

Q1) Wealth Maximisation vs Profit Maximisation**Concepts you must state**

- Wealth = present value of future cash flows; Profit = accounting surplus.
- Wealth considers timing and risk; Profit may ignore risk/time value.

QUESTION

State 3 crisp differences and the conclusion.

Basis	Wealth maximisation	Profit maximisation
Metric	Market value / NPV	Accounting profit
Risk & time value	Explicit via discount rate	Implicit/ignored
Goal conflict	Aligns with value	May mislead (short-termism)

ANSWER - Full Write-up

Requirement: Write differences and conclude which aligns with shareholder value.

Step 1 - Write one line: 'For financing/investment/dividend, target wealth (NPV positive).'

■ **FINAL: Prefer wealth maximisation; use NPV rule.**

Q2) Finance Functions**Concepts you must state**

- Investment (capital budgeting); Financing (capital structure); Dividend (payout policy).

QUESTION

Give one example each.

Function	Example
Investment	Pick Project X with positive NPV
Financing	Debt/equity mix to minimise WACC
Dividend	Decide payout vs retention ($g = b \times r$)

ANSWER - Full Write-up

Requirement: State and exemplify the 3 core decisions.

Step 1 - Add connecting line: 'All 3 interlinked via WACC and growth.'

■ **FINAL: Three decisions are integrated; objective is value.**

Q3) Agency Problem & Mitigation**Concepts you must state**

- Managers vs shareholders; lenders vs shareholders.

QUESTION

Give remedies briefly.

Conflict	Example	Remedy
Mgr vs SH	Perk consumption	ESOPs, monitoring
Lender vs SH	Risk shifting	Covenants, collateral

ANSWER - Full Write-up

Requirement: Write two conflicts and two remedies.

Step 1 - Close with governance code line.

■ **FINAL: Mitigate via incentives + monitoring + covenants.**

Q4) Risk–Return Trade-off (CAPM one-liner)**Concepts you must state**

- $k_e = R_f + \beta(R_m - R_f)$.
- $\beta > 1$ aggressive; $\beta < 1$ defensive.

QUESTION

Give a numeric illustration.

Example	Work
Given $R_f=6\%$, $R_m=12\%$, $\beta=1.2$	$k_e = 6\% + 1.2 \times 6\% = 13.2\%$

ANSWER - Full Write-up

Requirement: State CAPM and interpret beta.

Step 1 - Write interpretation: 'Requires 13.2% for risk taken.'

■ **FINAL: $k_e \approx 13.2\%$ (illustrative).**

Q5) Time Value of Money – Present Value**Concepts you must state**

- $PV = FV/(1+k)^n$.
- $PV \text{ of annuity} = A \times PVAF(k,n)$.

QUESTION

FV 1,00,000 after 3 yrs @10%; Annuity 20,000 for 4 yrs @10%.

PV single	$= 1,00,000/(1.10)^3$	$= 75,131$
PV annuity	$= 20,000 \times 3.170$	$= 63,400$

ANSWER - Full Write-up

Requirement: Compute PV of single sum and annuity.

Step 1 - Copy two lines into answer; show factor used.

■ **FINAL: PV single $\approx$ 75,131; PV annuity $\approx$ 63,400.**

Q6) Financial Goals & Constraints**Concepts you must state**

- Liquidity, Safety, Profitability (the trinity).

QUESTION

Provide 3 constraints.

Constraint	Note
Legal	Dividend rules, covenants
Market	Access/cost of capital
Operational	Capacity, human capital

ANSWER - Full Write-up

Requirement: List goals and common constraints.

Step 1 - One-line conclusion tying back to value.

■ **FINAL: Balance liquidity-profitability-risk to maximise value.**

Q7) Ethical Finance One-liners**Concepts you must state**

- Fair disclosure, true & fair view, no window-dressing, stakeholder responsibility.

QUESTION

Give 3 bullet lines.

Point	Exam line
Disclosure	Timely, adequate, not misleading
True & fair	Follow standards, consistency
Stakeholders	Balance SH value with compliance

ANSWER - Full Write-up

Requirement: Write short bullets to secure theory marks.

Step 1 - Keep it crisp (3–4 lines).

■ **FINAL: Good governance reduces cost of capital.**

Q8) Financing vs Investment vs Dividend – Link**Concepts you must state**

- Growth $g = b \times r$; payout affects b ; b affects g and price (Gordon).

QUESTION

Add one numeric line.

Example	Work
$E=10$; payout 40% $\Rightarrow b=60\%$; $r=15\%$	$g = 0.6 \times 0.15 = 9\%$

ANSWER - Full Write-up

Requirement: Write a connecting paragraph with one equation.

Step 1 - Conclude: policy mix chosen to maximise price via WACC and g .

■ **FINAL: Policies interact through WACC and growth.**

Q9) Sources vs Uses of Funds (basic)**Concepts you must state**

- Working capital increase is use; decrease is source; vice-versa for liabilities.

QUESTION

Give minimal table.

Change	Effect
Inventory up	Use
Creditors up	Source

ANSWER - Full Write-up

Requirement: Write table and one sentence.

Step 1 - Add one line: 'Match long assets with long funds (matching principle).'

■ **FINAL: Follow matching principle for liquidity.**

Q1) Equity vs Preference vs Debt**Concepts you must state**

- Cost, risk, control, tax-shield.

QUESTION

Give comparative table.

Feature	Equity	Preference	Debt
Risk to investor	High	Medium	Low (fixed)
Tax shield (issuer)	No	No	Yes (interest)
Control dilution	Yes	Limited	None
Priority	Residual	Above equity	Highest

ANSWER - Full Write-up

Requirement: Tabulate key differences.

Step 1 - One-line conclusion based on WACC.

■ **FINAL: Mix chosen to minimise WACC and meet flexibility.**

Q2) Rights Issue – TERP & Value of Right**Concepts you must state**

- $TERP = (nP_0 + mP_s)/(n+m)$.
- Right value = $P_0 - TERP$ (cum-rights).

QUESTION

$P_0=100$; 1 right for every 4 held at $P_s=80$.

TERP	$= (4 \times 100 + 1 \times 80)/5$	$= 96$
Right value	$= 100 - 96$	$= 4$

ANSWER - Full Write-up

Requirement: Compute TERP and right value.

Step 1 - Write both lines exactly.

■ **FINAL: TERP = 96; Value of one right = Rs. 4.**

Q3) Bonus vs Stock Split**Concepts you must state**

- Bonus capitalises reserves; split changes face value only.

QUESTION

Give crisp table.

Aspect	Bonus	Split
Source	Reserves	Face value change
Shares	Increase	Increase
EPS/Price (theory)	Down proportionately	Down proportionately

ANSWER - Full Write-up

Requirement: State differences and effect on EPS/Price (theory).

Step 1 - Add line: 'Wealth neutral ignoring signals.'

■ **FINAL: Both keep wealth same in theory.**

Q4) Lease vs Buy – NPV (simple)**Concepts you must state**

- Compare PV(costs) under both; choose lower PV cost.

QUESTION

Asset price 10,00,000; life 5 yrs; lease rent 2,60,000 p.a.; $k_d=10\%$; tax 30%; dep SLM (ignore salvage).

Item	Lease (after tax)	Buy (after tax)
Annual outflow	$2,60,000 \times (1-0.3) = 1,82,000$	Interest benefit via tax; principal no tax shield
Dep tax shield	-	$(10,00,000/5) \times 0.30 = 60,000 \text{ p.a.}$

ANSWER - Full Write-up

Requirement: Decide lease or buy using after-tax cash flows.

Step 1 - Write step: discount annual lease outflow at 10%; compute PV.

Step 2 - Write step: for buy, discount (interest $\times 0.30$ tax shield + depr. shield).

Step 3 - Conclude on lower PV.

■ **FINAL: Choose the option with lower PV cost (usually lease if shields larger).**

Q5) Venture Capital / PE — Stages (theory)**Concepts you must state**

- Seed, Start-up, Early growth, Expansion, Pre-IPO.

QUESTION

Provide 5 bullets.

Stage	One-liner
Seed	Idea/prototype funding
Start-up	Product build, GTM
Early growth	Scale, PMF
Expansion	New markets
Pre-IPO	Governance, exit prep

ANSWER - Full Write-up

Requirement: List stages and a one-line each.

Step 1 - Finish with value-adds: mentorship, networks.

■ **FINAL: Stage choice depends on risk and milestone needs.**

Q6) Buyback — Conditions (short)**Concepts you must state**

- Sources (free reserves, securities premium, proceeds not allowed).
- Debt-equity post buyback to remain within limit.
- Completion/ extinguishment timelines (high level).

QUESTION

Crisp bullets only.

Pointer	Line
Source	Free reserves/ SP allowed
Leverage	Within prescribed ratio
Timeline	Complete within permitted window

ANSWER - Full Write-up

Requirement: Write 3 regulatory pointers (exam-safe general).

Step 1 - Do not over-detail; stay generic for ICAI theory.

■ **FINAL: Mention key conditions only.**

Q7) Hybrid Securities (overview)**Concepts you must state**

- CCD/CCPS, Warrants, Preference with redemption premium.

QUESTION

Give 3 rows.

Instrument	Note
CCD/CCPS	Debt now, equity later
Warrants	Right to subscribe
Redeemable pref.	Fixed dividend; redeemable

ANSWER - Full Write-up

Requirement: Name and one-liner.

Step 1 - One sentence on effect on ke/ kd.

■ **FINAL: Hybrids balance risk and flexibility.**

Q8) Cost of Leasing — Implied Rate (concept)**Concepts you must state**

- IRR of lease saving stream vs purchase outflow.

QUESTION

Short explanation.

Definition	IRR equates PV(lease savings) with price difference
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ANSWER - Full Write-up

Requirement: Explain idea in 2 lines.

Step 1 - Use when comparing vendor financing.

■ **FINAL: Use IRR as effective cost measure.**

Q9) IPO Paths (very brief)**Concepts you must state**

- Fixed price vs Book-building (very short).

QUESTION

Table with 2 lines.

Mode	Essence
Fixed price	Price announced upfront
Book-building	Price discovered via bids

ANSWER - Full Write-up

Requirement: State two modes.

Step 1 - Keep it minimal.

■ **FINAL: Know both names and essence.**

Q1) Liquidity Ratios**Concepts you must state**

- CR = CA/CL; Quick = (CA-Inventory)/CL.

QUESTION

CA 12,00,000; Inv 4,00,000; CL 6,00,000.

CR	= 12,00,000 / 6,00,000	= 2.0
Quick	= (12,00,000-4,00,000)/ 6,00,000	= 1.33

ANSWER - Full Write-up

Requirement: Compute CR and Quick ratio.

Step 1 - Write both lines clearly.

■ **FINAL: CR=2.0; Quick=1.33.**

Q2) Activity Ratios**Concepts you must state**

- ITR = COGS/Avg Inv; DTR = Credit sales/Avg Debtors.

QUESTION

COGS 24,00,000; Avg Inv 4,00,000; Credit sales 30,00,000; Avg Debtors 5,00,000.

ITR	= 24,00,000/4,00,000	= 6 times
DTR	= 30,00,000/5,00,000	= 6 times

ANSWER - Full Write-up

Requirement: Compute Inventory and Debtors turnover.

Step 1 - Add days if asked: $365/6 \approx 61$ days.

■ **FINAL: ITR=6; DTR=6 (≈ 61 days each).**

Q3) Solvency Ratios**Concepts you must state**

- $D/E = \text{Debt/Equity}$; $ICR = \text{EBIT/Interest}$.

QUESTION

Debt 30,00,000; Equity 20,00,000; EBIT 10,00,000; I 3,00,000.

D/E	$= 30,00,000/20,00,000$	$= 1.5$
ICR	$= 10,00,000/3,00,000$	$= 3.33x$

ANSWER - Full Write-up

Requirement: Compute D/E and Interest coverage.

Step 1 - Comment: moderate leverage.

■ **FINAL: $D/E=1.5$; $ICR=3.33x$.**

Q4) Profitability Ratios**Concepts you must state**

- $GPM = GP/Sales$; $NPM = NP/Sales$.

QUESTION

Sales 50,00,000; GP 15,00,000; NP 6,00,000.

GPM	= 15,00,000/50,00,000	= 30%
NPM	= 6,00,000/50,00,000	= 12%

ANSWER - Full Write-up

Requirement: Compute GPM and NPM.

Step 1 - Two lines only.

■ **FINAL: GPM=30%; NPM=12%.**

Q5) DuPont Decomposition**Concepts you must state**

- $ROE = NPM \times \text{Asset Turnover} \times \text{Equity Multiplier}$.

QUESTION

NPM 12%; AT 1.5; EM 2.0.

ROE	$= 0.12 \times 1.5 \times 2.0$	$= 36\%$
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ANSWER - Full Write-up

Requirement: Compute ROE using 3-step model.

Step 1 - Conclude with levered profitability line.

■ **FINAL: ROE=36%.**

Q6) Common-size & Trend**Concepts you must state**

- Common-size: each item as % of sales; Trend: base year =100.

QUESTION

Add window dressing caution.

Caution

Do not infer efficiency from % alone; check footnotes

ANSWER - Full Write-up

Requirement: One-line method and caution.

Step 1 - Keep 2–3 lines max.

■ **FINAL: Use with care; triangulate with ratios.**

Q7) Funds Flow (Working Capital basis)**Concepts you must state**

- Increase in CA = Source; increase in CL = Use (WC statement convention).

QUESTION

Give tiny table.

Change	WC impact
Debtors ↑	Source
Creditors ↑	Use

ANSWER - Full Write-up

Requirement: Identify sources/uses and compute change in WC.

Step 1 - Add one sentence on schedule of changes.

■ **FINAL: Prepare schedule and statement.**

Q8) Forecasting with % of Sales (mini)**Concepts you must state**

- Spontaneous CL rise with sales; equity plug via retention.

QUESTION

Sales grow 20%; Creditors currently 4,00,000.

Projected creditors	$= 4,00,000 \times 1.20$	$= 4,80,000$
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ANSWER - Full Write-up

Requirement: Project spontaneous needs.

Step 1 - Mention plug approach.

■ **FINAL: Use plug (debt/equity) after spont. items.**

Q9) Window Dressing — Signs**Concepts you must state**

- Quarter-end boosts, delaying payables, selling receivables w/ recourse.

QUESTION

Cite signs only.

Sign	Note
Channel stuffing	Sales spike
Payable stretch	Short-term gain
Factoring w/ recourse	Hidden risk

ANSWER - Full Write-up

Requirement: Write three signs.

Step 1 - Exam-ready 3 bullets.

■ **FINAL: Recognise and adjust interpretation.**

Q1) Cost of Debt (redeemable, after tax)

Concepts you must state

- $kd(at) \approx [I(1-t) + (RV-NP)/n] / [(RV+NP)/2]$.

QUESTION

10% debenture, RV 100, NP 96 (4% float), n=5 yrs, t=30%.

$I(1-t)$	$= 10 \times (1-0.3)$	$= 7$
$(RV-NP)/n$	$= (100-96)/5$	$= 0.8$
Numerator	$= 7 + 0.8$	$= 7.8$
Denominator	$= (100+96)/2$	$= 98$
$kd(at)$	$= 7.8/98$	$= 7.96\%$

ANSWER - Full Write-up

Requirement: Compute kd (after tax) using YTM approximation.

Step 1 - Copy the approximation formula exactly.

■ **FINAL: $kd(\text{after tax}) \approx 7.96\%$.**

Q2) Cost of Preference (redeemable)

Concepts you must state

- $k_p \approx [D + (RV-NP)/n] / [(RV+NP)/2]$.

QUESTION

8% pref, RV 100, NP 95, n=10 yrs.

D	= 8	= 8
(RV-NP)/n	= 5/10	= 0.5
k_p	= (8+0.5)/97.5	= 8.72%

ANSWER - Full Write-up

Requirement: Compute k_p using approximation.

Step 1 - One line result.

■ FINAL: $k_p \approx 8.72\%$.

Q3) Cost of Equity (DGM) with flotation

Concepts you must state

- $k_e = D_1/NP + g$; $NP = P_0(1 - f)$.

QUESTION

$P_0=120$; $f=4\%$; $D_0=10$; $g=6\%$.

NP	$= 120 \times (1 - 0.04)$	$= 115.2$
D1	$= 10 \times (1 + 0.06)$	$= 10.6$
k_e	$= 10.6/115.2 + 0.06$	$= 15.2\%$

ANSWER - Full Write-up

Requirement: Compute k_e using net proceeds and growth.

Step 1 - Show the net proceeds step.

■ **FINAL: $k_e \approx 15.2\%$.**

Q4) Cost of Equity (CAPM)

Concepts you must state

- $k_e = R_f + \beta(R_m - R_f)$.

QUESTION

R_f 6%; R_m 12%; β 1.2.

k_e	$= 6\% + 1.2 \times 6\%$	$= 13.2\%$
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ANSWER - Full Write-up

Requirement: Compute k_e via CAPM.

Step 1 - Short line to copy.

■ FINAL: $k_e \approx 13.2\%$.

Q5) WACC (book/market)

Concepts you must state

- $WACC = w_e \times k_e + w_d \times k_d(at) + w_p \times k_p$.

QUESTION

E=60, D=30, P=10 (market weights); $k_e=14\%$; $k_d(at)=8\%$; $k_p=10\%$.

WACC	$= 0.6 \times 14\% + 0.3 \times 8\% + 0.1 \times 10\%$	$= 11.8\%$
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ANSWER - Full Write-up

Requirement: Compute WACC with after-tax k_d .

Step 1 - Write weights first then multiply.

■ **FINAL: WACC $\approx$ 11.8%.**

Q6) MCC & Breakpoints

Concepts you must state

- Breakpoint = Retained earnings / Equity fraction in target mix.

QUESTION

RE 12,00,000; Target E:D = 60:40.

Breakpoint	= 12,00,000 / 0.60	= 20,00,000
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ANSWER - Full Write-up

Requirement: Find first breakpoint when retained earnings exhausted.

Step 1 - Then draw MCC steps (theory line).

■ **FINAL: First breakpoint at Rs. 20,00,000 of new investment.**

Q7) Project-specific k_e (β re-levering) — concept

Concepts you must state

- $\beta_L = \beta_U[1 + (1-t)D/E]$.

QUESTION

Short conceptual note.

Line	Use industry β_U to estimate project k_e
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ANSWER - Full Write-up

Requirement: Write the Hamada idea in one line.

Step 1 - Theory-only one-liner safe for exam.

■ FINAL: State formula and usage.

Q8) Flotation cost impact — illustration

Concepts you must state

- Net proceeds lower → rate rises for same cash flows.

QUESTION

Give a single line.

Note

Mention NP step explicitly in formulas

ANSWER - Full Write-up

Requirement: Show increase in k_e/k_d due to float.

Step 1 - Keep it short.

■ FINAL: Always adjust for float when issuing.

Q9) Weighted Marginal Cost curve — sketch steps

Concepts you must state

- Compute breakpoints; assign higher k_e/k_d beyond; plot investment opportunity schedule vs MCC.

QUESTION

Three lines to copy.

Step 1	Compute breakpoints
Step 2	Recompute marginal costs
Step 3	Choose projects where $IRR \geq$ MCC

ANSWER - Full Write-up

Requirement: How to present in exam quickly.

Step 1 - Finish with capital rationing pointer.

■ **FINAL: Invest till $IRR \geq$ MCC threshold.**

Q1) EPS under Alternative Financing Plans**Concepts you must state**

- $EPS = (PAT - \text{Pref. dividend}) / \text{Equity shares}$.
- Interest is pre-tax; tax on EBT.
- Leverage raises EPS if EBIT is sufficiently high.

QUESTION

EBIT Rs. 12,00,000; tax 30%. Plan A: 1,00,000 shares. Plan B: Debt Rs. 20,00,000 @10%; Shares 80,000.

Plan	Data
Plan A	1,00,000 shares (all equity)
Plan B	Debt 20,00,000 @10%; Shares 80,000

ANSWER - Full Write-up

Requirement: Compute EPS for both plans and compare.

Computation Table

Statement	Plan A (Rs.)	Plan B (Rs.)
EBIT	12,00,000	12,00,000
Interest	-	2,00,000
EBT	12,00,000	10,00,000
Tax @30%	3,60,000	3,00,000
PAT	8,40,000	7,00,000
Shares	1,00,000	80,000
EPS (Rs.)	8.40	8.75

Step 1 - Write $EPS_A = 8,40,000 / 1,00,000 = 8.40$.

Step 2 - Write $EPS_B = 7,00,000 / 80,000 = 8.75$.

Step 3 - Sentence: ' $EPS_B > EPS_A$; prefer Plan B.'

■ **FINAL: EPS A = 8.40; EPS B = 8.75 -> Choose B.**

Q2) Indifference EBIT between Plans A and B**Concepts you must state**

- $EPS = [(EBIT - I)(1 - t)] / N$.

QUESTION

Use Plan A: $I=0$, $N=1,00,000$; Plan B: $I=2,00,000$, $N=80,000$; $t=30\%$.

Equation	Working
$(E \times 0.70) / 1,00,000 = (E - 2,00,000) \times 0.70 / 80,000$	Cancel 0.70 $\rightarrow E / 1,00,000 = (E - 2,00,000) / 80,000$
Solve	$0.00001E = 0.0000125E - 2.5 \Rightarrow$ $0.0000025E = 2.5 \Rightarrow E =$ $10,00,000$

ANSWER - Full Write-up

Requirement: Find EBIT where $EPS_A = EPS_B$.

Step 1 - Copy steps exactly as above.

Step 2 - Line: 'Indifference EBIT = Rs. 10,00,000.'

■ **FINAL: Indifference EBIT $\approx$ Rs. 10,00,000.**

Q3) Operating, Financial and Combined Leverage**Concepts you must state**

- OL = Contribution / EBIT.
- FL = EBIT / PBT.
- CL = Contribution / PBT (= OL×FL).

QUESTION

Sales 50,00,000; VC 60%; FC 10,00,000; I 3,00,000.

Item	Amount (Rs.)
Sales	50,00,000
Variable cost (60%)	30,00,000
Contribution	20,00,000
Fixed cost	10,00,000
EBIT	10,00,000
Interest	3,00,000
PBT	7,00,000

ANSWER - Full Write-up

Requirement: Compute OL, FL, CL and interpret.

Computation Table

Leverage	Formula	Computation	Result
OL	C/EBIT	20,00,000/10,00,000	2.0
FL	EBIT/PBT	10,00,000/7,00,000	1.43
CL	C/PBT	20,00,000/7,00,000	2.86

Step 1 - Write OL=2.00; FL≈1.43; CL≈2.86.

Step 2 - Explain: 1% sales → 2.86% EPS.

■ **FINAL: OL=2.0, FL≈1.43, CL≈2.86.**

Q4) k_e under MM II with Taxes**Concepts you must state**

- $k_e = k_{e0} + (k_{e0} - k_d)(1 - t)(D/E)$.

QUESTION

k_{e0} 14%; k_d 10%; t 30%; D/E 0.5.

$(k_{e0} - k_d)(1 - t)(D/E)$	$(4\%)(0.7)(0.5) = 1.4\%$
k_e	$14\% + 1.4\% = 15.4\%$

ANSWER - Full Write-up

Requirement: Compute levered k_e .

Step 1 - Write formula; substitute; underline '15.4%'.

■ **FINAL: $k_e \approx 15.4\%$.**

Q5) EPS sensitivity using DFL**Concepts you must state**

- $DFL = EBIT / (EBIT - I)$.
- $\% \Delta EPS = DFL \times \% \Delta EBIT$ (approx.).

QUESTION

EBIT 10,00,000; I 3,00,000; +20% EBIT.

DFL	$= 10,00,000 / (10,00,000 - 3,00,000)$	= 1.4286
$\% \Delta EPS$	$= 1.4286 \times 20\%$	= 28.57%

ANSWER - Full Write-up

Requirement: Estimate $\% \Delta EPS$ for a $\% \Delta EBIT$.

Step 1 - Copy the two lines exactly.

■ **FINAL: EPS rises $\approx$ 28.57%.**

Q6) DFL at two EBIT levels**Concepts you must state**

- DFL decreases as EBIT rises (I fixed).

QUESTION

I 3,00,000; compute for EBIT 8,00,000 and 12,00,000.

EBIT	DFL working	DFL
8,00,000	$8,00,000 / (8,00,000 - 3,00,000)$	1.60
12,00,000	$12,00,000 / (12,00,000 - 3,00,000)$	1.33

ANSWER - Full Write-up

Requirement: Comment on risk as EBIT changes.

Step 1 - Write final line: 'Risk falls from 1.60 to 1.33.'

■ **FINAL: DFL: 1.60 → 1.33 as EBIT rises.**

Q7) Optimum Capital Structure (WACC grid)**Concepts you must state**

- $WACC = w_d \times k_d + w_e \times k_e$.

QUESTION

k_e rises with leverage; $k_d(\text{after-tax})=8\%$.

Debt %	k_e	k_d (after tax)	WACC (computed)
0%	14%	8%	14.0%
20%	15%	8%	13.4%
40%	16%	8%	12.8%
60%	18%	8%	12.0%

ANSWER - Full Write-up

Requirement: Pick minimum WACC row.

Step 1 - Circle 12.0% at 60% debt; write conclusion line.

■ **FINAL: Optimum $\approx$ 60% debt (WACC 12%).**

Q8) Interpreting leverage numbers**Concepts you must state**

- $CL = OL \times FL = 4.5$; high earnings sensitivity.

QUESTION

State the implication.

Statement	Result
1% change in sales	$\approx 4.5\%$ change in EPS

ANSWER - Full Write-up

Requirement: Given $OL = 2.5$, $FL = 1.8$.

Step 1 - Write recommendation: conservative debt policy.

■ **FINAL: High combined leverage (4.5).**

Q1) Payback Period (even cash flows)**Concepts you must state**

- $PBP = \text{Outlay} / \text{Annual inflow}$.

QUESTION

Outlay 6,00,000; inflow 1,50,000 p.a.

Computation	Result
$PBP = 6,00,000 / 1,50,000$	4 years

ANSWER - Full Write-up

Requirement: Compute PBP and write clean conclusion.

Step 1 - Write formula.

Step 2 - Substitute numbers.

Step 3 - State: 'PBP = 4 years.'

■ **FINAL: Payback Period = 4 years.**

Q2) Payback Period (uneven) - cumulative**Concepts you must state**

- Add inflows till outlay recovered; fraction = shortfall / next year inflow.

QUESTION

Outlay 5,00,000; inflows as below.

Year	Inflow (Rs.)
1	1,20,000
2	1,40,000
3	1,30,000
4	90,000
5	80,000

ANSWER - Full Write-up

Requirement: Find year and fraction.

Computation Table

Year	Inflow	Cumulative
1	1,20,000	1,20,000
2	1,40,000	2,60,000
3	1,30,000	3,90,000
4	90,000	4,80,000
5	80,000	5,60,000

Step 1 - Shortfall after Y4 = 20,000.

Step 2 - Fraction = $20,000/80,000 = 0.25$.

Step 3 - PBP = $4 + 0.25 = 4.25$ years.

■ **FINAL: PBP $\approx$ 4.25 years.**

Q3) Discounted Payback @12%**Concepts you must state**

- Discount each inflow at 12%; cumulate PVs to recover outlay.

QUESTION

Outlay 4,00,000; $k=12\%$.

Year	Inflow (Rs.)
1	1,60,000
2	1,40,000
3	1,20,000
4	1,00,000

ANSWER - Full Write-up

Requirement: Compute DPP using PVs of inflows.

Computation Table

Year	Inflow	PV factor (12%)	PV	Cum. PV
1	1,60,000	0.893	1,42,880	1,42,880
2	1,40,000	0.797	1,11,580	2,54,460
3	1,20,000	0.712	85,440	3,39,900
4	1,00,000	0.636	63,600	4,03,500

Step 1 - Tick the year where cumulative crosses 4,00,000 (Y4).

Step 2 - Conclude: DPP $\approx$ 3.95–4.00 years.

■ **FINAL: Discounted Payback $\approx$ 3.95 years.**

Q4) Net Present Value @14%**Concepts you must state**

- $NPV = \sum PV(\text{inflow}) - \text{Outlay}$; accept if $NPV > 0$.

QUESTION

Outlay 7,00,000; inflows 2,50,000 for 4 years; $k = 14\%$.

Year	Cash inflow (Rs.)
1	2,50,000
2	2,50,000
3	2,50,000
4	2,50,000

ANSWER - Full Write-up

Requirement: Compute NPV and decision.

Computation Table

Year	PV@14%	PV of inflow
1	0.877	2,19,250
2	0.769	1,92,250
3	0.675	1,68,750
4	0.592	1,48,000
Σ PV inflows	-	7,28,250
Outlay	-	7,00,000
NPV	-	28,250

Step 1 - Multiply each year; total PV = 7,28,250.

Step 2 - $NPV = 28,250 \rightarrow$ Accept.

■ **FINAL: NPV $\approx$ Rs. 28,250 $\rightarrow$ Accept.**

Q5) Mutually Exclusive Projects by NPV @12%**Concepts you must state**

- Use annuity factor for even series; yearly factors for uneven series.

QUESTION

Data as table below; $k = 12\%$.

Project	Outlay / Inflows
A	Outlay 5,00,000; Inflow 1,80,000 $\times 4$ years
B	Outlay 5,00,000; Inflows 2,40,000; 2,10,000; 1,60,000; 1,10,000

ANSWER - Full Write-up

Requirement: Choose higher NPV.

Computation Table

Project	PV of inflows @12%	NPV (Rs.)
A	$1,80,000 \times 3.037 =$ 5,46,660	+46,660
B	$2,14,320 + 1,67,370 +$ $1,13,920 + 69,960 =$ 5,65,570	+65,570

Step 1 - Write both PV calculations as shown.

Step 2 - Line: 'Since $NPV(B) > NPV(A)$, choose B.'

■ **FINAL: Choose Project B (higher NPV $\approx$ 65,570).**

Q6) IRR (even inflows) by interpolation**Concepts you must state**

- Required PVAF = Outlay / Annual inflow; bracket; interpolate.

QUESTION

Outlay 4,00,000; inflow 1,20,000; n = 5.

Item	Value
Required PVAF	$= 4,00,000/1,20,000 = 3.333$
PVAF@16%	3.274
PVAF@18%	3.127

ANSWER - Full Write-up

Requirement: Find IRR using PVAF approach.

Computation Table

Interpolation fraction	$(3.333-3.274)/(3.274-3.127)$	≈ 0.40
IRR	$= 16\% + 0.40 \times 2\%$	$\approx 16.8\%$

Step 1 - Write PVAF need first.

Step 2 - Bracket and compute fraction 0.40.

Step 3 - Write IRR $\approx 16.8\%$.

■ **FINAL: IRR $\approx 16.8\%$.**

Q7) Profitability Index @10%**Concepts you must state**

- $PI = PV \text{ inflows} / \text{Outlay}$; accept if $PI > 1$.

QUESTION

Outlay 3,00,000; inflows: 1,20,000; 1,50,000; 1,20,000; $k=10\%$.

Year	PV factor 10%	PV inflow
1	0.909	1,09,080
2	0.826	1,23,900
3	0.751	90,120
Σ PV inflows	-	3,23,100

ANSWER - Full Write-up

Requirement: Compute PI and interpret.

Computation Table

PI	$= 3,23,100 / 3,00,000$	$= 1.08$
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Step 1 - Show division clearly.

Step 2 - Write 'PI > 1, accept.'

■ **FINAL: PI $\approx$ 1.08 (>1) -> Accept.**

Q8) NPV vs IRR - Why conflict? (theory)**Concepts you must state**

- Different reinvestment assumption; timing/scale; multiple IRRs with non-conventional flows.
- Conclusion: prefer NPV when conflict arises (value additivity).

QUESTION

State briefly.

Reason	Exam note
Reinvestment assumption	NPV @ k ; IRR @ IRR
Timing/scale	Different CF patterns
Multiple IRRs	Non-conventional flows

ANSWER - Full Write-up

Requirement: Give exam lines plus conclusion.

Step 1 - Write one line per reason.

Step 2 - Closing line: 'Prefer NPV when rankings conflict.'

■ **FINAL: Prefer NPV when conflict arises.**

Q9) Discounted Payback vs NPV (comment)**Concepts you must state**

- DPP uses TVM but ignores later inflows; NPV considers all flows and maximizes wealth.

QUESTION

Write 3 lines.

Method	Key point
Discounted Payback	TVM yes; ignores post-cutoff
NPV	Considers all flows; wealth measure

ANSWER - Full Write-up

Requirement: Contrast and conclude.

Step 1 - Two bullets then conclusion toward NPV.

■ **FINAL: NPV is superior for value maximization.**

Q10) Sensitivity of NPV to discount rate**Concepts you must state**

- Higher $k \rightarrow$ lower PV factors $\rightarrow$ lower NPV.

QUESTION

Outlay 5,00,000; inflows: 1,80,000; 1,70,000; 1,60,000; 1,50,000. Compare $k=10\%$ and 14% .

Year	Inflow (Rs.)
1	1,80,000
2	1,70,000
3	1,60,000
4	1,50,000

ANSWER - Full Write-up

Requirement: Show direction of change.

Step 1 - Compute NPV@10% and @14% (show PV totals).

Step 2 - Write: 'NPV falls as k rises.'

■ **FINAL: NPV decreases as k increases (shown).**

Add-on A) Replacement Choice via EAC

Concepts you must state

- $EAC = NPV(\text{costs}) \times CRF(k, n)$, where $CRF = k / [1 - (1+k)^{-n}]$.

QUESTION

Machine X: Price 10,00,000, life 3 yrs, opex 2,50,000/yr; Machine Y: Price 13,00,000, life 4 yrs, opex 2,10,000/yr; $k=12\%$; ignore salvage.

Step	Work	
NPV_X	$= 10,00,000 + 2,50,000 \times PVA(12\%, 3) = 10,00,000 + 2,50,000 \times 2.402 = 16,00,500$	
EAC_X	$= 16,00,500 \times CRF(12\%, 3); CRF=0.416$	$\approx 6,66,600$
NPV_Y	$= 13,00,000 + 2,10,000 \times PVA(12\%, 4) = 13,00,000 + 2,10,000 \times 3.037 = 19,38,000$	
EAC_Y	$= 19,38,000 \times CRF(12\%, 4); CRF=0.329$	$\approx 6,37,600$

ANSWER - Full Write-up

Requirement: Use Equivalent Annual Cost when lives differ.

Step 1 - State: Choose the LOWER EAC.

Step 2 - Copy final line.

■ **FINAL: Pick Machine Y (lower EAC $\approx$ Rs. 6.38 lakh).**

Add-on B) Capital Rationing (Single-period)**Concepts you must state**

- $PI = PV \text{ inflows} / \text{Outlay}$; choose highest PI till budget exhausted.

QUESTION

Budget 10,00,000; Projects A–D as below @12%.

Proj.	Outlay	PV inflows	PI
A	3,00,000	3,60,000	1.20
B	4,00,000	4,80,000	1.20
C	5,00,000	6,50,000	1.30
D	2,00,000	2,10,000	1.05

ANSWER - Full Write-up

Requirement: Select projects under a budget using PI ranking.

Computation Table

Selection working	Detail
PI order	C (1.30) > A/B (1.20) > D (1.05)
Budget tally	C + A + D = 10,00,000 exactly; adding B would exceed

Step 1 - Write the PI order and show the budget tally.

■ **FINAL: Choose Projects C, A, and D within budget.**

Add-on C) Inflation Treatment (Nominal vs Real)**Concepts you must state**

- Nominal CFs → nominal k; Real CFs → real k where $(1+k_{\text{nom}}) = (1+k_{\text{real}})(1+\pi)$.

QUESTION

Illustration: Nominal CF 1,00,000 growing at inflation 5%; real $k=10\% \Rightarrow$ nominal $k \approx 15.5\%$.

Compute nominal k	$(1+0.10)(1+0.05)-1$	= 0.155
Use	Discount nominal CFs at 15.5%	-

ANSWER - Full Write-up

Requirement: Match cash flows with discount rate consistently.

Step 1 - Write the consistency line to copy.

■ **FINAL:** Always keep CFs and k in the same 'space' (nominal/real).

Q1) Walter Model - Optimum Dividend**Concepts you must state**

- $P = [D + (r/k)(E - D)] / k$.
- If $r > k$ retain; if $r < k$ pay out; if $r = k$ indifferent.

QUESTION

$E=8$; $k=12\%$; $r=16\%$. Compare $D=0$ and $D=8$.

D	Price P (Rs.)
0	$[0 + (0.16/0.12)(8)]/0.12 = 88.89$
8	$[8 + (0.16/0.12)(0)]/0.12 = 66.67$

ANSWER - Full Write-up

Requirement: Decide dividend that maximises price.

Step 1 - Compute price for $D=0$ and $D=8$.

Step 2 - State rule: $r > k \rightarrow$ retain all.

■ **FINAL: Optimal dividend = 0; Price $\approx$ Rs. 88.89.**

Q2) Gordon Model - Price with Growth**Concepts you must state**

- $P_0 = D_1 / (k - g)$; $g = b \times r$; $D_1 = E \times \text{payout}$.

QUESTION

$E=10$; payout 40% $\Rightarrow b=60\%$; $r=15\%$; $k=18\%$.

g	$= 0.6 \times 0.15$	$= 9\%$
D1	$= 10 \times 0.40$	$= 4$
P0	$= 4 / (0.18 - 0.09)$	$= 44.44$

ANSWER - Full Write-up

Requirement: Compute P_0 under constant growth.

Step 1 - Write g and D1 lines.

Step 2 - Compute price 44.44.

■ **FINAL: $P_0 \approx \text{Rs. } 44.44$.**

Q3) MM Dividend Irrelevance - Short Note**Concepts you must state**

- Perfect markets; no taxes/float; homogeneous expectations.
- Dividend outflow replaced by external finance; value driven by investment policy.

QUESTION

Give bullets and a small numeric demonstration.

Element	Point
Assumptions	No taxes/float; perfect markets; fixed investment
Logic	Dividend replaced by external finance
Implication	Policy irrelevant

ANSWER - Full Write-up

Requirement: Explain with assumptions and implication.

Step 1 - Mini demo: Need Rs.100 invest; earnings Rs.100. If dividend paid (100), issue shares Rs.100; assets still 100 -> price unchanged.

Step 2 - Write final line on real-world caveats.

■ **FINAL: Dividend policy irrelevant under perfect market assumptions.**

Q4) Residual Dividend Policy - Computation**Concepts you must state**

- Dividend = Earnings - Equity portion of investments (target mix).

QUESTION

Earnings 20,00,000; investment 15,00,000; target E:D = 60:40; shares 1,00,000.

Item	Amount (Rs.)
Earnings	20,00,000
Equity need (60% of 15L)	9,00,000

ANSWER - Full Write-up

Requirement: Compute pool and per-share payout if needed.

Computation Table

Residual (pool)	= 20,00,000 - 9,00,000	= 11,00,000
Dividend per share	= 11,00,000 / 1,00,000	= Rs. 11

Step 1 - Compute equity need, then residual.

Step 2 - Divide by shares if asked.

■ **FINAL: Dividend payout pool = Rs. 11,00,000 (Rs. 11/share).**

Q5) Clientele and Signalling - Short Notes**Concepts you must state**

- Clientele: groups prefer different payouts by tax/liquidity needs.
- Signalling: dividend change conveys information.

QUESTION

Give concise points with example each.

Topic	Essence
Clientele	Investor preference segmentation
Signalling	Information via dividend change

ANSWER - Full Write-up

Requirement: Write definitions with one-line examples.

Step 1 - Clientele example: Retiree funds prefer Rs. steady dividend; growth funds prefer low payout.

Step 2 - Signalling example: Dividend up from Rs.4 to Rs.5 -> price up.

■ **FINAL: Dividends reflect clientele and act as signals.**

Q6) Bonus Issue & Stock Split - Post numbers**Concepts you must state**

- Bonus 1:1 doubles shares → EPS halves; price halves in theory (ignoring signals).

QUESTION

Pre: EPS 10; Shares 1,00,000; Price 100. Bonus 1:1.

Item	Pre / Event
EPS (pre)	10
Shares (pre)	1,00,000
Price (pre)	100
Bonus	1:1

ANSWER - Full Write-up

Requirement: Find post-event EPS and theoretical price.

Computation Table

Post shares	$= 1,00,000 \times 2$	$= 2,00,000$
EPS (post)	$= 10 \times (1,00,000/2,00,000)$	$= 5$
Price (post, theory)	$= 100 \times 1/2$	$= 50$

Step 1 - Show each line; end with 'wealth neutral ignoring signals.'

■ **FINAL: Post: EPS = 5; Price ≈ 50.**

Q7) Stable Dividend Policy - Forms**Concepts you must state**

- Stable absolute (Rs./share), constant payout (%), low regular + extra.

QUESTION

Give brief definitions.

Form	Meaning
Stable absolute	Fixed Rs./share
Constant payout	Fixed % of earnings
Low regular + extra	Small stable + year-end extra

ANSWER - Full Write-up

Requirement: List 3 forms and quick pros/cons.

Step 1 - Write one line each; conclude: stable builds credibility; trade-off flexibility.

■ **FINAL: Stable policy builds credibility; less flexible.**

Q8) Practical Dividend Constraints - List**Concepts you must state**

- Legal/contractual; liquidity; growth needs; control/tax.

QUESTION

Provide 4 bullets with examples.

Constraint	Example
Legal/contractual	Debt covenants
Liquidity	Cash availability
Growth needs	Planned capex
Control/tax	Ownership, investor tax

ANSWER - Full Write-up

Requirement: State constraints with examples.

Step 1 - Write the table and then a one-line conclusion.

■ **FINAL: Constraints set a feasible payout corridor.**

Q1) Working Capital Requirement (percentage of sales)**Concepts you must state**

- $NWC = CA - CL$.
- Debtors from ACP; Inventory from % of COGS; Cash from % of sales.

QUESTION

Sales 24,00,000; COGS 70%; Inventory 25% of COGS; Debtors 1.5 months of sales; Cash 5% of sales; Creditors 1 month of purchases.

Item	Computation	Amount (Rs.)
COGS	$70\% \times 24,00,000$	16,80,000
Inventory	$25\% \times 16,80,000$	4,20,000
Debtors	$(1.5/12) \times 24,00,000$	3,00,000
Cash	$5\% \times 24,00,000$	1,20,000
Creditors	$(1/12) \times 16,80,000$	1,40,000

ANSWER - Full Write-up

Requirement: Compute NWC clearly by components.

Computation Table

CA	Inventory + Debtors + Cash	8,40,000
CL	Creditors	1,40,000
NWC	CA - CL	7,00,000

Step 1 - Add CA then subtract CL.

Step 2 - Box the answer.

■ **FINAL: NWC ≈ Rs. 7,00,000.**

Q2) Operating Cycle / Cash Conversion Cycle**Concepts you must state**

- $CCC = ICP + RCP - PDP$.

QUESTION

ICP 60; RCP 45; PDP 30 (days).

Component	Days
ICP	60
RCP	45
PDP	30

ANSWER - Full Write-up

Requirement: Compute CCC.

Computation Table

CCC	$= 60 + 45 - 30$	$= 75 \text{ days}$
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Step 1 - One line working.

■ **FINAL: CCC = 75 days.**

Q3) EOQ**Concepts you must state**

- $EOQ = \sqrt{(2AO/C)}$.

QUESTION

A = 24,000; O = 400; C = 8.

Parameter	Value
A	24,000 units
O	Rs. 400/order
C	Rs. 8/unit/year

ANSWER - Full Write-up

Requirement: Find EOQ under basic model.

Computation Table

EOQ	$= \sqrt{(2 \times 24,000 \times 400 / 8)}$	≈ 490 units
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Step 1 - Write formula then substitute.

■ **FINAL: EOQ $\approx$ 490 units.**

Q4) Reorder Level with Safety Stock**Concepts you must state**

- $ROL = \text{Max usage} \times \text{Max LT} + \text{Safety stock}$.

QUESTION

Max usage 1,000/week; Max LT 3 weeks; Safety stock 500.

ROL	$= 1,000 \times 3 + 500$	$= 3,500 \text{ units}$
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ANSWER - Full Write-up

Requirement: Compute ROL with given safety stock.

Step 1 - One crisp line.

■ **FINAL: Reorder Level = 3,500 units.**

Q5) Receivables - Debtors for target ACP**Concepts you must state**

- Debtors = Credit sales $\times$ (ACP/365).

QUESTION

Credit sales 36,50,000; ACP 45 days.

Debtors	= 36,50,000 $\times$ 45/365	$\approx$ 4,50,000
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ANSWER - Full Write-up

Requirement: Find Debtors level for ACP = 45 days.

Step 1 - Write formula then substitution.

■ **FINAL:** Maintain debtors $\approx$ Rs. 4.5 lakh.

Q6) Cash Budget (2 months)**Concepts you must state**

- Closing = Opening + Receipts - Payments; check minimum balance.

QUESTION

Opening 50,000. Receipts (M1/M2) = 3,00,000 / 3,20,000. Payments (M1/M2) = 2,80,000 / 3,10,000. Minimum 40,000.

Month	Opening	Receipts	Payments	Closing
1	50,000	3,00,000	2,80,000	70,000
2	70,000	3,20,000	3,10,000	80,000

ANSWER - Full Write-up

Requirement: Find closing cash for two months.

Step 1 - State both closings $\geq 40,000$.

■ **FINAL: Closings: 70,000 and 80,000 (adequate).**

Q7) Inventory Turnover and DIO**Concepts you must state**

- $ITR = COGS / \text{Avg inventory}$; $DIO = 365 / ITR$.

QUESTION

COGS 24,00,000; Avg inventory 4,00,000.

ITR	$= 24,00,000 / 4,00,000$	$= 6 \text{ times}$
DIO	$= 365 / 6$	$\approx 61 \text{ days}$

ANSWER - Full Write-up

Requirement: Compute ITR and DIO.

Step 1 - Write both lines exactly.

■ **FINAL: ITR = 6; DIO $\approx$ 61 days.**

Q8) Factoring Decision - Cost vs Benefit**Concepts you must state**

- Net benefit = (Bad debts saved + Admin saved) - (Commission + Interest on advance).

QUESTION

Sales 60,00,000; bad debts 2% saved; admin 1% saved; commission 2%; advance 80% @12%; ACP 45 days.

Item	Value
Sales	60,00,000
Bad debts saved	2%
Admin saved	1%
Commission	2%
Advance	80%
Interest	12% for 45 days

ANSWER - Full Write-up

Requirement: Evaluate factoring offer.

Computation Table

Savings (Rs.)	$= (2\% + 1\%) \times 60,00,000$	= 1,80,000
Commission (Rs.)	$= 2\% \times 60,00,000$	= 1,20,000
Interest (Rs.)	$= 0.8 \times 60,00,000 \times 12\% \times (45/365)$	≈ 71,000
Net benefit (Rs.)	$= 1,80,000 - (1,20,000 + 71,000)$	≈ -11,000

Step 1 - Do the three component lines then write the net line.

Step 2 - Conclude 'Do not accept; negotiate.'

■ **FINAL: Offer marginally unfavourable (~Rs. 11k loss).**

Q1) Operating Cycle with Seasonality**Concepts you must state**

- Average ICP = $(ICP_high + ICP_low)/2$ when halves equal.
- $CCC = ICP_avg + RCP - PDP$.

QUESTION

ICP high 75; off 45; RCP 50; PDP 35.

Component	Days
ICP (avg)	$(75+45)/2 = 60$
RCP	50
PDP	35

ANSWER - Full Write-up

Requirement: Compute CCC using average ICP.

Computation Table

CCC	$= 60 + 50 - 35$	$= 75 \text{ days}$
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Step 1 - Two-line working as shown.

■ **FINAL: CCC = 75 days.**

Q2) Cash Budget (Quarterly) with OD check**Concepts you must state**

- Closing = Opening + Receipts - Payments; top-up with OD if below minimum.

QUESTION

Opening 1,00,000; Q1 R/P = 9,00,000/9,80,000; Q2 R/P = 10,50,000/10,00,000; Minimum cash 75,000; OD limit 2,00,000.

Quarter	Opening	Receipts	Payments	Closing before min
Q1	1,00,000	9,00,000	9,80,000	20,000
Q2	20,000	10,50,000	10,00,000	70,000

ANSWER - Full Write-up

Requirement: Prepare cash budget and check OD limit.

Computation Table

OD needed Q1	= 75,000 - 20,000	= 55,000
OD needed Q2	= 75,000 - 70,000	= 5,000
Limit	2,00,000	Within limit

Step 1 - Write both OD numbers and confirm within limit.

■ **FINAL: Use OD 55,000 in Q1 and 5,000 in Q2 (within limit).**

Q3) Credit Policy Change - Incremental Profit test**Concepts you must state**

- $\Delta \text{Profit} = \Delta \text{Contribution} - k \times \Delta \text{Debtors_at_VC} - \Delta \text{Bad debts} - \Delta \text{Admin.}$

QUESTION

Sales 1.2 crore; SP/VC = 100/70; ACP 30→60; bad debts +1%; $k=12\%$; assume volume unchanged.

Component	Working	Amount (Rs.)
$\Delta \text{Debtors at VC}$	$(\text{Sales}/365) \times \Delta \text{days} \times 0.7$ 0	$(1,20,00,000/365) \times 30 \times 0.70 \approx 6,90,411$
Capital cost	$12\% \times 6,90,411$	$\approx 82,849$
$\Delta \text{Bad debts}$	$1\% \times 1,20,00,000$	$= 1,20,000$
$\Delta \text{Contribution}$	No volume change	0

ANSWER - Full Write-up

Requirement: Evaluate extending credit period by 30 days.

Computation Table

Net impact	$= 0 - (82,849 + 1,20,000)$	$\approx -2,02,849$
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Step 1 - Copy the table values and the negative total.

Step 2 - State decision: Do not extend.

■ **FINAL: Policy not advisable (reduces profit by $\approx$ Rs. 2.03 lakh).**

Q4) EOQ with Quantity Discount - Select tier**Concepts you must state**

- Compute EOQ for each price; if EOQ below bracket min, use bracket min; compare total cost qualitatively.

QUESTION

Price: <1,000 @ 50; ≥1,000 @ 49.5; A=24,000; O=400; Carrying=10% of price.

Parameter	Value
A	24,000
O	400
Price tiers	50 / 49.5
Carrying	10% of price

ANSWER - Full Write-up

Requirement: Compare EOQ per tier and choose.

Computation Table

EOQ@50	$= \sqrt{(2 \times 24,000 \times 400 / (0.1 \times 50))}$	$\approx 1,959$
EOQ@49.5	$= \sqrt{(2 \times 24,000 \times 400 / (0.1 \times 49.5))}$	$\approx 1,972 (\geq 1,000)$

Step 1 - State: discounted tier feasible and lowers purchase cost.

Step 2 - Write: choose $\approx 1,970$ units.

■ **FINAL: Choose discounted tier; order $\approx 1,970$ units per lot.**

Q5) Factoring vs In-house - Effective Cost**Concepts you must state**

- Net cost = Commission + Interest - (Bad debts saved + Admin saved).

QUESTION

Sales 90,00,000; commission 2%; advance 80% @12%; ACP 60 days; savings 1.5%.

Commission	$= 2\% \times 90,00,000$	$= 1,80,000$
Interest	$= 0.8 \times 90,00,000 \times 12\% \times (60/365)$	$\approx 1,42,000$
Savings	$= 1.5\% \times 90,00,000$	$= 1,35,000$

ANSWER - Full Write-up

Requirement: Compute net cost of factoring and conclude.

Computation Table

Net cost	$= 1,80,000 + 1,42,000 - 1,35,000$	$\approx 1,87,000$
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Step 1 - Write the line exactly.

Step 2 - Decision: in-house better unless other benefits exist.

■ **FINAL: Continue in-house (factor cost $\approx$ Rs. 1.87 lakh).**

Q6) Safety Stock for 95% Service**Concepts you must state**

- $SS = z \times \sigma_d \times \sqrt{LT}$.

QUESTION

$z=1.65$; $\sigma_d=120/\text{day}$; $LT=10$ days.

σ_L	$= 120 \times \sqrt{10}$	≈ 379
Safety stock	$= 1.65 \times 379$	≈ 625 units

ANSWER - Full Write-up

Requirement: Compute SS using z-score.

Step 1 - Two lines as shown.

■ **FINAL: Safety stock ≈ 625 units.**

Q7) Working Capital Finance - CC vs WCDL**Concepts you must state**

- CC charges on utilized amount; WCDL charges fixed for drawdown period.

QUESTION

CC 13% on average utilization; WCDL 12% fixed for full year.

Annual cost (CC)	$= 0.13 \times 40,00,000$	= 5,20,000
Annual cost (WCDL)	$= 0.12 \times 40,00,000$	= 4,80,000

ANSWER - Full Write-up

Requirement: Compare interest cost for average utilization 40,00,000.

Step 1 - Write both lines; choose WCDL if fully used all year.

■ **FINAL: Pick WCDL if fully used; else CC for flexibility.**

Q8) Reorder Point with demand variability**Concepts you must state**

- $ROP = d \times LT + z\sigma_L$.

QUESTION

$d=500/\text{day}$; $LT=6$ days; $\sigma_L=200$; $z=1.65$.

ROP	$= 500 \times 6 + 1.65 \times 200$	$= 3,330$ units
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ANSWER - Full Write-up

Requirement: Compute ROP including safety factor.

Step 1 - One crisp line as above.

■ **FINAL: ROP = 3,330 units.**