comparison, patterns and changes easier to understand. A meaningful title, labels and a suitable scale help the reader interpret them correctly.

Step 1: State the meaning of a graph A graph presents numerical information pictorially. Instead of reading each number in a long table, the user can see the relative sizes of values and the relationships between them. For example, monthly sales can be represented by a line graph, with months on the horizontal axis and sales on the vertical axis. The position of each plotted point represents the sales for that month.

Step 2: Explain easy understanding of data A graph summarises a large amount of numerical information in a compact visual form. A reader can grasp the main message quickly without examining every worksheet entry. For instance, the highest and lowest sales months can be identified immediately from the highest and lowest points of a sales graph. Thus, graphs make numerical reports easier to communicate, including to readers who are less comfortable with detailed tables.

Step 3: Explain convenient comparison Graphs make comparisons between categories, periods or related series easier. A bar graph of sales at two branches, drawn using the same scale, shows which branch has higher sales and the relative size of the difference. This visual comparison helps management recognise better performance and areas needing attention more quickly than a lengthy

list of figures.

Step 4: Explain identification of trends and patterns A graph reveals the direction of change over time, such as a rising, falling or fluctuating sales pattern. It can also highlight seasonal peaks or unusual movements that deserve investigation. Such patterns provide useful support for planning and decision-making; for example, a recurring rise in sales before a festival can help in planning stock requirements.

Step 5: Conclusion A graph is a visual presentation of numerical data. Its three advantages are easy understanding of large amounts of data, convenient comparison, and clear identification of trends and patterns.

Quick Tip to Solve: Give the definition first, then explain three distinct advantages with examples: understanding, comparison and trends. Naming chart types alone does not explain advantages.

---

32. A.R. Associates Ltd. have their offices in Mumbai and Vadodara. HRA for Mumbai is ₹ 10,000 and Vadodara is ₹ 8,000. DA is calculated on Basic Pay (BP) as 15% for BP $\leq$ ₹ 14,000 and 10% for BP $\geq$ ₹ 15,000. Standard number of days are taken as 30 days per month.

Give the formulae and calculate the amount of Gross Salary using Excel for the following employees :

(i) Neerja is working in Mumbai office. Her Basic Pay is ₹ 30,000. She availed leave without pay for 5 days.

(ii) Manan is working in Vadodara office. His Basic Pay is ₹ 14,000. He did not avail any leave without pay. [6 marks]

Solution:

Concept:

- Full-month gross salary is Basic Pay (BP) plus Dearness Allowance (DA) plus House Rent Allowance (HRA). DA is calculated at the rate applicable to the employee's basic pay, while HRA depends on the office location.
- With a standard month of 30 days, paid days equal 30 − leave without pay. Gross salary payable is the full-month gross salary multiplied by the fraction paid days$/30$.
- Excel's IF function selects between values according to a logical test. Cell references allow the payroll calculation to be copied to another employee's row without rewriting the arithmetic.

Step 1: Arrange the input data in Excel Use row 1 for headings and rows 2 and 3 for Neerja and Manan respectively. Enter the following data; Basic Pay is the stated full-month basic pay.

Row	A: Employee	B: Office	C: BP (Rs)	D: Unpaid leave
2	Neerja	Mumbai	30,000	5
3	Manan	Vadodara	14,000	0

Reserve E for DA rate, F for full-month DA, G for full-month HRA, H for paid days, I for full-month gross salary and J for gross salary payable. This separates each component so that the calculation can be checked easily.

Step 2: Enter the payroll formulae Enter the formulae below in row 2 and copy them down to row 3.

Cell and purpose	Excel formula
E2: DA rate	`=IF(C2<=14000,15%,IF(C2>=15000,10%,NA()))`
F2: Full-month DA	`=C2*E2`
G2: Full-month HRA	`=IF(B2="Mumbai",10000,8000)`
H2: Paid days	`=30-D2`
I2: Full-month gross	`=SUM(C2,F2,G2)`
J2: Gross payable	`=ROUND(I2*H2/30,2)`

The HRA formula distinguishes the two offices given in the question. The DA formula follows the two printed pay bands exactly. The NA() branch flags a pay between Rs 14,000 and Rs 15,000, for which no rate is specified; neither employee falls in that interval. Determine the DA rate from the stated monthly BP before applying the paid-day fraction.

Step 3: Calculate Neerja's gross salary Neerja works in Mumbai, so her full-month HRA is Rs 10,000. Her basic pay of Rs 30,000 lies in the 10% DA band.

$$\begin{aligned} \text{DA} &= 30,000 \times 10\% = \text{Rs } 3,000, \\ \text{Full-month gross} &= 30,000 + 3,000 + 10,000 \\ &= \text{Rs } 43,000, \\ \text{Paid days} &= 30 - 5 = 25, \\ \text{Gross payable} &= 43,000 \times \frac{25}{30} \\ &= \text{Rs } 35,833.33. \end{aligned}$$

Thus, unpaid leave reduces the monthly gross entitlement in the ratio of paid days to standard days. In Excel, the direct check is `=ROUND((30000+30000*10%+10000)*25/30,2)`.

Step 4: Calculate Manan's gross salary Manan works in Vadodara, so his full-month HRA is Rs 8,000. His basic pay is exactly Rs 14,000 and therefore qualifies for DA at 15%, since the lower band includes its upper limit.

$$\begin{aligned} \text{DA} &= 14,000 \times 15\% = \text{Rs } 2,100, \\ \text{Full-month gross} &= 14,000 + 2,100 + 8,000 \\ &= \text{Rs } 24,100, \\ \text{Paid days} &= 30 - 0 = 30, \\ \text{Gross payable} &= 24,100 \times \frac{30}{30} \\ &= \text{Rs } 24,100. \end{aligned}$$

There is no leave deduction for Manan. The direct Excel check is `=(14000+14000*15%+8000)*30/30`.

Step 5: Conclusion The gross salaries payable are **Rs 35,833.33 for Neerja** and **Rs 24,100 for Manan**. Neerja is paid for 25 days, whereas Manan receives his full-month gross salary for all 30 days.

Quick Tip to Solve: Select the DA band from monthly Basic Pay first, add HRA for the correct city, and then multiply gross salary by paid days divided by 30. Round only the final payable amount.