Skillshort

Self-Study Preparation Pack

CS EXECUTIVE

Paper 4: Corporate Accounting and Financial Management (CAFM)

Chapter-wise Detailed Notes

For the December 2026 examination (Mon 28 Dec 2026, 2:00–5:15 pm incl. 15 min reading) · ICSI Syllabus 2022 · Group 1 · Companies Act 2013, Schedule III, AS and Ind AS as amended up to 31 May 2026

100 marks · 3 hours | Part I Corporate Accounting 60 · Part II Financial Management 40

Numericals carry about 70% of marks | Working notes + formulas earn step marks

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This subject pack has 6 parts

1 Chapter-wise notes

2 Important topics & weightage

3 Past papers: trends & links

4 Mock tests + solutions

5 Chapter practice questions

6 Last-week plan & strategy

Prepared by Skillshort for self-study. Original explanations and questions; not an official ICSI publication. Items marked VERIFY should be checked against the latest official material.

How to use these notes

These notes follow the **19 lessons of the ICSI study material** for Corporate Accounting and Financial Management (Syllabus 2022; study material updated to 30 November 2025 – no separate supplement is listed for Paper 4 for December 2026 VERIFY). Each chapter gives the rules, the formats and at least one worked example. Practise every format in writing – this paper is mostly numerical.

Paper at a glance

Item	Detail
Marks / time	100 marks, 3 hours (2:00–5:15 pm with 15 minutes' reading time)
Part I – Corporate Accounting (60 marks)	Lessons 1–10: Q1 case study (company accounts / ratio analysis), Q2, Q3, Q4 or Q4A – journal entries, underwriting, debentures, ESOP, consolidation, cash flow, ratios
Part II – Financial Management (40 marks)	Lessons 11–19: Q5 case study (capital budgeting / cost of capital), Q6 or Q6A – leverage, dividend, working capital, security analysis, short theory
Choice	Internal choice in **Q4 / Q4A** and **Q6 / Q6A** (pattern of the Dec 2024 – June 2026 papers) VERIFY
Applicable law	Companies Act 2013 and Schedule III, Accounting Standards / Ind AS as amended up to **31 May 2026**
Pass	40% in each paper and 50% aggregate in the group

Recent papers have been fully written answers – no OMR or MCQ section was seen VERIFY. Check the instructions printed on your question paper.

Notes chapter to ICSI lesson map

Notes chapter	ICSI lesson	Notes chapter	ICSI lesson
1–3	Lessons 1–3	11 Introduction to FM and Time Value of Money	Lessons 11–12
4 Share Capital and Debentures	Lessons 4–5	13–19	Lessons 13–19
6–10	Lessons 6–10	Last-Day Formula Sheet	All lessons

EXAM TIP Numerical answer rules

- Start with **working notes** (WN 1, 2 ...), then the final statement (Schedule III format, journal, ledger).
- State **assumptions** clearly; round to 2 decimals; show the formula before substitution.
- Journal entries: **narration** + date; cash flow: show the **sign** (inflow / outflow) and reconcile with cash balances.
- FM: always conclude – **accept / reject**, **which option**, **optimum** payout.

Chapter 1: Introduction to Accounting

In this chapter: Book keeping · Accounting cycle · Single / double entry system · Accounting principles · Concepts & conventions · Types of account · Journal · Ledger · Trial balance · Final accounts

1.1 Accounting cycle

Transaction (source document) → **Journal** (book of original entry) → **Ledger** posting → **Trial balance** → Adjustments (accruals, depreciation, provisions) → **Final accounts** (Trading & P&L, Balance Sheet) → Closing & opening entries

- **Book keeping** = recording; **accounting** = recording + classifying + summarising + interpreting.
- **Double entry**: every debit has equal credit (Luca Pacioli); **single entry** = incomplete records (statement of affairs method).

1.2 Types of account - golden rules

Account	Debit	Credit
Personal (natural, artificial, representative)	The **receiver**	The **giver**
Real (assets)	What **comes in**	What **goes out**
Nominal (expenses, incomes)	**Expenses & losses**	**Incomes & gains**

- Modern (accounting equation) rule: Assets ↑ Dr, Liabilities/Capital ↑ Cr, Expenses ↑ Dr, Revenue ↑ Cr.

Accounting equation = Assets = Liabilities + Capital

1.3 Concepts & conventions

- **Concepts**: business entity, money measurement, **going concern**, accounting period, cost, dual aspect, **realisation**, **accrual**, matching.
- **Conventions**: consistency, **conservatism (prudence)**, materiality, full disclosure.
- AS 1 fundamental assumptions: **going concern, consistency, accrual**; policy selection: prudence, substance over form, materiality.

1.4 Trial balance & errors

- Trial balance = list of ledger balances; tallies if arithmetical accuracy of postings.
- Errors **not disclosed**: omission, commission (wrong person's account, same side), **principle** (capital vs revenue), compensating errors.
- Errors disclosed: one-sided posting, wrong totalling, wrong balance carried → **Suspense account** until rectified.
- **Final accounts**: Trading a/c (gross profit), P&L a/c (net profit), Balance Sheet (financial position) - for companies in **Schedule III** format (Lesson 2).

WORKED EXAMPLE Mini illustration - journal to TB

- Started business with cash ₹1,00,000; bought goods ₹40,000 on credit from Ram; sold goods costing ₹30,000 for ₹45,000 cash; paid rent ₹5,000.

Journal = Cash Dr 1,00,000 / Capital Cr; Purchases Dr 40,000 / Ram Cr; Cash Dr 45,000 / Sales Cr; Rent Dr 5,000 / Cash Cr

Trial balance = Dr: Cash 1,40,000 + Purchases 40,000 + Rent 5,000 = **1,85,000**; Cr: Capital 1,00,000 + Ram 40,000 + Sales 45,000 = **1,85,000** ✓

Profit = Sales 45,000 − COGS 30,000 (closing stock 10,000) − Rent 5,000 = **₹10,000**

Chapter 2: Introduction to Corporate Accounting

In this chapter: Records of accounts to be maintained by a company s.128 · Preparation & presentation of FS · Schedule III · Disclosure requirements · True & fair view · XBRL

2.1 Schedule III (Division I) - Balance Sheet skeleton

EQUITY & LIABILITIES	ASSETS
1 Shareholders' funds: share capital; reserves & surplus; money received against share warrants	1 Non-current: PPE & intangibles (PPE, intangibles, CWIP, intangibles under development); non-current investments; DTA (net); LT loans & advances; other NCA
2 Share application money pending allotment	2 Current: current investments; inventories; trade receivables; cash & cash equivalents; ST loans & advances; other current assets
3 Non-current liabilities: LT borrowings; DTL (net); other LT liabilities; LT provisions	
4 Current liabilities: ST borrowings; trade payables (MSME/others); other CL; ST provisions	

- **Current** if: realised/settled in **operating cycle** (assume **12 months** if not identifiable), held for trading, due within 12 months, or **no unconditional right to defer** settlement ≥ 12 months.

NOTE Additional disclosures (amended Schedule III)

- **Shareholding of promoters** & % change; **ageing** of trade receivables (< 6 m, 6 m-1 yr, 1-2, 2-3, > 3 yrs) & trade payables (< 1, 1-2, 2-3, > 3 yrs; MSME/others; disputed).
- **CWIP & intangibles under development** ageing + overdue completion schedule.
- Title deeds not in company's name; **benami** property; **wilful defaulter**; relationship with **struck-off** companies; charges pending; layers of companies.
- **Ratios** (current, D/E, DSCR, ROE, inventory TO, receivables TO, payables TO, net capital TO, net profit, ROCE, return on investment) with explanation if change **> 25%**.
- **CSR** spent/unspent; **crypto/virtual currency**; undisclosed income surrendered; loans to promoters/directors/KMP.

2.2 Dividend (s.123) & Free reserves

- Out of **current year profit** (after depreciation), **previous years' undistributed profits**, or both; transfer to reserves **optional**.
- Out of free reserves (inadequate profits): rate ≤ **average of 3 preceding years**; withdrawal ≤ **10% of paid-up capital + free reserves**; first set off **current year losses**; balance reserves ≥ **15% of paid-up capital**.
- Unrealised gains, revaluation, FV changes **can't** be used for dividend.
- Dividend deposited in separate bank a/c within **5 days**; paid within **30 days**.

2.3 Schedule III - Statement of Profit & Loss (Part II)

Line	Content
I	Revenue from operations
II	Other income
III	Total income (I + II)
IV	Expenses: cost of materials consumed; purchases of stock-in-trade; changes in inventories of FG, WIP & stock-in-trade; employee benefits; finance costs; depreciation & amortisation; other expenses
V-VI	Profit before exceptional & extraordinary items & tax → exceptional items
VII-IX	Extraordinary items → PBT → Tax (current, deferred)

Line	Content
X-XV	Profit from continuing ops; discontinuing ops (AS 24) & tax; profit for the period
XVI	EPS - basic & diluted

2.4 Division I vs Division II

Point	Div I (AS)	Div II (Ind AS)
Statement of changes in equity	Not required	Required
OCI	No	Yes - items that will/won't be reclassified
Equity section	Shareholders' funds	Equity share capital + other equity
Financial assets	Not separate	Separate line items

- **Division III** for NBFCs under Ind AS.

2.5 Schedule III - exam rules

- Figures rounded per turnover: < ₹100 cr → hundreds/thousands/lakhs/millions or decimals; ≥ ₹100 cr → lakhs/millions/crores.
- **Proposed dividend** → disclosed in notes (not liability).
- Debit balance of P&L → shown under **reserves & surplus** as negative.
- Unpaid dividend → other current liabilities.

EXAM TIP FAQ

- Current maturities of long-term debt → **short-term borrowings** (Div I amended).
- Cheques on hand → cash & cash equivalents; earmarked balances → bank balances other than cash.
- Capital advances → long-term loans & advances (not CWIP).

2.6 Books, true & fair view

- **s.128**: books on **accrual basis & double entry** at registered office; electronic mode (server in India, daily back-up); preserve **8 years**.
- **s.129**: FS give **true & fair view**, comply with **notified AS / Ind AS**, in **Schedule III** form; consolidated FS for subsidiaries/associates/JVs (AOC-1).
- True & fair = no material misstatement, consistent policies, adequate disclosure, substance over form; auditor reports on it (s.143).

2.7 XBRL filing

- **XBRL** = eXtensible Business Reporting Language - machine-readable tagging of FS (taxonomy).
- Mandatory (Companies (Filing of Documents & Forms in XBRL) Rules 2015): **listed** companies & their Indian subsidiaries; paid-up ≥ **₹5 cr**; turnover ≥ **₹100 cr**; companies preparing FS under **Ind AS** (Companies (Ind AS) Rules).
- Excluded: banking, insurance, power, NBFC companies VERIFY.
- Filed as **AOC-4 XBRL** within 30 days of AGM; benefits - analysis, comparability, regulator surveillance.

Chapter 3: Accounting Standards (AS)

In this chapter: Applicability · Interpretation · Scope & compliance · International Financial Reporting Standards · Overview of AS · AS vs Ind AS vs IFRS

3.1 Meaning & objectives

- AS = **written policy documents** on **recognition, measurement, presentation & disclosure** of transactions in financial statements.
- Issued by ICAI through **Accounting Standards Board (ASB, 1977)**; for companies, **Central Govt notifies** u/s 133 Companies Act, 2013 in consultation with **NFRA** - currently **Companies (Accounting Standards) Rules, 2021**.
- Objective: **harmonise** diverse practices → comparability, reliability, credibility.

RMPD – R Recognition; M Measurement; P Presentation; D Disclosure

3.2 Standard-setting process (ICAI)

Identify broad areas → Constitute study groups → Preliminary draft → ASB → Circulate draft to Council members & specified bodies (MCA, CAG, SEBI, RBI, IRDAI, CBDT...) → Exposure Draft for public comments → ASB considers comments → final draft → Council approves → AS issued (Govt notifies for companies)

3.3 Benefits vs Limitations

Benefits	Limitations
Reduce/eliminate confusing variations	Choice between alternatives is difficult
Disclosures beyond law	Rigidity in application
Inter-firm & intra-firm comparability	Cannot override the statute
Credibility for users	Scope restricted (only material items)

3.4 Ind AS & IFRS convergence

- **IFRS** issued by IASB (London). India chose **convergence**, not adoption → **Ind AS** (Companies (Ind AS) Rules, 2015).
- Ind AS mandatory for listed & large companies (net worth >= ₹250 crore) in phases; others follow **AS** (Inter syllabus).
- Carve-outs = departures from IFRS to suit Indian conditions.

EXAM TIP Frequently asked

- Who notifies AS for companies? → **Central Government** in consultation with **NFRA** (s.133).
- Can AS override law? → **No**; if statute conflicts, statute prevails (disclose).
- Purpose of Exposure Draft? → Public comments before finalisation.

COMMON MISTAKE Mistakes to avoid

- Writing "SEBI issues AS" - wrong; SEBI is only consulted.
- Mixing Ind AS numbering with AS (e.g., Ind AS 115 is not AS 9).
- AS apply only to **material** items.

3.5 Companies: SMC criteria (Companies (AS) Rules, 2021)

- **Small & Medium-sized Company (SMC)** = a company that:
- (a) equity/debt **not listed** or in process of listing;
- (b) is **not** a bank, financial institution or insurance company;
- (c) **turnover** (excluding other income) <= **₹250 crore** in immediately preceding accounting year;
- (d) **borrowings** (incl. public deposits) <= **₹50 crore** at any time in immediately preceding accounting year;

- (e) is **not a holding or subsidiary** of a non-SMC.
- Status decided at **end of the accounting period**; a company that ceases to be SMC can't use relaxations; if becomes SMC, relaxations only after it **remains SMC for 2 consecutive periods**.

NOTE **Non-company entities - revised criteria (periods beginning on/after 1-4-2024)**

Level	Criteria (summary)
Level I (Large)	Listed/in process; bank, FI, insurer; turnover > ₹250 cr; borrowings > ₹50 cr; holding/sub of Level I
Level II (MSME)	Turnover > ₹50 cr up to 250 cr OR borrowings > ₹10 cr up to 50 cr
Level III (MSME)	Turnover > ₹10 cr up to 50 cr OR borrowings > ₹2 cr up to 10 cr
Level IV (MSME)	All others (turnover <= ₹10 cr & borrowings <= ₹2 cr)

- Non-company entities (revised criteria, periods from 1-4-2024): **MSME** = turnover up to ₹250 cr & borrowings up to ₹50 cr; **AS 3, AS 17, AS 20 and AS 24 not applicable to any MSME**. Level-wise thresholds above: VERIFY

3.6 SMC company - exemptions / relaxations

AS	For SMC
AS 3	Not mandatory (also s.2(40): no CFS for OPC, small, dormant co.)
AS 17	Not applicable
AS 15	Relaxation in actuarial valuation/disclosure VERIFY
AS 19, 29	Certain disclosures exempt
AS 20	Diluted EPS & some disclosures exempt
AS 28	Value in use by reasonable estimate (no PV calc)
AS 25	Only if entity prepares interim FR

EXAM TIP **Exam points**

- A private co. with turnover ₹240 cr but borrowings ₹60 cr last year → **non-SMC** (all AS apply).
- Small company (Co. Act) limits now **₹10 cr capital / ₹100 cr turnover** - this is different from SMC under AS Rules.
- Disclose in FS: "the company is an SMC and has complied with AS applicable to SMC".

COMMON MISTAKE **Watch out**

- Turnover test uses **preceding year**, borrowings test uses **any time** during preceding year.
- A subsidiary of a listed (non-SMC) company is **non-SMC** even if tiny.
- Do not use non-company levels for companies.

3.7 AS vs Ind AS vs IFRS

Point	AS	Ind AS	IFRS
Issued by	ICAI (notified by CG, Companies (AS) Rules 2021)	MCA (Ind AS Rules 2015)	IASB
Applies to	Non-Ind AS companies, SMCs	Listed / net worth ≥ ₹250 cr & group	140+ jurisdictions
Framework	Prudence-based	Fair value, substance	Fair value, principles
FS components	BS, P&L, CFS (not SMC)	+ Statement of changes in equity, OCI	Same as Ind AS
Extraordinary items	Allowed (AS 5)	Prohibited	Prohibited

Point	AS	Ind AS	IFRS
Proposed dividend	Not a liability (after 2016)	Not a liability	Not a liability

3.8 Ind AS roadmap

- **Phase I** (1-4-2016): companies with **net worth ≥ ₹500 cr** (listed/unlisted) + holding, subsidiary, JV, associates.
- **Phase II** (1-4-2017): **listed** / in process of listing + unlisted net worth ≥ **₹250 cr** + group.
- **NBFCs**: net worth ≥ ₹500 cr (1-4-2018); ≥ ₹250 cr & listed (1-4-2019); banks & insurers - deferred VERIFY.
- **Voluntary** adoption allowed - **irreversible**; once Ind AS, always Ind AS (even if net worth falls).

Chapter 4: Accounting for Share Capital and Debentures (Lessons 4–5)

In this chapter: Issue of shares · Forfeiture & reissue · Premium · Redemption & conversion · Capital redemption reserve · Bonus shares · Rights issue · ESOPs & ESPS · Sweat equity · Underwriting · Book building · Debentures - accounting, DRR, redemption & conversion

4.1 Issue of shares - entries

Bank Dr → Share Application A/c → Share Application Dr → Share Capital (+ Securities Premium) → Allotment due: Share Allotment Dr → Share Capital → Calls: Share Call Dr → Share Capital → Receipts: Bank Dr → Allotment/Calls

- **Over-subscription**: reject or **pro-rata** allotment - excess application adjusted to allotment/calls.
- **Securities premium** s.52: use for bonus shares, preliminary expenses, issue expenses/discount, premium on redemption, buy-back.

4.2 Forfeiture & re-issue

On forfeiture = Dr Share Capital (called-up) ; Cr Calls in arrears ; Cr Forfeited Shares (amount received)

On re-issue = Dr Bank + Dr Forfeited Shares (discount) ; Cr Share Capital

Capital reserve = Forfeited amount on re-issued shares – discount on re-issue

- Discount on re-issue **cannot exceed** amount forfeited on those shares.
- If premium was received before forfeiture → not reversed.

4.3 Rights, bonus & sweat equity

Issue	Section	Key points
Rights	s.62(1)(a)	Offer to existing holders pro-rata; 7-30 days; renounceable
Bonus	s.63	From free reserves, securities premium, CRR; not revaluation reserve; fully paid
Sweat equity	s.54	To employees/directors for know-how/value addition; special resolution; lock-in 3 yrs VERIFY
Preferential	s.62(1)(c) & s.42	Special resolution; valuation report

4.4 ESOP & ESPS

- **ESOP**: option to buy shares at a future date at pre-determined price; grant → **vesting** (min 1 yr) → exercise.
- Accounting (Guidance Note / Ind AS 102): **fair value** (or intrinsic value under GN) of options recognised as **employee compensation expense** over vesting period.

Expense p.a. = Options expected to vest × Fair value ÷ Vesting period (true-up for forfeitures)

- Entries: Dr Employee comp. expense; Cr Stock Options Outstanding A/c → on exercise: Dr Bank + Dr SOO; Cr Share Capital + Securities Premium.
- **ESPS**: shares offered at discount; difference = employee cost.

4.5 Redemption of preference shares s.55

- Only **fully paid** shares; redeem out of **profits available for dividend** or **fresh issue** proceeds.

CRR = Nominal value redeemed – Proceeds of fresh issue (face value part) for redemption

- Premium on redemption: from **securities premium** or profits (for non-Ind AS companies) VERIFY.
- CRR may be used **only for fully paid bonus shares**.

4.6 Debentures - issue & redemption

- Issue at par/premium/discount; redeemable at par/premium → **loss on issue** written off over term.

- **DRR** (Rule 18(7)): not required for listed companies, NBFCs & HFCs; **10% of outstanding** value for other unlisted companies; **15% investment/deposit** of amount maturing in the year by 30 April VERIFY.
- Methods: lump sum, instalments (draw), purchase in open market (ex/cum interest), conversion, **sinking fund**.

4.7 Underwriting - net liability

Gross liability = Issue × underwriting %

Less: Marked applications = Credited to the respective underwriter

Less: Unmarked applications = Credited in **ratio of gross liability** (or as per agreement)

Net liability = Gross – marked – unmarked (if negative, re-distribute surplus)

- **Firm underwriting**: underwriter's own applications - treated as marked (or unmarked) per agreement VERIFY.
- Commission ceiling (s.40(6)/Rule 13): **shares 5%**, **debentures 2.5%** of issue price (or AoA if lower).

WORKED EXAMPLE Forfeiture illustration

- 1,000 shares of ₹10; application ₹2 paid; allotment ₹3 unpaid → forfeited.

Forfeiture = Dr Share Capital 5,000 ; Cr Allotment 3,000 ; Cr Forfeited Shares 2,000

- Re-issue **600** shares as ₹10 fully paid at **₹9**: Dr Bank 5,400; Dr Forfeited 600; Cr Share Capital 6,000.

Capital reserve = 600 × 2 – 600 = **₹600** (balance 800 stays in Forfeited Shares for 400 shares)

EXAM TIP FAQ - shares

- Calls in arrears - interest up to **10% p.a.** (Table F) VERIFY; calls in advance - interest up to 12% p.a.
- Bonus out of **revaluation reserve** - not permitted.
- Shares issued at discount - **void** except sweat equity (s.53).
- Buy-back & redemption both need **CRR** for amount from free reserves.

4.8 Book building & differential rights

- **Book building**: price discovery - price band (cap ≤ 120% of floor), bids collected by BRLMs, cut-off price; **no accounting entry** until allotment (application money → share capital / premium on allotment).
- **Equity shares with differential voting rights (DVR)** - Rule 4 SCD Rules: authorised by AOA, **ordinary resolution**, DVR shares ≤ **74%** of total post-issue paid-up equity VERIFY; accounted as separate class of equity in Note 1.
- **ESPS** (employee stock purchase) - shares issued at discount to market; difference = **employee benefit expense** (Guidance Note / Ind AS 102).

Chapter 6: Related Aspects – Buy-back & Other Company Accounts

In this chapter: Accounting for ESOP · Buy-back of shares · Equity shares with differential rights · Underwriting & debentures - related entries

6.1 s.68 essentials

- Sources: **free reserves**, **securities premium**, proceeds of an **earlier issue of different kind** of shares/securities (not same kind).
- Authorised by **Articles**; **Board resolution** if ≤ **10%** of paid-up equity + free reserves; else **special resolution** (≤ **25%**).
- Equity buy-back ≤ **25% of total paid-up equity capital** in a FY.
- Post buy-back **debt ≤ 2 × (paid-up capital + free reserves)** (higher ratio if notified for a class VERIFY).
- Only **fully paid** securities; gap of **1 year** between buy-backs; complete within **1 year** of resolution.
- Extinguish/physically destroy within **7 days** of completion; no fresh issue of same kind for **6 months** (except bonus/conversion of existing obligations) VERIFY.

6.2 Three tests (do all, take lowest)

1. Shares outstanding test = 25% × existing equity shares (number)

2. Resources test = 25% × (Paid-up capital + free reserves) ÷ buy-back price

3. Debt-equity test = Max equity reduction = Present equity − (Debt ÷ 2); shares = reduction ÷ price

- Equity for tests usually = paid-up capital + free reserves (incl. securities premium; exclude revaluation reserve); treatment of CRR in post-buy-back equity as per study material VERIFY.

6.3 Journal entries

Sell investments (if needed): Bank Dr / Investment / P&L → Equity share buy-back a/c Dr To Bank (at buy-back price) → Equity share capital Dr (face value) + Premium (Securities premium/free reserves) Dr To Equity share buy-back a/c → Free reserves Dr To **Capital Redemption Reserve** (face value bought back out of free reserves/premium) (s.69)

COMMON MISTAKE Mistakes in buy-back

- Using **revaluation reserve** or **CRR** as free reserve - not allowed.
- Forgetting the **10%/25%** approval distinction and the **debt-equity** test → wrong maximum.
- Not transferring nominal value to **CRR** when funded from free reserves.
- s.70: **no buy-back** through subsidiary/investment company, or if **default** in deposits/debentures/term loans/dividend (allowed 3 years after default remedied).

EXAM TIP Frequently asked

- Buy-back **out of proceeds of fresh issue** of preference shares → no CRR needed for that portion.
- Securities premium can be used for **premium** portion of buy-back.
- MCQ: max buy-back allowed when debts exceed 2:1 limit → **nil**.

WORKED EXAMPLE **Worked illustration: maximum buy-back**

- Equity capital ₹1,000 lakh (100 lakh shares of ₹10); free reserves ₹1,500 lakh (incl. securities premium); debt ₹3,000 lakh; buy-back price ₹30.

Test	Working	Shares (lakh)
Shares outstanding	25% × 100	25.00
Resources	25% × 2,500 = 625 ÷ 30	**20.83**
Debt-equity	Min equity 3,000 ÷ 2 = 1,500; reduction 2,500 − 1,500 = 1,000 ÷ 30	33.33

- Maximum = **lowest = 20.83 lakh shares** (resources test). Needs **special resolution** (> 10%).

WORKED EXAMPLE **Entries for the above (say 20 lakh shares bought)**

- Equity share buy-back A/c Dr 600 To Bank 600
- Equity share capital Dr 200 + Securities premium Dr 400 To Equity share buy-back A/c 600
- General reserve Dr 200 To **Capital Redemption Reserve** 200 (s.69)
- (₹ in lakh; premium ₹20 × 20 lakh = 400 from securities premium/free reserves.)

Chapter 7: Consolidation of Accounts

In this chapter: Standalone & consolidated FS · Holding company · Subsidiary companies · Associate companies & joint venture · Accounting treatment & disclosures

7.1 AS 21 – who consolidates?

- **Parent** presents CFS (in addition to separate FS) when it has subsidiaries; **control** = ownership (direct/indirect) of **> 50% voting power** OR control of **composition of board**.
- **Exclude** a subsidiary when control is **temporary** - acquired & held exclusively for disposal in near future (within **12 months** VERIFY) → account under AS 13.
- **Uniform policies**; reporting dates differ by **≤ 6 months** (adjust significant transactions).

7.2 Core consolidation working

Goodwill / (Capital reserve) = Cost of investment – Parent's share of subsidiary's equity **on date of acquisition**

Minority interest = Minority % × (Share capital + pre- & post-acquisition reserves) at BS date

Post-acquisition profit to group = Parent % × (Reserves at BS date – reserves at acquisition)

- Pre-acquisition dividend received → reduce cost of investment.
- Negative MI losses: absorbed by majority unless minority has binding obligation.

7.3 Steps in CFS

Analyse subsidiary's equity: capital profits vs revenue profits → Compute goodwill/capital reserve → Compute minority interest → Eliminate intra-group balances (debtors/creditors, bills, loans) → Eliminate **unrealised profit in full** on intra-group stock/assets → Add line-by-line assets, liabilities, income, expenses

7.4 AS 23 – equity method

- **Associate** = significant influence (**≥ 20%** presumed), not subsidiary or JV.
- Initially at **cost**; goodwill/capital reserve identified and **included in carrying amount** (disclosed).
- Carrying amount ± investor's share of **post-acquisition profits/losses**; **dividends reduce** carrying amount.
- Unrealised profits eliminated **to extent of investor's interest**.
- Losses beyond carrying amount → stop at **zero** (unless guarantees/obligations).
- Used only in **CFS**; separate FS → AS 13. Exclude if held for disposal in near future.

7.5 AS 27 – three forms of JV

Form	Venturer recognises
Jointly controlled operations	Assets it controls, liabilities, expenses incurred & share of income
Jointly controlled assets	Share of joint assets, liabilities, income & expenses
Jointly controlled entity	Separate FS: AS 13 (investment); CFS: **proportionate consolidation**

- Joint control = **contractually agreed sharing of control**.
- Transactions with JCE: recognise only portion of gain attributable to **other venturers**; recognise full loss on NRV fall/impairment.

EXAM TIP Exam points

- Goodwill on consolidation - may be tested for impairment (AS 28); not amortised compulsorily VERIFY.
- Unrealised profit: on stock sold by sub to parent - eliminate **full**, share burden with minority? Treat per ICAI approach in question VERIFY.
- Proportionate consolidation uses venturer's % line by line - no minority interest.

WORKED EXAMPLE **Worked illustration: goodwill & minority interest**

- H acquires **80%** of S on 1-4-2025 for ₹9,00,000. S at acquisition: capital ₹5,00,000 + reserves ₹3,00,000. At 31-3-2026 reserves ₹4,50,000.

Goodwill = 9,00,000 − 80% × 8,00,000 = **₹2,60,000**

Post-acq. profit to group = 80% × 1,50,000 = **₹1,20,000**

Minority interest = 20% × (5,00,000 + 4,50,000) = **₹1,90,000**

WORKED EXAMPLE **Worked illustration: unrealised profit & associate**

- S sold goods to H at cost + 25%; H's closing stock from S ₹1,00,000 → unrealised profit = 1,00,000 × 25/125 = **₹20,000** (eliminate in full).
- Associate: H buys 25% of A for ₹5 lakh (A's net assets ₹16 lakh → **goodwill ₹1 lakh** inside carrying amount); A's profit ₹4 lakh, dividend ₹1 lakh.

Carrying amount = 5 + 25% × 4 − 25% × 1 = **₹5.75 lakh**

Chapter 8: Financial Statement Analysis

In this chapter: Characteristics of good FS · Requirements of financial reporting & recent trends · Best practices · Ratio analysis - liquidity, turnover, leverage, insolvency, profitability · DuPont analysis · Reading & interpretation of FS

8.1 Liquidity & leverage

Current ratio = Current assets ÷ Current liabilities

Quick ratio = (CA − Inventory − Prepaid) ÷ CL

Cash ratio = (Cash + marketable securities) ÷ CL

Debt-equity = Long-term debt ÷ Shareholders' funds

Debt to total funds = Debt ÷ (Debt + Equity)

Interest coverage = EBIT ÷ Interest

DSCR = (PAT + Depreciation + Interest + non-cash) ÷ (Interest + Principal instalment)

8.2 Activity ratios

Inventory turnover = COGS ÷ Average inventory

Receivables turnover = Credit sales ÷ Average receivables

Debtors collection period = 365 ÷ Receivables turnover

Payables turnover = Credit purchases ÷ Average payables

Fixed asset turnover = Sales ÷ Net fixed assets

Capital turnover = Sales ÷ Capital employed

Working capital turnover = Sales ÷ Net working capital

8.3 Profitability & market

GP ratio = Gross profit ÷ Sales × 100

ROCE = EBIT ÷ Capital employed × 100

ROE = PAT (equity) ÷ Equity shareholders' funds

EPS = (PAT − Pref. dividend) ÷ No. of equity shares

P/E ratio = Market price ÷ EPS

Dividend yield = DPS ÷ MPS

Du Pont ROE = Net margin × Asset turnover × Equity multiplier

WORKED EXAMPLE **Construct BS from ratios**

- Sales ₹30 lakh; GP 25%; inventory turnover (on COGS) 6; debtors' period 73 days; current ratio 2; quick ratio 1.2.

COGS = 22.5 L → inventory = **₹3.75 L**

Debtors = 30 L × 73/365 = **₹6 L**

CA – CL = CR 2 & QR 1.2 → (CA – 3.75)/CL = 1.2 and CA = 2 CL → 0.8 CL = 3.75 → **CL = ₹4.69 L**, CA = ₹9.38 L

COMMON MISTAKE **Ratio traps**

- Use **average** balances when available; year-end otherwise (state assumption).
- Inventory turnover on **COGS** (not sales) unless question says otherwise.
- Limitations: historical, window dressing, different accounting policies, inflation, no single standard.

8.4 Ratios by user

User	Interest	Key ratios
Short-term creditors	Liquidity	Current, quick, cash ratio
Long-term lenders	Solvency	D/E, interest coverage, DSCR
Shareholders	Return & value	ROE, EPS, P/E, dividend yield, payout
Management	Efficiency	Turnover ratios, margins, ROCE

8.5 More coverage & market ratios

Preference dividend coverage = PAT ÷ Preference dividend

Fixed charges coverage = (EBIT + Dep) ÷ (Interest + Principal/(1 – t))

Dividend payout = DPS ÷ EPS; Retention = 1 – payout

Earnings yield = EPS ÷ MPS

Market value to book value = MPS ÷ BVPS

Q ratio (Tobin) = Market value of assets ÷ Replacement cost

Net profit ratio = PAT ÷ Sales

Operating ratio = (COGS + Operating exp.) ÷ Sales

8.6 Du Pont tree

ROE → = ROA × Equity multiplier (Total assets ÷ Equity) → ROA = **Net profit margin** (PAT ÷ Sales) × **Asset turnover** (Sales ÷ Total assets)

- Shows whether ROE is driven by **profitability, efficiency or leverage**.
- Extended (5-step): tax burden × interest burden × EBIT margin × asset turnover × equity multiplier.

8.7 Steps to construct a balance sheet from ratios

Start with **given absolute figure** (sales / net worth / capital) → Use GP ratio → COGS; turnover ratios → stock, debtors, creditors, fixed assets → Use current & quick ratio to solve CA & CL simultaneously → Use D/E or proprietary ratio → debt & net worth → Balance the totals; plug cash/reserves

EXAM TIP **FAQ – Ratio analysis**

- Current ratio 2:1 & quick ratio 1:1 are **conventional norms** - interpret as per industry.
- High inventory turnover = efficient, but too high may mean stock-outs.
- Interest coverage < 1.5-2 times signals solvency stress.
- Ratio analysis limitations: no standard definitions, price-level changes, window dressing, not predictive alone.

8.8 Good financial statements & reporting trends

- Characteristics: **relevance, reliability (faithful representation), comparability, understandability**, timeliness, verifiability (Conceptual Framework).
- Trends: **integrated reporting ()**, **BRSR** (top 1,000 listed), XBRL, segment & ESG disclosures, KAM in audit reports, sustainability standards (ISSB).
- Best practices: consistent policies, notes on judgements & estimates, management discussion & analysis, related-party transparency.
- **Interpretation**: trend (horizontal), common-size (vertical), ratio analysis, cash-flow based analysis.

Chapter 9: Cash Flows

In this chapter: Understanding the statement of cash flows · Purpose · Operating, investing & financing activities · Analysing cash flows to find the firm's life-cycle stage · Additional uses of cash flow information

9.1 AS 3: Cash & cash equivalents

- **Cash equivalents** = short-term, **highly liquid**, readily convertible to known cash, **insignificant risk** of change in value.
- Rule of thumb: original maturity **<= 3 months from date of acquisition**.
- Equity shares are **not** cash equivalents (except redeemable pref. shares near maturity).
- Bank overdraft repayable on demand: part of cash management - treatment per AS 3/practice VERIFY.

9.2 Classification of interest & dividend

Item	Financial ent.	Others
Interest paid	Operating	Financing
Interest received	Operating	Investing
Dividend received	Operating	Investing
Dividend paid	Financing	Financing
Income tax	Operating (unless specifically identified with investing/financing)	same

9.3 Indirect method (operating activities)

Net profit before tax & extraordinary items → + Depreciation, amortisation, impairment, interest exp., loss on sale → − Interest/dividend income, profit on sale of investments/PPE → = Operating profit before WC changes → ± Changes in inventories, receivables, payables → − Income tax paid → = Net cash from operating activities

9.4 Investing & Financing

- **Investing**: purchase/sale of PPE, intangibles, investments (non-cash-equivalent), loans to others.
- **Financing**: issue/redemption of shares & debentures, borrowings, dividend paid, interest paid (non-financial).
- **Non-cash transactions** (e.g., asset acquired by issuing shares, conversion of debt) → **excluded**, disclosed separately.
- Foreign currency cash flows at **rate on date of cash flow**; unrealised exchange diffs on cash shown separately in reconciliation.

EXAM TIP Exam points

- Direct method is **encouraged** but indirect used in practice; Schedule III cos. normally indirect.
- Extraordinary items' cash flows → classify & disclose separately.
- Purchase of PPE on credit = not a cash flow until paid.

WORKED EXAMPLE **Cash from operations – indirect**

Item	₹ '000
Net profit before tax	500
+ Depreciation	120
+ Interest expense	40
– Profit on sale of asset	(20)
– Dividend income	(15)
Operating profit before WC changes	625
– Increase in receivables	(60)
+ Increase in payables	35
– Increase in inventory	(40)
Cash generated	560
– Income tax paid	(130)
Net cash from operating	**430**

9.5 AS 3 vs Ind AS 7

Point	AS 3	Ind AS 7
Bank overdraft	Financing	Part of cash & CE if repayable on demand
Extraordinary items	Separately	No such concept
Changes in liabilities from financing	Not required	Reconciliation required

- Interest/dividend paid by non-financial entity: **financing** (both).

EXAM TIP **Cash flow traps**

- Proposed dividend for current year - **not** a cash outflow.
- Purchase of asset on credit / conversion of debt to equity - **non-cash**, disclose only.
- Tax paid → operating unless specifically identified.

9.6 Cash flow pattern & life cycle

Stage	Operating	Investing	Financing
Introduction / start-up	–	–	**+** (equity, debt)
Growth	+ (small)	– (heavy capex)	+
Maturity	**+ (large)**	– / small	– (repay, dividends, buy-back)
Decline / shake-out	– / small +	**+** (asset sales)	–

- Other uses: **free cash flow** (CFO – capex), cash-flow coverage, quality of earnings (CFO vs net profit), liquidity planning.

Chapter 10: Forecasting Financial Statements

In this chapter: Building forecasts of future Balance Sheets · Income Statements · Statements of Cash Flows · Percentage-of-sales method · External funds needed

10.1 Forecasting steps

Forecast **sales** (trend, regression, management estimate) → Forecast **income statement** (costs % of sales, fixed costs, interest, tax) → Forecast **balance sheet** (spontaneous assets & liabilities % of sales; fixed assets per capex plan) → Retained earnings = opening + PAT − dividend → Balancing figure = **external funds needed (EFN)** or surplus → Derive **forecast cash flow** statement (change in BS items)

- Check: forecast ratios vs industry; sensitivity (best / base / worst).

10.2 Percentage-of-sales & EFN

EFN = $(A^*/S0) \times \Delta S - (L^*/S0) \times \Delta S - m \times S1 \times (1 - d)$

- A^* = assets varying with sales; L^* = **spontaneous** liabilities (creditors, accruals); m = net margin; d = payout ratio; S1 = forecast sales.
- **Sustainable growth rate** = ROE × retention ratio (b); internal growth = ROA × b / (1 − ROA × b).

WORKED EXAMPLE Illustration

- Sales ₹100 cr → ₹120 cr; assets (all vary) ₹50 cr; spontaneous liabilities ₹10 cr; net margin 5%; payout 40%.

Increase in assets = 50% × 20 = **₹10 cr**

Spontaneous finance = 10% × 20 = **₹2 cr**

Retained earnings = 5% × 120 × 60% = **₹3.6 cr**

EFN = 10 − 2 − 3.6 = **₹4.4 cr** (to be raised by debt / equity)

Chapter 11: Introduction to FM and Time Value of Money (Lessons 11–12)

In this chapter: Nature, scope & objectives of FM · Profit vs wealth maximisation · Time value of money - power of compounding · Significance & application · Annuity · Use of TVM tables

11.1 Profit vs wealth maximisation

Basis	Profit max.	Wealth max.
Focus	Accounting profit	**Market value of shares** (NPV)
Time value	Ignored	Considered
Risk	Ignored	Considered
Vague?	Yes (which profit?)	Clear (cash flows)
Acceptance	Traditional	**Modern - superior objective**

11.2 Finance functions

- **Investment** (capital budgeting, WC) - where to invest.
- **Financing** - mix of debt/equity (capital structure).
- **Dividend** - payout vs retention.
- **Liquidity** - managing current assets/cash.
- Finance executive role: raising funds, allocation, profit planning, capital market understanding, treasury, risk.

11.3 Agency problem

- Conflict between **shareholders (principal)** & **managers (agent)**; also shareholders vs debt-holders.
- **Agency costs**: monitoring (audit, board), bonding (managers' guarantees), opportunity costs, structuring compensation.
- **Solutions**: ESOPs, performance-linked pay, independent directors, market for corporate control, monitoring.

11.4 Evolution of financial management

Traditional phase (till 1940s) - episodic fund raising, legal & institutional focus → **Transitional phase** (1940s-50s) - day-to-day funds & working capital → **Modern phase** (1950s onwards) - analytical, decision-oriented: capital budgeting, cost of capital, valuation, risk-return

11.5 FM & other disciplines

- **Accounting**: provides data (FS, cash flows); FM uses it for decisions - accounting = **accrual**, FM = **cash flow** basis.
- **Economics**: macro (interest rates, inflation, monetary policy) & micro (marginal analysis, demand) feed FM decisions.
- **Production, marketing, HR**: every functional plan has a financial impact - capex, pricing, payroll.
- Inter-relationship of 3 decisions: investment ↔ financing ↔ dividend - all aim at **maximising shareholder wealth**.

MEMORY TRICK **Three core decisions – "IFD"**

IFD – I Investment (where to invest - capital budgeting & WC); F Financing (from where - debt/equity mix); D Dividend (how much to distribute vs retain)

Note: Wealth = Present value of future cash flows to shareholders → reflected in **market price per share**.

11.6 Role of the finance executive (modern)

- Raising of funds at minimum cost; allocation to profitable uses; profit planning; understanding capital markets.

- Value creation: identify value drivers, risk management (hedging FX, interest), treasury, investor relations.
- **CFO in strategic role**: M&A, restructuring, ESG reporting, digital finance, compliance & governance.

EXAM TIP FAQ – FM basics

- Why is wealth maximisation superior? Considers **time value, risk, cash flows**; long-term; aligns with market value.
- Conflicts in profit maximisation: ignores timing (₹1 today ≠ ₹1 tomorrow), ignores risk, ambiguous term "profit".
- Agency cost examples: auditing costs, stock options, board oversight, restrictive covenants by lenders.

11.7 Time value of money

FV (single) = PV × (1 + r)^n

PV (single) = FV ÷ (1 + r)^n

FV of annuity = A × [(1 + r)^n – 1] ÷ r

PV of annuity = A × [1 – (1 + r)^–n] ÷ r

Perpetuity = A ÷ r; growing perpetuity := A_1 ÷ (r – g)

Effective annual rate = (1 + i/m)^m – 1

- **Annuity due** = ordinary annuity × (1 + r).

WORKED EXAMPLE TVM illustration

- ₹1,00,000 invested at 10% for 3 years: FV = 1,00,000 × 1.331 = **₹1,33,100**.
- PV of ₹50,000 p.a. for 4 years @ 10% = 50,000 × 3.170 = **₹1,58,500**.
- 12% p.a. compounded quarterly: EAR = (1.03)^4 – 1 = **12.55%**.
- Loan EMI = Loan ÷ PVAF (r, n): ₹5 lakh, 10%, 5 yrs → 5,00,000 ÷ 3.791 = **₹1,31,891** p.a.

11.8 Risk & return

Expected return = $\Sigma p_i R_i$

Standard deviation = $\sqrt{\Sigma p_i (R_i - E(R))^2}$

Coefficient of variation = σ ÷ E(R)

Portfolio return = $\Sigma w_i R_i$

CAPM = Rf + β (Rm – Rf)

- **Systematic** (market, non-diversifiable, measured by β) vs **unsystematic** (diversifiable) risk.
- Two-asset portfolio $\sigma^2 = w_1^2\sigma_1^2 + w_2^2\sigma_2^2 + 2w_1w_2\rho\sigma_1\sigma_2$.

11.9 Using TVM tables

- **Table A-1**: FV of Re 1 = (1 + r)^n; **A-2**: PV of Re 1 = 1/(1 + r)^n; **A-3**: FV annuity = [(1 + r)^n – 1]/r; **A-4**: PV annuity = [1 – (1 + r)^–n]/r.
- Annuity due = ordinary annuity × (1 + r); perpetuity PV = A/r; growing perpetuity = A1/(r – g).
- **Rule of 72**: years to double ≈ 72 / r%; effective annual rate = (1 + i/m)^m – 1.

Example = PV of ₹10,000 p.a. for 3 yrs @ 10% = 10,000 × 2.487 = **₹24,870**

Chapter 13: Capital Budgeting

In this chapter: Compounding & discounting · Capital budgeting process · Non-discounted (payback, ARR) & discounted methods (NPV, PI, IRR) · Economic Value Added · Capital rationing · Risk evaluation & sensitivity analysis

13.1 Evaluation techniques

Payback = Years until cumulative cash flow = investment

ARR = Average PAT ÷ Average investment × 100 (avg inv. = (cost − salvage)/2 + salvage + WC)

NPV = Σ CFt ÷ (1 + k)^t − Initial outlay

PI = PV of inflows ÷ PV of outflows

IRR = r where NPV = 0 (interpolate: L + NPV_L ÷ (NPV_L − NPV_H) × (H − L))

MIRR = [Terminal value of inflows @ k ÷ PV of outflows]^(1/n) − 1

- Accept: NPV > 0; PI > 1; IRR > k.

13.2 Technique comparison

Method	Time value	Cash flows all?	Issue
Payback	× (DPB ✓)	× (after payback ignored)	Liquidity focus
ARR	×	Accounting profit	Simple
NPV	✓	✓	**Best** - absolute value, additive
PI	✓	✓	Useful in capital rationing
IRR	✓	✓	Multiple IRRs, reinvestment at IRR assumption

- NPV vs IRR conflict (size/timing differences) → **NPV preferred**.

13.3 Cash flow rules

- Use **incremental after-tax cash flows**; include working capital (outflow at start, recovery at end); **ignore sunk costs**, allocated overheads, financing costs (interest - in discount rate).
- Include **opportunity cost** of resources; tax shield on depreciation (Dep × t); salvage & tax on profit/loss on sale.

Operating CF = (Sales − cash costs − Dep)(1 − t) + Dep

NPV profile - IRR where NPV crosses zero (illustrative project)

Item	Value
NPV @ 0%	50
NPV @ 5%	33
NPV @ 10%	18
NPV @ 15%	6
NPV @ 18% (≈ IRR)	0

WORKED EXAMPLE NPV illustration

- Machine ₹10 L; life 5 yrs; no salvage; SLM dep 2 L; PBDT ₹3.5 L p.a.; tax 25%; k 10% (PVAF 3.791).

CFAT = (3.5 − 2)(0.75) + 2 = **₹3.125 L**

NPV = 3.125 × 3.791 − 10 = **₹1.85 L** → accept

Payback = 10 ÷ 3.125 = **3.2 years**; PI = 11.85/10 = **1.185**

13.4 Capital rationing & risk

- **Capital rationing**: divisible projects → rank by **PI**; indivisible → combinations maximising total NPV.
- **Risk-adjusted discount rate**: k + risk premium; **certainty equivalent**: CE coefficient × CF discounted at Rf.
- **Sensitivity**: change one variable; **scenario**: several variables (best/base/worst).

COMMON MISTAKE Capital budgeting traps

- Deducting **interest** from cash flows (double counting).
- Ignoring **working capital recovery** in last year.
- Using profit instead of **cash flow**.
- Forgetting **tax on salvage** gain (book value vs sale).

13.5 Special capital budgeting situations

- **Unequal lives** → **Equivalent annual cost/benefit** = NPV ÷ PVAF (n, k); or replacement chain.
- **Replacement decision** → incremental cash flows: Δ savings, Δ depreciation tax shield, sale value of old asset (net of tax), Δ WC.
- **Inflation**: nominal rate (1 + n) = (1 + r)(1 + i); discount **nominal cash flows at nominal rate** or real at real - never mix.
- **Discounted payback** - payback on PV of cash flows; **payback reciprocal** ≈ IRR for long-life even flows.

13.6 Risk analysis tools

Expected NPV = Σ (NPV_i × p_i)

Standard deviation = $\sqrt{\Sigma\ p_i\ (NPV_i - ENPV)^2}$

Coefficient of variation = σ ÷ Expected NPV

Certainty equivalent NPV = $\Sigma\ (\alpha_t \times CF_t) \div (1 + Rf)^{t} - I$

RADR = Rf + risk premium (or CAPM β-based)

- **Decision tree** - sequential decisions, roll back with expected values; **simulation** (Monte-Carlo) VERIFY.

13.7 Capital budgeting process

Identify investment proposals > Screening & evaluation (NPV/IRR) > Selection (accept/reject, ranking) > Financing & implementation > Performance review / post-audit

- Types: expansion, replacement, modernisation, diversification, mutually exclusive vs independent, contingent.

WORKED EXAMPLE Equivalent annual cost - unequal lives

- Machine X: cost ₹1.5 L, life 3 yrs, running cost ₹40,000 p.a.; Machine Y: ₹2.4 L, 5 yrs, ₹35,000 p.a.; k = 10% (PVAF 3: 2.487; 5: 3.791).

PV cost X = 1.5 L + 40,000 × 2.487 = 2,49,480 → EAC = 2,49,480 ÷ 2.487 = **₹1,00,314**

PV cost Y = 2.4 L + 35,000 × 3.791 = 3,72,685 → EAC = 3,72,685 ÷ 3.791 = **₹98,308**

- Choose **Y** (lower EAC).

EXAM TIP **FAQ – Investment decisions**

- NPV & IRR give conflicting ranking for **mutually exclusive** projects with size/timing/life differences → use NPV (reinvestment at k is realistic).
- Multiple IRRs arise with **non-conventional cash flows** (sign changes more than once).
- PI ranks projects under **single-period capital rationing** (divisible projects).
- Sunk cost ×; opportunity cost ✓; WC ✓; interest × (in discount rate); allocated fixed overheads ×.

13.8 Economic Value Added (EVA)

EVA = NOPAT − (WACC × Capital employed)

- NOPAT = EBIT × (1 − t); capital employed = equity + debt (or total assets − non-interest-bearing CL).
- **Positive EVA** = value created over cost of capital (Stern Stewart); MVA = market value − capital employed.

Example = NOPAT ₹30 L, capital employed ₹200 L, WACC 12% → EVA = 30 − 24 = **₹6 L** (value created)

Chapter 14: Cost of Capital

In this chapter: Sources · Meaning · Factors affecting cost of capital · Methods for calculating cost of capital · WACC · Marginal cost of capital

14.1 Specific costs

Kd (irredeemable) = I (1 – t) ÷ NP

Kd (redeemable) = [I (1 – t) + (RV – NP)/n] ÷ [(RV + NP)/2]

Kp = [PD + (RV – NP)/n] ÷ [(RV + NP)/2]

Ke (Gordon) = D1 ÷ P0 + g

Ke (CAPM) = Rf + β (Rm – Rf)

Ke (new issue) = D1 ÷ (P0 – flotation) + g

Kr = Ke (adjusted for personal tax/brokerage if given)

Growth g = b × r (retention × return on equity)

- YTM via trial & error / interpolation when exactness required.

14.2 WACC

WACC (Ko) = Σ (Weight × specific cost after tax)

- **Book value weights** (balance sheet) vs **market value weights** (preferred - reflect current values); retained earnings included in equity market value.
- **Marginal cost of capital**: WACC of next rupee raised - breakpoints when cheaper source exhausted.

Break point = Amount of cheaper source available ÷ its weight

WORKED EXAMPLE WACC illustration

- Equity ₹50 L (Ke 15%); 10% debentures ₹30 L (tax 25%); 12% preference ₹20 L.

Kd = 10% × 0.75 = 7.5%

WACC = 0.5 × 15 + 0.3 × 7.5 + 0.2 × 12 = 7.5 + 2.25 + 2.4 = **12.15%**

- CAPM check: Rf 6%, β 1.2, Rm 13.5% → Ke = 6 + 1.2 × 7.5 = **15%**.

14.3 More cost of capital formulas

Ke (earnings-price) = E1 ÷ P0 (when payout 100% / no growth)

Ke (realised yield) = Geometric mean of past annual returns [(D + P1) ÷ P0] – 1

Ke (bond yield + risk premium) = YTM of firm's bonds + 3-5% premium

Kd (zero coupon) = (RV ÷ NP)^(1/n) – 1

Kd (convertible) = IRR of [NP vs interest (1 – t) + value of conversion/redemption]

Ke (new equity - Gordon) = D1 ÷ [P0 (1 – f)] + g

- Use **after-tax** cost for debt; preference & equity have **no tax shield**.

14.4 Why cost of capital matters

- **Hurdle rate** / discount rate for capital budgeting.
- Basis for designing capital structure - mix minimising WACC.
- Evaluating financial performance (EVA = NOPAT − WACC × capital employed).
- Decisions on dividend vs retention, leasing vs buying, working capital financing.

EVA = NOPAT − (WACC × Capital employed)

MVA = Market value of firm − Capital employed

WORKED EXAMPLE **Marginal cost of capital (breakpoints)**

- Target mix: equity 60%, debt 40%. Retained earnings available ₹30 L (Ke 14%); beyond → new equity 15%. Debt up to ₹20 L @ 8% post-tax; beyond 9%.

Break point (RE) = 30 ÷ 0.60 = **₹50 L**

Break point (Debt) = 20 ÷ 0.40 = **₹50 L**

WACC up to 50 L = 0.6 × 14 + 0.4 × 8 = **11.6%**

WACC above 50 L = 0.6 × 15 + 0.4 × 9 = **12.6%**

WACC behaviour with leverage - Traditional view (illustrative)

Debt ratio	0%	20%	40%	60%	80%
Ke	12	12.5	13.5	16	20
Kd (post-tax)	6	6	6.5	8	11
WACC (Ko)	12	11.2	10.7	11.2	12.8

Chapter 15: Capital Structure

In this chapter: Significance & determinants · Capital structure planning & optimum structure · Theories (NI, NOI, traditional, MM) · EBIT-EPS analysis · Breakeven EBIT · Under / over capitalisation

15.1 Capital structure theories

Theory	Value of firm	WACC with leverage
Net Income (NI)	↑ with debt	↓ continuously (Kd, Ke constant)
Net Operating Income (NOI)	Constant	Constant (Ke ↑ linearly)
Traditional	↑ then ↓	U-shaped - optimum exists
MM (no tax)	Constant (arbitrage)	Constant
MM (with tax)	Vl = **Vu + D × t**	↓ with debt
Trade-off	Tax benefit vs **bankruptcy costs**	Optimum
Pecking order	Internal funds → debt → equity	Information asymmetry

15.2 EBIT-EPS

EPS = (EBIT − I)(1 − t) − PD ÷ N

Indifference point = (EBIT − I1)(1 − t) ÷ N1 = (EBIT − I2)(1 − t) ÷ N2

Financial BEP = Interest + PD ÷ (1 − t)

Value (NI) = EBIT − I over Ke + D; NOI: V = EBIT ÷ Ko

- Above indifference EBIT → **debt plan** gives higher EPS.

WORKED EXAMPLE Indifference illustration

- Need ₹20 L: Plan A - equity at ₹100 (20,000 shares) over existing 10,000 shares; Plan B - 10% debt ₹20 L. Tax 25%.

Equation = (EBIT)(0.75) ÷ 30,000 = (EBIT − 2,00,000)(0.75) ÷ 10,000

EBIT = 3 (EBIT − 2 L) = EBIT → **EBIT = ₹3,00,000**

- EPS at indifference = 3 L × 0.75 ÷ 30,000 = **₹7.50** both plans.

15.3 Over- & under-capitalisation

- **Over-capitalisation**: earnings insufficient for fair return on capital (ROI < normal) - causes: excess issues, high promotion costs, inadequate depreciation; remedy: reduce debt, buy-back, reduce face value.
- **Under-capitalisation**: earnings very high relative to capital - high EPS & share price; may invite competition/labour demands; remedy: bonus/split, more issues.
- **Optimum structure** features: profitability, solvency, flexibility, conservatism, control.

15.4 MM arbitrage (no tax)

Two identical firms - levered L, unlevered U - but V(L) > V(U) > Investor sells shares of overvalued **L** > Borrows personally in same D/E proportion (**home-made leverage**) > Buys shares of **U** → same income, less investment > Prices adjust till V(L) = V(U)

- MM Prop II: **Ke = Ko + (Ko − Kd) × D/E** - cost of equity rises linearly with leverage.

15.5 Valuation under approaches

NI approach - Value of equity = (EBIT − I) ÷ Ke ; V = S + D ; Ko = EBIT ÷ V

NOI approach - V = EBIT ÷ Ko ; S = V − D ; Ke = (EBIT − I) ÷ S

MM with tax = VI = Vu + D × t ; Vu = EBIT (1 − t) ÷ Ke(u)

Ke (levered, MM with tax) = Keu + (Keu − Kd)(1 − t) D/E

WORKED EXAMPLE NI vs NOI quick check

- EBIT ₹4 L; debt ₹10 L @ 10%; Ke 16% (NI); Ko 12.5% (NOI).

NI = S = 3 L ÷ 0.16 = 18.75 L; V = **28.75 L**; Ko = 4 ÷ 28.75 = **13.9%**

NOI = V = 4 ÷ 0.125 = **32 L**; S = 22 L; Ke = 3 ÷ 22 = **13.6%**

15.6 Factors determining capital structure

- **Financial leverage / trading on equity**, growth & stability of sales, cost of capital, cash-flow ability to service debt, control (dilution), flexibility, size, market conditions, tax rate, legal requirements, lenders' covenants.
- **Optimum capital structure** = WACC minimum & value maximum.

EXAM TIP FAQ - Capital structure

- Indifference point - EPS same under two plans; above it, **debt plan** better.
- MM assumptions: perfect capital markets, no taxes (Prop. I original), homogeneous risk class, 100% payout, investors can borrow at same rate as firm.
- Pecking order: managers prefer **internal funds → debt → equity** (signalling).
- Over-capitalisation symptoms: low EPS, falling share price, low dividend rate.

15.7 Financial break-even EBIT

Financial BEP = Interest + Preference dividend / (1 − t)

- At EBIT = financial BEP, **EPS = 0**; indifference point (equal EPS for two plans): (EBIT − I1)(1 − t)/N1 = (EBIT − I2)(1 − t)/N2.
- Below indifference point → **equity** plan gives higher EPS; above → **debt** plan.

Chapter 16: Dividend Decisions

In this chapter: Factors determining dividend policy · Relevance theories - Walter, Gordon · Irrelevance - MM · Forms of dividend - cash, stock dividend, stock split, share repurchase

16.1 Dividend models

Walter = $P = [D + (r/Ke)(E - D)] \div Ke$

Gordon = $P0 = E(1 - b) \div (Ke - br)\ (D1 \div (Ke - g))$

MM = $P0 = (D1 + P1) \div (1 + Ke)$

MM new shares = $\Delta N = [I - (E - nD1)] \div P1$

Graham & Dodd = $P = m\ (D + E/3)$

Lintner = $D1 = D0 + [(EPS \times \text{target payout}) - D0] \times \text{adjustment factor}$

16.2 Walter's decision rule

Firm	r vs Ke	Optimal payout
Growth	r > Ke	**0%** (retain all)
Normal	r = Ke	Irrelevant
Declining	r < Ke	**100%**

- Gordon: same direction; "**bird-in-hand**" argument - investors prefer current dividends (risk ↑ with time).
- MM assumptions: perfect markets, no taxes, fixed investment policy, certainty.

WORKED EXAMPLE Walter illustration

- EPS ₹10; Ke 10%; r 15%; payout 40% (D = 4).

P = $[4 + (0.15/0.10)(6)] \div 0.10 = (4 + 9) \div 0.10 =$ **₹130**

- At 0% payout: (0 + 15)/0.10 = **₹150** → retain all (growth firm).

EXAM TIP Determinants & FAQ

- Determinants: earnings stability, liquidity, growth needs, legal (s.123), taxation (dividend taxable in hands of shareholders), access to capital, shareholder preference, inflation, debt covenants.
- **Stock split** vs **bonus**: split - face value ↓, no change in reserves; bonus - reserves capitalised; both raise number of shares.
- Buy-back taxed as **deemed dividend** in shareholders' hands from 1-10-2024 VERIFY.

16.3 Types of dividend policy

Policy	Meaning	Suits
Stable DPS	Fixed rupee dividend, raised gradually	Investors wanting regular income
Constant payout	Fixed % of earnings - DPS fluctuates	Firms with variable earnings
Stable + extra	Low regular + extra in good years	Cyclical businesses
Residual	Pay what remains after funding positive-NPV projects	Growth firms
No dividend	Retain all	Start-ups, high-growth

WORKED EXAMPLE **Gordon & MM illustration**

- **Gordon**: E = ₹20; b = 60%; r = 15%; Ke = 12%.

g = 0.6 × 15% = 9%; D1 = 20 × 0.4 = 8

P0 = 8 ÷ (0.12 − 0.09) = **₹266.67**

- **MM**: P0 ₹100; Ke 10%; D1 ₹5 expected.

P1 (dividend paid) = 100 × 1.10 − 5 = **₹105**

P1 (no dividend) = ₹110 → wealth same either way

16.4 Lintner & bonus/buy-back

- **Lintner model**: firms have **target payout**, adjust dividends gradually (speed of adjustment); dividends are "sticky".
- **Bonus shares** - capitalisation of reserves, no cash outflow, signals confidence.
- **Buy-back** - returns cash, ↑ EPS, signals undervaluation; alternative to dividend.
- **Radical approach** (tax-based) - if dividends taxed higher than capital gains, investors prefer retention VERIFY.

Chapter 17: Working Capital Management

In this chapter: Meaning & types · Determinants & assessment of WC requirement · Negative working capital · Operating cycle & quantitative techniques · Management of cash, receivables & inventories · Financing of WC · Banking norms & macro aspects · Factoring & forfaiting

17.1 Operating cycle & estimation

Operating cycle = R + W + F + D − C

- R = raw material holding; W = WIP; F = finished goods; D = debtors collection; C = creditors payment period.

RM days = Average RM stock ÷ (RM consumption per day)

WIP days = Average WIP ÷ (cost of production per day)

Net WC = Current assets − Current liabilities (estimate on **cash cost basis** - excl. depreciation & profit)

- Add **safety margin/contingency** % if given.

17.2 Financing approaches

Approach	Permanent CA	Temporary CA	Risk / Return
Matching (hedging)	Long-term	Short-term	Moderate
Conservative	Long-term	Partly long-term	Low risk, low return
Aggressive	Partly short-term	Short-term	High risk, high return

- Gross vs net WC; permanent vs temporary (fluctuating) WC.

17.3 Cash management models

Baumol optimal cash = √(2 × A × T ÷ I)

- A = annual cash requirement; T = cost per transaction; I = interest rate.

Miller-Orr spread = 3 × [(3/4 × T × σ²) ÷ i]^(1/3)

Return point = Lower limit + Spread ÷ 3; Upper limit = LL + spread

- Cash budget: receipts & payments method; **float** management - concentration banking, lock-box.

17.4 Receivables & payables

- Credit policy evaluation (incremental approach): Δ contribution − Δ bad debts − Δ cost of investment in debtors (**on cost**, × required return) − Δ discount − Δ admin.

Investment in debtors = Cost of credit sales × collection period ÷ 365

Cost of forgoing cash discount = d/(100 − d) × 365/(credit period − discount period)

- **Factoring**: compare factor's commission + interest on advance vs savings (bad debts, admin, interest on reduced debtors).

WORKED EXAMPLE Trade credit illustration

- Terms **2/10 net 40**.

Annualised cost = 2/98 × 365/30 = **24.83%**

- If bank borrowing cost 12% → **borrow & take discount**.

17.5 Financing of WC

- **Spontaneous**: trade credit, outstanding expenses.
- **Bank finance**: CC/OD, working capital demand loan, bill discounting, letter of credit.
- **Others**: commercial paper, factoring, inter-corporate deposits, public deposits.
- Bank norms - **Tandon Committee** methods (maximum permissible bank finance: 75% of (CA − CL) / 75% of CA − CL / 75% of (CA − core CA) − CL); Chore Committee VERIFY.

WORKED EXAMPLE WC estimation illustration

- Annual production & sales 60,000 units; RM ₹40, labour ₹20, OH (cash) ₹15 per unit; selling price ₹100. RM stock 1 month; WIP ½ month (RM full, conversion 50%); FG 1 month; debtors 2 months; creditors 1 month; wages lag ½ month.

RM = 60,000 × 40/12 = **2,00,000**

WIP = 5,000 × 0.5 × (40 + 17.5) = **1,43,750**

FG = 5,000 × 75 = **3,75,000**; Debtors (cost) = 10,000 × 75 = **7,50,000**

Less creditors = 2,00,000; wages 50,000 → **Net WC = ₹12,18,750**

EXAM TIP Inventory & receivables FAQ

- Inventory techniques - EOQ, ABC, JIT, VED (see Paper 4) applied to minimise holding cost.
- Credit standards (5 Cs): character, capacity, capital, collateral, conditions.
- Monitoring receivables: ageing schedule, DSO, collection matrix.

17.6 Unit III - Inventory management

EOQ = √(2 × A × O ÷ C)

Reorder level = Max usage × Max lead time

Minimum level = ROL − (Avg usage × Avg lead time)

Maximum level = ROL + ROQ − (Min usage × Min lead time)

Safety stock = (Max lead time − Avg lead time) × Avg usage

- **ABC** (value), **VED** (criticality), **JIT**, **FSN** (movement) - control techniques.
- Total inventory cost = ordering + carrying (+ stock-out); minimum at EOQ.

17.7 Unit II – Treasury & cash management

- Treasury functions: **cash management, currency management, fund raising, banking relations, risk management (interest & FX), investment of surplus**.
- Motives for holding cash (Keynes): **transaction, precautionary, speculative** (+ compensating).
- Cash budget: receipts & payments method (short-term), adjusted profit & loss method (long-term).
- Surplus investment: T-bills, CDs, CPs, money market mutual funds, repo.
- Float: **disbursement float** (good), **collection float** (minimise via lock-box, concentration banking, e-payments).

WORKED EXAMPLE **Unit IV – Credit policy evaluation**

- Present sales ₹50 L, credit 30 days; proposed 60 days ↑ sales to ₹60 L; contribution 25%; bad debts ↑ from 1% to 2%; required return 15% (on cost 75% of sales).

Δ Contribution = 10 L × 25% = **2,50,000**

Δ Bad debts = (1.2 L − 0.5 L) = **70,000**

Δ Cost of funds = [(45 L × 60/365) − (37.5 L × 30/365)] × 15% ≈ **64,726**

Net gain = 2,50,000 − 70,000 − 64,726 = **₹1,15,274** → adopt

17.8 Unit V – Payables management

- Trade credit = spontaneous source; cost arises only if **cash discount forgone** or supplier raises price.
- **Stretching payables** - beyond due date harms credit rating & supplier relations.
- Evaluate: annualised cost of forgoing discount vs bank borrowing rate.
- Supply-chain finance / reverse factoring - payer-initiated early payment to suppliers VERIFY.

17.9 Unit VI – WC financing – bank norms

Tandon method	Maximum permissible bank finance (MPBF)
Method I	75% × (CA − CL other than bank borrowings)
Method II	75% × CA − CL
Method III	75% × (CA − core CA) − CL

- **Chore Committee** - bifurcation of cash credit into loan & cash credit components; **Nayak Committee** (MSEs: 20% of turnover) VERIFY.

EXAM TIP **FAQ – Working capital**

- Operating cycle ↓ → WC need ↓; reduce via faster collection, JIT, longer creditor period.
- WC on **cash cost basis** excludes depreciation & profit; total cost basis includes depreciation VERIFY.
- Excess WC → idle funds, low ROI; inadequate WC → stock-outs, loss of credit standing.
- Factoring vs bill discounting: factoring = **sale & management** of receivables; discounting = **loan** against bills.

Typical composition of current assets (illustrative %)

Item	Value
Raw material	22
WIP	10
Finished goods	18
Receivables	35
Cash & bank	10
Prepaid & others	5

17.10 Factoring vs forfaiting; negative WC

Point	Factoring	Forfaiting
Receivables	Short-term (domestic / export), many invoices	**Medium-term export** receivables (bills / promissory notes)
Recourse	With or without recourse	**Without recourse**
Services	Collection, ledger management, credit protection	Pure financing (discounting) with bank aval

- **Negative working capital** (CL > CA): retailers / e-commerce collect cash before paying suppliers - efficient if stable; risk of liquidity crunch.

Chapter 18: Security Analysis

In this chapter: Systematic & unsystematic risk · Fundamental analysis - economy, industry, company · Technical analysis · Efficient market hypothesis

18.1 Systematic vs unsystematic risk

Point	Systematic (market)	Unsystematic (specific)
Source	Interest rates, inflation, policy, recession	Management, labour, product, lawsuits
Diversification	**Cannot** be diversified	**Can** be diversified away
Measure	**Beta (β)**	Residual variance

Total risk = Systematic + Unsystematic ($\sigma^2 total = \beta^2\sigma^2 m + \sigma^2 e$)

Beta = Cov(Ri, Rm) / Var(Rm)

CAPM = Ke = Rf + β (Rm − Rf)

Example = Rf 6%, Rm 12%, β 1.5 → Ke = 6 + 1.5 × 6 = **15%**

18.2 Fundamental analysis (EIC)

Economy - GDP, inflation, interest rates, fiscal/monetary policy, exchange rate → **Industry** - life cycle, competition (Porter), regulation, demand → **Company** - financials (ratios, EPS, P/E), management quality, competitive advantage, valuation (DCF, P/E × EPS)

- Intrinsic value > market price → **buy** (undervalued).

18.3 Technical analysis & EMH

Item	Essence
Dow theory	Primary, secondary & minor trends
Charts	Line, bar, candlestick; support & resistance; head & shoulders
Indicators	Moving averages, RSI, MACD, breadth, volume
EMH - weak	Prices reflect **past prices** → technical analysis useless
EMH - semi-strong	Reflect **all public information** → fundamental analysis useless
EMH - strong	Reflect **all information incl. insider** → no abnormal return

Chapter 19: Operational Approach to Financial Decision

In this chapter: Overview of costing · Key concepts · Basic principles of costing · Marginal costing - breakeven point · Margin of safety

19.1 Costing overview & key concepts

- **Cost accounting** = classification, recording, allocation of costs for control & decisions; **cost unit** (per unit) & **cost centre** (location/person).
- Elements: material, labour, expenses → **prime cost** + factory overheads = works cost + admin = cost of production + S&D = **cost of sales**.
- Classification: fixed / variable / semi-variable; direct / indirect; controllable / uncontrollable; **sunk**, **opportunity**, relevant, differential cost.
- Principles: cost related to cause; abnormal costs excluded; past costs not charged to future; prudence.

19.2 CVP formulas

Contribution = Sales − Variable cost = Fixed cost + Profit

P/V ratio = Contribution ÷ Sales × 100 = Δ Profit ÷ Δ Sales

BEP (units) = Fixed cost ÷ Contribution per unit

BEP (₹) = Fixed cost ÷ P/V ratio

Margin of safety = Actual sales − BEP sales = Profit ÷ P/V ratio

Sales for desired profit = (FC + desired profit) ÷ P/V ratio

Cash BEP = Cash fixed cost ÷ Contribution per unit

- Shut-down point = Avoidable FC ÷ contribution per unit.

19.3 Absorption vs marginal

Basis	Absorption	Marginal
Fixed production OH	**Product cost** (in stock)	**Period cost**
Stock valuation	Higher	Lower
Production > sales	Profit higher	Lower
Sales > production	Profit lower	Higher
Production = sales	Same	Same

Profit difference = Change in stock units × fixed OH rate per unit

19.4 Decision rules

Decision	Rule
Key / limiting factor	Rank by **contribution per unit of key factor**
Make or buy	Buy if purchase price < **variable cost + avoidable FC + opportunity cost**
Shut down / drop product	Continue if contribution > avoidable fixed costs
Special order (spare capacity)	Accept if price > marginal cost (& no market harm)
Export order	Accept if contribution positive & capacity idle
Sell or process further	Incremental revenue vs incremental cost

Break-even chart (illustrative: FC ₹2,00,000; VC ₹60; SP ₹100)

Units (BEP = 5,000 units)	0	2000	4000	5000	6000	8000	10000
Total cost (₹ '000)	200	320	440	500	560	680	800
Sales (₹ '000)	0	200	400	500	600	800	1000
Fixed cost (₹ '000)	200	200	200	200	200	200	200

WORKED EXAMPLE CVP illustration

- Sales ₹10 lakh, profit ₹1 lakh; Sales ₹12 lakh, profit ₹1.6 lakh.

P/V ratio = 60,000 ÷ 2,00,000 = **30%**

Fixed cost = 10,00,000 × 30% − 1,00,000 = **₹2,00,000**

BEP = 2,00,000 ÷ 30% = **₹6,66,667**; MOS at 10 L = **₹3,33,333** (33.3%)

WORKED EXAMPLE Key factor illustration

- Products X & Y; contribution/unit ₹40 & ₹60; machine hrs/unit 2 & 4; 2,000 hrs available; max demand 600 each.

Contribution per hour = X = 20; Y = 15 → **produce X first**

- X 600 units (1,200 hrs) → remaining 800 hrs → Y 200 units. Contribution = 24,000 + 12,000 = **₹36,000**.

19.5 Graphs & limitations

- **Angle of incidence**: angle between sales line & total cost line at BEP - larger angle = higher profit rate.
- **P/V graph**: profit on y-axis vs sales; crosses x-axis at BEP.
- Limitations of CVP: linearity assumption, constant selling price & FC, single product/constant mix, no stock changes.
- Advantages of marginal costing: simple, no under/over absorption, decision-making, profit planning.

WORKED EXAMPLE Make or buy practice

- Component: DM ₹40, DL ₹25, VOH ₹15, FOH ₹20 (allocated, unavoidable) per unit; supplier price ₹90; capacity freed can earn contribution ₹30,000 on 2,000 units output.

Relevant make cost = 80 per unit + opportunity cost 15 (30,000/2,000) = **₹95**

- Buy at ₹90 → **buy** (saving ₹5/unit = ₹10,000).

WORKED EXAMPLE Absorption vs marginal profit

- Production 10,000; sales 8,000; FOH ₹1,00,000 (₹10/unit at normal 10,000).

Difference = 2,000 units × 10 = **₹20,000** - absorption profit **higher**.

- If sales 12,000 (opening stock 2,000 at ₹10 FOH), absorption profit lower by ₹20,000.

WORKED EXAMPLE Special order & shut-down

- Normal: 8,000 units @ ₹50; VC ₹30; FC ₹1,20,000; capacity 10,000 units. Special order 1,500 @ ₹38.

Incremental contribution = 1,500 × 8 = **₹12,000** → accept (no displacement of regular sales)

- Shut-down point (avoidable FC ₹60,000): 60,000 ÷ 20 = **3,000 units**; close if sales fall below.

19.6 P/V ratio levers

Change	Effect on PV	Effect on BEP
Selling price ↑	↑	↓
Variable cost ↑	↓	↑
Fixed cost ↑	No change	↑
Sales volume ↑	No change	No change (MOS ↑)

Last-Day Formula Sheet

In this chapter: Accounting formulas · FM formulas · Top traps

Corporate accounting

Forfeiture: amount received → Forfeited a/c · reissue loss ≤ forfeited · balance → capital reserve · CRR = nominal value of pref. redeemed / bought back out of profits · fresh issue proceeds exclude premium for redemption · buy-back debt-equity ≤ 2:1, ≤ 25% of paid-up + free reserves · underwriting net liability = gross − marked − unmarked (pro-rata) · DRR 10% unlisted · CFS: goodwill = cost − share of net assets · NCI = share of net assets · CFO indirect = PBT + non-cash − gains ± WC

Financial management

NPV = PV inflows − PV outflow · PI = PV inflows / outflow · IRR at NPV 0 · Kd = I(1 − t)/NP · Ke = D1/P0 + g · CAPM Rf + β(Rm − Rf) · WACC = Σ w × k · EBIT-EPS indifference · Financial BEP = I + PD/(1 − t) · Walter P = [D + (r/Ke)(E − D)]/Ke · Gordon P = E(1 − b)/(Ke − br) · Operating cycle = RMCP + WIPCP + FGCP + DCP − CPP · BEP = F / PV ratio · MoS = Sales − BEP · EFN · EVA = NOPAT − WACC × CE · Sustainable g = ROE × b

COMMON MISTAKE **Top traps**

- Using **book value** weights when market values given (WACC) - use market unless told.
- Including **sunk cost** / allocated fixed overheads in capital budgeting cash flows - **exclude**.
- Charging **interest** in project cash flows - **exclude** (captured in discount rate).
- Buy-back: forgetting **CRR** transfer for buy-back out of free reserves.
- Cash flow: treating dividend paid as operating - it is **financing** (for non-financial entities).

MEMORY TRICK **Ratio families – "LATS-P"**

LATSP – L Liquidity (current, quick); A Activity (turnover); T Total leverage / solvency (D/E, ICR); S Shareholder (EPS, P/E, DPS); P Profitability (GP, NP, ROCE, ROE)