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Step-by-step solutions, alternate methods & exam tips for Class 12 Business Studies

Chapter 9: Financial Management

About this Chapter

Chapter 9 of Class 12 Business Studies, **Financial Management**, deals with the procurement and effective utilisation of funds for a business. It covers the meaning, role, objectives and importance of financial management; the three financial decisions (investment / capital budgeting, financing, and dividend); the concept of capital structure and the factors that affect it (including *trading on equity*); financial planning; fixed and working capital and the factors that determine each. Solutions for 2026-27 follow NCERT Reprint 2026-27.

Topics covered: Financial management meaning • Objectives (wealth maximisation) • Three financial decisions • Financial planning • Capital structure • Trading on equity • Fixed capital • Working capital

Quick Formula Sheet

Three financial decisions:
Investment • Financing • Dividend

Capital structure:
Debt : Equity mix

Trading on equity:
Use debt → boost EPS
Only if ROI > cost of debt

Working capital:
NWC = CA − CL

Wealth maximisation:
Maximise market price
of equity shares

Very Short Answer Type Questions

Q 9.1 What is meant by capital structure?

SOLUTION

Concept used. **Capital structure** is the mix of *long-term sources of finance* used by a firm. On the basis of ownership, business funds are classified into two categories – *owners' funds* (equity, retained earnings) and *borrowed funds* (debt, debentures, long-term loans). Capital structure refers to the *proportion* between these two – the debt-equity mix.

Step 1. **Definition.** Capital structure is the relative proportion of owners' funds (equity + retained earnings) and borrowed funds (debt + debentures) in the total long-term capital of the firm.

Step 2. **Two extremes.**

- *All equity, no debt.* Low risk, but high cost of capital and missed trading-on-equity benefit.
- *Very high debt.* Cheap on average but raises financial risk – the firm must service fixed interest payments out of variable EBIT.

Step 3. **Optimum capital structure.** The debt-equity mix at which the firm's overall cost of capital is minimum and the market value of the share is maximum. Finding it is one of the central tasks of financial management.

Step 4. **Why it matters.** Capital structure affects three things at once – the firm's cost of capital, its financial risk and its earnings per share (EPS).

> **Final Answer:** **Capital structure** is the mix of long-term sources of finance used by a firm – specifically, the proportion between *owners' funds* (equity + retained earnings) and *borrowed funds* (debt + debentures). The optimum capital structure minimises cost of capital and maximises share price.

☞ **Exam Tip**

For a 1-mark VSA: "Capital structure is the mix of equity and debt in the long-term capital of a firm."

EXPERT'S SOLUTION *: Aarav Sharma, M.Com, Delhi University*

Quick reading. Capital structure = debt-equity mix.

Step 1. Owners' funds + Borrowed funds = total long-term capital.

Step 2. Capital structure = proportion between the two.

Step 3. Optimum mix = lowest cost, highest share price.

> **Final Answer:** Capital structure = mix of equity and debt in long-term capital.

Q 9.2 State the two objectives of financial planning.

SOLUTION

Concept used. **Financial planning** is essentially the preparation of a *financial blueprint* of an organisation's future operations – estimating the funds required, the timing, and the sources from which the funds will come. The NCERT explicitly lists *two* twin

objectives of financial planning.

Step 1. **Objective 1: To ensure availability of funds whenever they are required.**

- Estimate the *quantum* of funds needed – short-term (working capital) and long-term (fixed capital).
- Estimate the *timing* – when each instalment is needed.
- Specify the *sources* – equity, debentures, banks, retained earnings.
- Net effect: no production halt for lack of funds, no missed growth opportunity.

Step 2. **Objective 2: To see that the firm does not raise resources unnecessarily.**

- Surplus funds are an idle cost (interest on debt, dividend on equity, lost opportunity).
- Excess equity dilutes EPS.
- Excess debt raises financial risk.
- Financial planning aligns the cash-in with the cash-out so that just-enough funds, of the right type, are raised at the right time.

Final Answer: The two objectives of financial planning are: (i) **to ensure availability of funds whenever they are required** (right quantum, right timing, right source) and (ii) **to see that the firm does not raise resources unnecessarily** (avoid idle surplus funds, avoid dilution and unnecessary financial risk).

EXPERT'S SOLUTION *: Priya Iyer, M.Com, Christ University Bangalore*

Quick reading. Two objectives, exact NCERT wording.

Step 1. Availability of funds when required.

Step 2. No unnecessary funds raised.

Final Answer: (i) Availability of funds when required; (ii) No unnecessary fund-raising.

Q 9.3 **Name the concept of financial management which increases the return to equity shareholders due to the presence of fixed financial charges.**

SOLUTION

Concept used. The concept described is **Trading on Equity**. When a firm finances part of its needs through fixed-charge sources (debt, preference shares) and earns a return on investment (ROI) *higher* than the cost of those fixed-charge funds, the surplus benefit accrues entirely to the equity shareholders – raising their earnings per share (EPS).

Step 1. **Definition.** Trading on equity means *the increase in profit available to equity shareholders due to the use of fixed-cost financing (debt or preference shares)* in the capital structure.

Step 2. **How it works.** Debt has a fixed cost (interest). If the firm earns more on its total investment than it pays on its debt, the excess belongs to the equity holders. *Example:* Firm earns 15% ROI; pays 10% interest on debt. The 5% spread on the debt portion goes to equity holders, boosting their EPS.

Step 3. **Condition.** Trading on equity is beneficial *only when* ROI $>$ cost of debt. If ROI $<$ cost of debt, the spread becomes negative and trading on equity actually *reduces* EPS – this is the *financial risk* the firm assumes.

> **Final Answer:** The concept is **Trading on Equity**. It is the rise in earnings per share for equity holders when the firm uses fixed-cost finance (debt, preference shares) and earns an ROI higher than the cost of that finance. The condition for it to be beneficial is *ROI $>$ cost of debt*; otherwise the firm bears a negative spread (financial risk).

☞ **Exam Tip**

Always state the condition: *trading on equity helps only when ROI $>$ cost of debt*. Examiners look for this safeguard.

EXPERT'S SOLUTION *: Vivaan Mehta, M.Com, Symbiosis Pune*

Quick reading. Use debt $\rightarrow$ boost EPS, but only if ROI $>$ cost of debt.

Step 1. Fixed-cost finance $=$ debt $+$ preference shares.

Step 2. Spread $=$ ROI $-$ cost of debt.

Step 3. Positive spread $\rightarrow$ higher EPS.

> **Final Answer:** Trading on Equity.

Q 9.4 **Amrit is running a 'transport service' and earning good returns by providing**

this service to industries. Giving reason, state whether the working capital requirement of the firm will be 'less' or 'more'.

SOLUTION

Concept used. The **nature of business** is the primary determinant of working capital requirement. A *trading or service* concern (which buys and sells, or sells a service, with no manufacturing) typically needs *less* working capital than a manufacturing concern, because it does not hold large stocks of raw materials, work-in-progress and finished goods.

Step 1. **Diagnose the business.** Amrit runs a *transport service* – he provides a service (movement of goods) to industries. There is no manufacturing, no raw material, no work-in-progress and no finished-goods inventory.

Step 2. **Apply the principle.**

- Services typically need *less* working capital than manufacturing because there is no production cycle to fund.
- Cash collection in transport is often quick (industries pay against invoices in 30-60 days; sometimes advance).
- Operating expenses (fuel, driver salaries, maintenance) recur each month but are predictable.

Step 3. **Conclusion.** The working capital requirement of Amrit's transport firm will be *less* compared with a manufacturing firm of similar scale.

> **Final Answer:** The working capital requirement of Amrit's transport service firm will be **less**, because a service business holds no raw material, no work-in-progress and no finished-goods inventory; only operating expenses (fuel, salaries, maintenance) need to be funded, and receivables turn over reasonably fast. Service firms have a shorter operating cycle than manufacturing firms.

EXPERT'S SOLUTION *: Aanya Kapoor, M.Com, BHU Varanasi*

Quick reading. Service = no inventory = less working capital.

Step 1. Transport is a service.

Step 2. No raw materials, WIP, finished goods.

Step 3. Less working capital.

> **Final Answer:** Less working capital.

Q 9.5 **Ramnath is into the business of assembling and selling of televisions. Recently he has adopted a new policy of purchasing the components on three months credit and selling the complete product in cash. Will it affect the requirement of working capital? Give reason in support of your answer.**

SOLUTION

Concept used. Working capital requirement is determined by the *operating cycle*: the time between paying for inputs (cash out) and collecting from customers (cash in). Two key determinants here are *credit availed* (from suppliers) and *credit allowed* (to customers). Both have changed in Ramnath's case.

Step 1. **Identify the two changes.**

- *Credit availed from suppliers* has *increased* from 'cash purchase' (presumably) to *3 months*.
- *Credit allowed to customers* has *decreased* from credit sales (presumably) to *cash sale*.

Step 2. **Effect on working capital.**

- More supplier credit $\Rightarrow$ Ramnath gets to use the supplier's money for 3 months, reducing his own funding need.
- Cash sale to customers $\Rightarrow$ no debtors; cash returns immediately.
- Net effect: the operating cycle is shortened dramatically. Cash flowing in arrives *before* cash flowing out is paid.

Step 3. **Conclusion.** Working capital requirement will *decrease*. In fact, the firm now operates almost on the suppliers' money, holding only inventory and minimal operating cash.

Final Answer: Yes, the change *affects* working capital – it **decreases** the requirement. Two reasons: (i) buying on *3 months credit* lets Ramnath use the supplier's money for that period, postponing his cash outflow; (ii) selling for *cash* means immediate cash inflow with no debtors. The operating cycle shrinks, so much less working capital is needed.

☞ Exam Tip

Two changes $\Rightarrow$ two reasons. State both: credit availed $\uparrow$ and credit allowed $\downarrow$ both shrink working capital.

EXPERT'S SOLUTION *: Karan Joshi, M.Com, BHU Varanasi*

Quick reading. Pay later (suppliers) + collect now (customers) ⇒ shorter cycle ⇒ less working capital.

Step 1. Credit availed ↑: less cash out today.

Step 2. Credit allowed ↓: cash in today.

Step 3. Cycle shrinks; WC need falls.

> **Final Answer:** Working capital requirement decreases.

Short Answer Type Questions

Q 9.6 **What is financial risk? Why does it arise?**

SOLUTION

Concept used. Financial risk is one of the two main risks of a business – the other being *business risk* (operating risk). Financial risk arises from the *financing decisions* of the firm, specifically the use of *debt* in the capital structure.

Step 1. **Definition.** Financial risk is the risk that a firm *may not be able to meet its fixed financial obligations* – interest on debt, repayment of principal, and preference dividend.

Step 2. **Why it arises.**

- Debt carries a *fixed* cost (interest) which must be paid whether the firm earns profits or not.
- Operating profits (EBIT) are *variable* – they rise in good years and fall in bad years.
- When debt is high, even a small fall in EBIT can leave the firm short of cash to pay interest – triggering default.
- Higher debt ⇒ higher fixed financial charges ⇒ higher financial risk.

Step 3. **Total risk = business risk + financial risk.** A firm with low business risk (stable demand, low operating leverage) can take on more debt – and *vice versa*. Utility companies typically use high debt; tech start-ups use low debt.

Step 4. **Managing financial risk.** Maintain a balanced debt-equity ratio, build cash reserves, ensure interest-coverage ratio (ICR) and debt-service coverage ratio (DSCR) well above 1.

Final Answer: **Financial risk** is the risk that the firm may fail to meet its *fixed financial obligations* – interest, principal repayment and preference dividend. It *arises* because debt carries fixed charges, while operating profit (EBIT) is variable; in a bad year the firm may not have enough EBIT to service its debt. The greater the proportion of debt in the capital structure, the higher the financial risk.

EXPERT'S SOLUTION *: Aarav Sharma, M.Com, Delhi University*

Quick reading. Debt → fixed charges → risk if EBIT falls.

Step 1. Definition: risk of not meeting fixed financial obligations.

Step 2. Cause: debt has fixed cost; EBIT is variable.

Step 3. More debt ⇒ more financial risk.

Final Answer: Financial risk = risk of failing to meet fixed financial charges. Arises from use of debt in the capital structure.

Q 9.7 Define current assets. Give four examples of such assets.

SOLUTION

Concept used. Current assets are one of the two broad categories of assets on the balance sheet (the other being *fixed assets*). They are at the heart of *working capital* management.

Step 1. **Definition.** Current assets are assets which, in the normal routine of the business, get *converted into cash or cash equivalents within one year* (or one operating cycle, whichever is longer). They are the firm's short-term, liquid resources.

Step 2. **Key properties.**

- *High liquidity* – convertible to cash quickly.
- *Lower return* than fixed assets – they earn little or no income on their own.
- *Support operations* – finance the day-to-day operating cycle.

Step 3. **Four examples (in order of liquidity).**

- *Cash in hand / cash at bank* – already in liquid form.
- *Marketable securities* – short-term investments easily sold.
- *Bills receivable / debtors* – amounts due from customers, payable within a

year.

- *Inventories* – raw materials, work-in-progress, finished goods.
- *Prepaid expenses* – expenses paid in advance (rent, insurance).

Final Answer: **Current assets** are assets that get converted into cash or cash equivalents within one year (or one operating cycle) in the normal routine of the business. **Four examples:** (1) cash in hand / cash at bank, (2) marketable securities, (3) bills receivable / debtors, and (4) inventories of raw materials, work-in-progress and finished goods.

EXPERT'S SOLUTION *: Priya Iyer, M.Com, Christ University Bangalore*

Quick reading. Convertible to cash within 1 year. Four examples.

Step 1. Cash and bank balances.

Step 2. Marketable securities.

Step 3. Debtors / bills receivable.

Step 4. Inventories.

Final Answer: Current assets = assets convertible to cash within a year. Examples: cash, marketable securities, debtors, inventories.

Q 9.8 What are the main objectives of financial management? Briefly explain.

SOLUTION

Concept used. **Financial management** is concerned with the *optimal procurement and usage of funds*. Its primary objective is **wealth maximisation** of the equity shareholders. The NCERT explains the link between wealth maximisation and the firm's three financial decisions.

Step 1. **Primary objective – Wealth Maximisation.**

- *Meaning.* Maximise the market price of the firm's equity share, which in turn maximises the wealth of equity shareholders.
- *Why not profit maximisation?* Profit is short-term, ignores risk, ignores the time value of money and is open to accounting manipulation. Share price discounts future cash flows and reflects long-term value.
- *Achievement.* A financial decision creates wealth only if its NPV (present

value of future cash inflows minus present value of outflows) is positive at the firm's cost of capital.

Step 2. **Three derived objectives (the financial decisions).**

- *Investment / capital budgeting decisions* – choose projects with positive NPV; allocate funds to fixed and current assets.
- *Financing decisions* – decide the mix of equity and debt that minimises the cost of capital.
- *Dividend decision* – decide what part of profit to retain (for growth) and what part to distribute (to shareholders), so as to maximise long-run share price.

Step 3. **Operational objectives.**

- Ensure adequate funds at right time.
- Ensure reasonable return to shareholders.
- Ensure efficient use of funds (no idle funds, no waste).
- Maintain liquidity to meet day-to-day obligations.
- Manage risk (financial + business).

Final Answer: The **primary objective** of financial management is *wealth maximisation* of the equity shareholders – maximising the market price of the equity share. It is preferred over profit maximisation because it accounts for risk, time value of money and long-term cash flows. This primary objective is operationalised through three financial decisions – *investment, financing and dividend* – each of which must add to shareholder wealth.

☞ Exam Tip

Always contrast wealth maximisation with profit maximisation – examiners reward the four weaknesses of profit maximisation (short-term, ignores risk, ignores time value, manipulable).

EXPERT'S SOLUTION *: Vivaan Mehta, M.Com, Symbiosis Pune*

Quick reading. Wealth max > profit max. Operationalised via 3 financial decisions.

Step 1. Primary: wealth maximisation (max market price of share).

Step 2. Three decisions: Investment, Financing, Dividend.

Step 3. Operational: adequate funds, return, efficiency, liquidity, risk control.

Final Answer: Primary = Wealth maximisation. Three decisions = Investment + Financing + Dividend.

Q 9.9 Financial management is based on three broad financial decisions. What are these?

SOLUTION

Concept used. **Financial management** revolves around three broad **financial decisions** – each one a separate question the financial manager must answer to maximise shareholder wealth.

Step 1. **Investment Decision (Capital Budgeting).**

- *Question: Where* should the firm invest its funds?
- *Scope:* fixed-asset investment (plant, machinery, building, R&D) is called *capital budgeting*; current-asset investment is called *working capital management*.
- *Factors affecting:* cash flows, rate of return, investment criteria (NPV, IRR, payback), risk.
- *Effect:* determines the asset side of the balance sheet and the firm's future earning power.

Step 2. **Financing Decision.**

- *Question: How* should the firm raise the funds for investment?
- *Scope:* the mix of equity and debt – the capital structure.
- *Factors affecting:* cost, risk, cash flow position, control, regulatory framework, stock market conditions, floatation costs.
- *Effect:* determines the liabilities side of the balance sheet and the firm's financial risk.

Step 3. **Dividend Decision.**

- *Question: How much* of the profit should be distributed to shareholders as dividend, and how much should be retained in the business?
- *Factors affecting:* earnings, stability of earnings, growth opportunities, cash flow, shareholder preference, taxation policy, stock market reaction, legal constraints.
- *Effect:* determines retained earnings, future growth funding and the signal sent to the stock market.

Final Answer: The three broad financial decisions are: (i) **Investment Decision** (capital budgeting + working capital management – where to invest), (ii) **Financing Decision** (equity vs debt mix – how to raise funds), and (iii) **Dividend Decision** (how much to pay out vs retain). All three are interlinked and together aim at maximising shareholder wealth.

EXPERT'S SOLUTION *: Aanya Kapoor, M.Com, BHU Varanasi*

Quick reading. Where to invest, how to fund, how much to distribute.

Step 1. Investment = capital budgeting.

Step 2. Financing = debt/equity mix.

Step 3. Dividend = retain vs distribute.

Final Answer: Investment + Financing + Dividend.

Q 9.10 **Sunrises Ltd. dealing in readymade garments, is planning to expand its business operations in order to cater to international market. For this purpose the company needs additional Rs. 80,00,000 for replacing machines with modern machinery of higher production capacity. The company wishes to raise the required funds by issuing debentures. The debt can be issued at an estimated cost of 10%. The EBIT for the previous year of the company was Rs. 8,00,000 and total capital investment was Rs. 1,00,00,000. Suggest whether issue of debenture would be considered a rational decision by the company. Give reason to justify your answer. (Ans: No, Cost of Debt (10%) is more than ROI which is 8%).**

SOLUTION

Concept used. The decision turns on **Return on Investment (ROI)** versus the **cost of debt**. Trading on equity is beneficial only when ROI > cost of debt. If ROI < cost of debt, raising debt would actually *destroy* shareholder value.

Step 1. **Compute ROI.**

$$\text{ROI} = \frac{\text{EBIT}}{\text{Total Capital Investment}} \times 100 = \frac{\text{Rs. } 8{,}00{,}000}{\text{Rs. } 1{,}00{,}00{,}000} \times 100 = 8\%.$$

Step 2. **Cost of debt.** Given as 10%.

Step 3. **Apply the rule.** For debt to add value, ROI must *exceed* cost of debt. Here ROI = 8% and cost of debt = 10%, so ROI < cost of debt.

Step 4. **Consequence of issuing debt.**

- Every Rs. 100 of debt earns only Rs. 8 of EBIT but costs Rs. 10 of interest.
- Net effect = a loss of Rs. 2 per Rs. 100 of debt, paid out of the existing equity holders' profits.
- EPS of equity holders will *fall*, not rise.
- Financial risk will also rise – the firm has taken on fixed interest obligations.

Step 5. **Recommendation.** The company should *not* raise the Rs. 80 lakh through debentures.

- Better alternatives: raise funds through *equity* (rights issue / fresh equity), *retained earnings* (if available), or a smaller debt issue once the new machines start improving ROI.
- If debt must be used, negotiate a lower interest rate or wait until projected ROI on the expansion exceeds 10%.

Final Answer: **No**, issuing debentures is *not* a rational decision. ROI is only $\frac{8,00,000}{1,00,00,000} \times 100 = 8\%$, which is *less than* the cost of debt of 10%. Trading on equity will work against the firm – every rupee of debt loses 2 paise of shareholder wealth. The company should fund the expansion through equity or retained earnings, or wait until projected ROI on the modern machines exceeds 10%.

☞ Exam Tip

Numerical case – always compute ROI on a separate line and compare with cost of debt. The two-line comparison is what the examiner is looking for.

EXPERT'S SOLUTION *: Karan Joshi, M.Com, BHU Varanasi*

Quick reading. ROI = 8%; cost of debt = 10%. Debt destroys value.

Step 1. ROI = EBIT/Capital $\times$ 100 = 8%.

Step 2. Cost of debt = 10%.

Step 3. ROI $<$ Cost of debt $\Rightarrow$ negative spread $\Rightarrow$ EPS falls.

Step 4. Recommend equity / retained earnings instead.

Final Answer: No – ROI (8%) is less than cost of debt (10%); debt will hurt shareholder wealth.

Q 9.11 How does working capital affect both the liquidity as well as profitability of a business?

SOLUTION

Concept used. Working capital is the lifeblood of the business – it funds the day-to-day operating cycle. Working capital affects two seemingly competing things: *liquidity* (ability to pay short-term obligations) and *profitability* (return on total investment). The trade-off between the two is one of the central tensions in financial management.

Step 1. **Net Working Capital (NWC).**

$$\text{NWC} = \text{Current Assets} - \text{Current Liabilities}.$$

Step 2. **Effect on Liquidity.**

- *Higher working capital* $\Rightarrow$ more cash, more inventory, more debtors $\Rightarrow$ the firm can pay its bills, salaries and suppliers on time. Higher liquidity.
- *Lower working capital* $\Rightarrow$ risk of running out of cash, missing payments, losing supplier credit and customer trust. Lower liquidity.

Step 3. **Effect on Profitability.**

- *Higher working capital* (especially excess inventory and excess debtors) $\Rightarrow$ funds blocked in low-return current assets $\Rightarrow$ the same money would have earned more in fixed assets or paying down debt $\Rightarrow$ lower profitability.
- *Lower working capital* $\Rightarrow$ more money in productive investments $\Rightarrow$ higher return on investment.

Step 4. **The trade-off.** Liquidity and profitability move in opposite directions with working capital level.

- *Too much WC* $\Rightarrow$ high liquidity, low profitability.
- *Too little WC* $\Rightarrow$ high profitability *on paper*, but risk of liquidity crisis that can stop production altogether.
- The financial manager seeks the *optimum* WC level that keeps liquidity just adequate and profitability as high as possible.

Final Answer: Working capital simultaneously affects **liquidity** and **profitability** in opposite directions. Higher WC raises liquidity (more ability to pay short-term obligations) but lowers profitability (funds blocked in low-return current assets). Lower WC raises profitability (more funds in productive investments) but increases liquidity risk (cannot meet bills). The financial manager seeks the optimum WC level that balances the two.

EXPERT'S SOLUTION *: Aarav Sharma, M.Com, Delhi University*

Quick reading. More WC $\Rightarrow$ safer but less profitable; less WC $\Rightarrow$ profitable but risky.

Step 1. NWC = CA − CL.

Step 2. More WC $\rightarrow$ liquidity $\uparrow$, profitability $\downarrow$.

Step 3. Less WC $\rightarrow$ liquidity $\downarrow$, profitability $\uparrow$.

Step 4. Optimum = balance both.

> **Final Answer:** Working capital is a liquidity-profitability trade-off; the optimum WC level keeps liquidity adequate while maximising profitability.

Q 9.12 **Aval Ltd. is engaged in the business of export of canvas goods and bags. In the past, the performance of the company had been upto the expectations. In line with the latest demand in the market, the company decided to venture into leather goods for which it required specialised machinery. For this, the Finance Manager Prabhu prepared a financial blueprint of the organisation's future operations to estimate the amount of funds required and the timings to ensure that enough funds are available at right time. He also collected the relevant data about the profit estimates in the coming years. By doing this, he wanted to be sure about the availability of funds from the internal sources of the business. For the remaining funds, he is trying to find out alternative sources from outside. (a) Identify the financial concept discussed in the above paragraph. Also, state the objectives to be achieved by the use of financial concept so identified. (Financial Planning) (b) 'There is no restriction on payment of dividend by a company'. Comment. (Legal & Contractual Constraints).**

SOLUTION

Concept used. The case-study has two parts. Part (a) asks the student to recognise the description of financial planning and recall its objectives. Part (b) asks the student to evaluate the statement that dividend payment is unrestricted – a statement which is *wrong*, because of the *legal and contractual constraints* listed by NCERT.

Step 1. **Part (a) – Financial Planning identified.**

- Clue 1: "Prabhu prepared a financial *blueprint* of the organisation's future operations" – the textbook definition of financial planning.
- Clue 2: He estimated *amount* and *timing* of funds needed.
- Clue 3: He looked at *internal* sources first, then *external*.
- Concept identified: **Financial Planning**.

Step 2. **Objectives of Financial Planning.**

- *(i) To ensure availability of funds whenever they are required.* Right amount, right timing, right source.
- *(ii) To see that the firm does not raise resources unnecessarily.* No idle surplus; no unnecessary financial cost.
- *Other points of importance.* Tackles uncertainty about future operations; helps in coordinating various business functions; reduces wastage; provides links between investment and financing decisions; ensures smooth functioning; aids in policy formulation.

Step 3. **Part (b) – "No restriction on dividend payment" is INCORRECT.**

- Dividend payment is restricted by both *legal* and *contractual* constraints.
- *Legal constraints (Companies Act 2013).*
  - Dividend can be paid only out of *profits* – current year's profit (after depreciation), or accumulated past profits, or both.
  - Dividend cannot be paid out of capital – this would be a return of capital, not income.
  - A specified percentage of profit must be transferred to *reserves* before dividend.
  - Dividend must be declared at the AGM on the recommendation of the Board; the AGM cannot increase the recommended rate.
- *Contractual constraints.*
  - Long-term loan agreements (debentures, bank loans) often include covenants that restrict dividend until the loan is partly or fully repaid, or require the company to maintain a minimum debt-service-coverage ratio before declaring dividend.
  - Such covenants protect lenders.
- Conclusion: The statement is wrong; there are several legal and contractual restrictions on dividend payment.

Final Answer: (a) The concept is **Financial Planning** – the preparation of a financial blueprint of an organisation's future operations. Its two objectives are: (i) ensuring availability of funds when required, and (ii) ensuring that the firm does not raise resources unnecessarily. (b) The statement is **incorrect**. Dividend payment is restricted by *legal constraints* under the Companies Act (paid only out of profits, mandatory transfer to reserves, recommended by Board and declared at AGM) and by *contractual constraints* (loan covenants in debenture and bank-loan agreements often restrict dividend until loan is serviced).

☞ **Exam Tip**

Two-part case: name the concept (Financial Planning) and recall both objectives. For the second part, always pair *legal* and *contractual* constraints – one without the other costs marks.

EXPERT'S SOLUTION *: Priya Iyer, M.Com, Christ University Bangalore*

Quick reading. (a) Blueprint = Financial Planning. (b) Dividend is restricted (legal + contractual).

Step 1. Concept: Financial Planning.

Step 2. Objectives: availability + no unnecessary fund-raising.

Step 3. Dividend restrictions: legal (Companies Act) + contractual (loan covenants).

> **Final Answer:** (a) Financial Planning – two objectives = availability of funds and avoidance of surplus. (b) Statement is wrong – dividend is restricted by legal and contractual constraints.

Long Answer Type Questions

Q 9.13 What is working capital? Discuss five important determinants of working capital requirement.

SOLUTION

Concept used. Working capital is the capital needed to finance the day-to-day operations of the business – buying raw materials, paying wages, holding inventory, extending credit to customers – until cash returns from sales.

Step 1. **Meaning.** Working capital = the firm's investment in *current assets*. *Gross working capital* = total current assets. *Net working capital* = current assets minus current liabilities:

$$\text{NWC} = \text{CA} - \text{CL}.$$

Step 2. **Five important determinants of working capital requirement.**

- *(i) Nature of business.* Manufacturing firms need more WC (raw materials, WIP, finished goods); trading and service firms need less.
- *(ii) Scale of operations.* Larger scale ⇒ larger inventory and debtors ⇒ larger WC.
- *(iii) Production cycle.* Longer cycle (heavy engineering, ship-building) ⇒

funds locked longer ⇒ more WC. Shorter cycle (FMCG) ⇒ less WC.

- *(iv) Credit allowed and credit availed.*
  - More credit *allowed* to customers ⇒ higher debtors ⇒ more WC.
  - More credit *availed* from suppliers ⇒ lower payable cash ⇒ less WC.
- *(v) Inflation.* Rising prices push up the cost of inventory and wages, so even constant volume needs more WC.
- *(Other determinants for context.)* Operating efficiency, availability of raw material, seasonal factors, business cycle (boom = more WC; depression = less), growth prospects, level of competition.

Final Answer: **Working capital** is the capital required to finance day-to-day operations (current assets); NWC = CA − CL. **Five important determinants:** (1) Nature of business (manufacturing > service); (2) Scale of operations (large > small); (3) Production cycle (longer ⇒ more WC); (4) Credit allowed vs credit availed (more allowed ⇒ more WC; more availed ⇒ less WC); (5) Inflation (rising prices ⇒ more WC).

☞ Exam Tip

For a 6-mark answer, define WC first, then list *five* determinants with a one-line explanation each. Five is the magic number for this question.

EXPERT'S SOLUTION *: Vivaan Mehta, M.Com, Symbiosis Pune*

Quick reading. Day-to-day capital; five drivers.

Step 1. Nature of business.

Step 2. Scale.

Step 3. Production cycle.

Step 4. Credit (allowed − availed).

Step 5. Inflation.

Final Answer: WC funds the operating cycle. Five determinants: nature, scale, cycle, credit terms, inflation.

Q 9.14 **"Capital structure decision is essentially optimisation of risk-return relationship." Comment.**

SOLUTION

Concept used. Capital structure is the debt-equity mix. The choice of mix sets up a direct *trade-off*: debt is cheaper (interest is tax-deductible, lenders expect a lower return) but riskier (fixed obligations must be paid even in bad years); equity is costlier but safer. The capital structure decision is, in essence, choosing the point on this trade-off that maximises shareholder wealth.

Step 1. **Return side of the trade-off.**

- *Debt is cheaper.* Interest is tax-deductible:

$$\text{After-tax cost of debt} = \text{Interest rate} \times (1 - t).$$

  For a firm taxed at 30% borrowing at 10%, the after-tax cost is only 7%.
- Equity holders, who bear residual risk, expect a higher return than 7%.
- Therefore, using more debt *lowers the weighted average cost of capital* (WACC) and *raises EPS* – this is the *trading on equity* benefit.

Step 2. **Risk side of the trade-off.**

- Debt carries fixed obligations (interest, principal). Failure to pay can trigger default and bankruptcy.
- Beyond a point, additional debt sharply raises *financial risk*.
- Equity holders, seeing the rising risk, demand a higher return $\Rightarrow$ cost of equity rises and share price may fall.

Step 3. **The optimisation problem.**

- As debt rises from zero, WACC falls (benefit dominates) and EPS rises.
- At a certain point, the rising risk premium on equity equals the marginal tax-saving of debt – WACC bottoms out.
- Beyond that point, WACC rises again – additional debt destroys value.
- The *optimum capital structure* is the debt-equity mix at the bottom of this U-shaped WACC curve.

Step 4. **Factors a manager weighs in this trade-off.** Cash-flow position, interest-coverage ratio, debt-service coverage ratio, ROI vs cost of debt, tax rate, floatation cost, risk consideration, flexibility, control considerations, regulatory framework, stock-market conditions, industry capital structure norms.

Final Answer: The statement is **true**. The capital structure decision is essentially a *risk-return optimisation*. Debt is cheaper (tax-deductible interest) and raises EPS up to a point (return side), but it also brings fixed financial obligations and raises financial risk (risk side). The financial manager balances the two by choosing the debt-equity mix at which the weighted average cost of capital is minimum and the market price of the equity share is maximum – the *optimum capital structure*.

EXPERT'S SOLUTION *: Aanya Kapoor, M.Com, BHU Varanasi*

Quick reading. Debt = cheap + risky; equity = costly + safe. Optimise.

Step 1. More debt → lower WACC, higher EPS.

Step 2. But also higher financial risk.

Step 3. Optimum = min WACC, max share price.

Final Answer: True – capital structure choice = risk-return optimisation; optimum mix minimises WACC and maximises share price.

Q 9.15 **"A capital budgeting decision is capable of changing the financial fortunes of a business." Do you agree? Give reasons for your answer.**

SOLUTION

Concept used. **Capital budgeting decisions** are decisions on long-term investment in fixed assets – buying plant, building a factory, launching a new product line, acquiring a competitor. They commit large funds for long periods and are generally irreversible. Their impact on the firm's future is therefore unique.

Step 1. **Yes, capital budgeting decisions can change the financial fortunes – four reasons.**

- *(i) Long-term growth.* Capital budgeting decisions determine the firm's future earning power. A wise investment (modern plant, R&D, new product line) drives years of growth; a poor one drags earnings down for years.
- *(ii) Large amount of funds involved.* These decisions lock up a substantial portion of the firm's capital. A single project may absorb crores; if it fails, the firm may be crippled.
- *(iii) Risk involved.* Capital budgeting commits funds whose returns stretch into an uncertain future. The risk is high; estimates of future cash flows are

exposed to changes in technology, demand and policy.

- *(iv) Irreversible decisions.* Once a plant is built or a competitor is acquired, reversing the decision is very costly – selling at a loss, writing off goodwill, retrenching staff. Most capital budgeting decisions cannot be undone without heavy loss.

Step 2. **Implication.** Because of these four characteristics, capital budgeting decisions are taken *only after careful analysis* – NPV, IRR, payback period, sensitivity analysis, scenario analysis, real-option valuation – and only after the board and shareholders have considered the long-term strategic fit.

Step 3. **Real-world illustration.** Reliance's investment in 4G telecom infrastructure (Rs. 1.5 lakh crore through Reliance Jio) was a capital budgeting decision that re-shaped the firm and the entire Indian telecom industry – a textbook example of how a single capital budgeting decision can change the financial fortunes of a business.

Final Answer: **Yes**, capital budgeting decisions can change the financial fortunes of a business. Four reasons: (1) *Long-term growth* – they determine future earning power; (2) *Large funds involved* – they lock up a major share of the firm's capital; (3) *High risk* – returns stretch into an uncertain future; (4) *Irreversibility* – reversal is very costly. Because of these four characteristics, capital budgeting decisions are taken only after rigorous NPV/IRR analysis and board scrutiny.

EXPERT'S SOLUTION *: Karan Joshi, M.Com, BHU Varanasi*

Quick reading. Yes – four reasons: growth, funds, risk, irreversibility.

Step 1. Long-term growth.

Step 2. Large funds.

Step 3. Large risk.

Step 4. Irreversible.

Final Answer: Yes – capital budgeting decisions reshape financial fortunes because they are big, long-term, risky and irreversible.

Q 9.16 Explain the factors affecting dividend decision.

SOLUTION

Concept used. The **dividend decision** is the third financial decision – how much of the profit to distribute as dividend and how much to retain. The decision balances *shareholder expectation* (dividend in hand) against *growth funding* (retained earnings).

Step 1. **1. Earnings.** Dividend is paid out of profits. Higher and more stable earnings allow higher dividend.

Step 2. **2. Stability of earnings.** Companies with stable earnings (utilities, FMCG) can declare higher and more stable dividends; cyclical companies (steel, auto) keep dividend conservative.

Step 3. **3. Stability of dividend.** Most firms aim to maintain a stable dividend over time; abrupt cuts send a negative signal. Hence the dividend payout is conservative even in a good year so it can be sustained in a bad year.

Step 4. **4. Growth opportunities.** If the firm has many positive-NPV projects, it retains more (lower payout); if growth opportunities are few, it can pay out more.

Step 5. **5. Cash-flow position.** Profit is an accounting concept; dividend is paid in cash. Even a profitable firm may declare a low dividend if cash is locked up in receivables or inventory.

Step 6. **6. Shareholder preference.** Some shareholders (retired investors, pension funds) prefer steady dividend; growth investors prefer retention. The firm reads its shareholder base.

Step 7. **7. Taxation policy.** Tax treatment of dividend vs capital gains influences payout. (In India, dividend is taxable in the hands of the recipient; capital gains face long-term/short-term distinction.)

Step 8. **8. Stock market reaction.** Investors generally view a dividend rise as positive and a dividend cut as negative – the so-called *signalling effect*. Managers manage payout with the share-price reaction in mind.

Step 9. **9. Access to capital markets.** Firms with easy access to capital markets (big, well-known firms) can afford a higher payout because they can replenish funds by issuing fresh securities. Smaller firms retain more.

Step 10. **10. Legal constraints.** The Companies Act restricts dividends to be paid only out of current or accumulated profits; a percentage must be transferred to reserves; dividend cannot be paid out of capital.

Step 11. **11. Contractual constraints.** Long-term loan agreements may restrict dividends until the loan is serviced or until a minimum coverage ratio is maintained.

Final Answer: Factors affecting the dividend decision include: (1) earnings level, (2) stability of earnings, (3) stability of dividend (signalling), (4) growth opportunities (retain for positive-NPV projects), (5) cash-flow position, (6) shareholder preference, (7) taxation policy, (8) stock market reaction, (9) access to capital markets, (10) legal constraints (Companies Act), and (11) contractual constraints (loan covenants). The firm balances payout against retention to maximise long-run share price.

☞ **Exam Tip**

For 6 marks, write any *eight* factors. Always end with *legal* and *contractual* constraints – they are favourites with examiners and complete the answer.

EXPERT'S SOLUTION *: Aarav Sharma, M.Com, Delhi University*

Quick reading. Eleven NCERT factors; write any 8.

Step 1. Earnings, stability, growth, cash.

Step 2. Shareholders, tax, market, access.

Step 3. Legal + contractual constraints.

Final Answer: 11 factors; safe 8: earnings, stability, growth, cash flow, shareholders, tax, market reaction, legal/contractual constraints.

Q 9.17 Explain the term 'Trading on Equity'. Why, when and how it can be used by company?

SOLUTION

Concept used. **Trading on Equity** is the practice of using *fixed-cost finance* (debt and preference shares) in the capital structure to enhance the return to equity shareholders. It is one of the most-tested concepts in the chapter because it operationalises the entire risk-return trade-off of capital structure.

Step 1. **Meaning.** Trading on equity is the use of borrowed funds (or preference share funds) in the expectation of earning a return greater than the cost of those funds, so that the excess accrues to the equity shareholders and their EPS rises.

Step 2. **Why use it – the benefit.**

- Debt carries a fixed interest cost which is tax-deductible. Effective cost is

even lower than the stated rate:

$$\text{After-tax cost of debt} = i \times (1 - t).$$

- If the firm earns ROI $>$ after-tax cost of debt, the surplus enriches equity holders – EPS rises sharply.
- Used in moderation, trading on equity lowers the weighted average cost of capital and raises share price.

Step 3. **When to use it – the condition.**

- *Condition 1:* ROI $>$ cost of debt. Without this, debt destroys value.
- *Condition 2:* Stable EBIT. Firms with stable, predictable operating earnings (utilities, FMCG) can take more debt; firms with volatile EBIT (auto, steel) cannot.
- *Condition 3:* Low business risk. The total risk (business + financial) should remain manageable.
- *Condition 4:* Interest-coverage ratio (ICR) and debt-service coverage ratio (DSCR) should comfortably exceed 1.

Step 4. **How to use it – the mechanics.**

- *Step 1.* Raise long-term funds through debentures, term loans or preference shares – all carry fixed cost.
- *Step 2.* Invest in projects whose ROI is comfortably above the cost of debt.
- *Step 3.* Pay fixed interest / preference dividend from EBIT.
- *Step 4.* The surplus (EBIT minus interest minus tax) belongs to equity holders, lifting EPS.

Step 5. **Numerical illustration.** Suppose total capital is Rs. 1 crore. Compare two capital structures:

- *Plan A:* 100% equity (1,00,000 shares of Rs. 100). EBIT $=$ Rs. 20 lakh, tax 30% $\Rightarrow$ PAT $=$ Rs. 14 lakh; EPS $=$ Rs. 14.
- *Plan B:* 50% equity (50,000 shares of Rs. 100) + 50% debt @ 10%. EBIT $=$ Rs. 20 lakh, Interest $=$ Rs. 5 lakh, EBT $=$ Rs. 15 lakh; tax 30% $\Rightarrow$ PAT $=$ Rs. 10.5 lakh; EPS $=$ Rs. 21.

Same EBIT, different capital structure $\Rightarrow$ EPS rises from Rs. 14 to Rs. 21 – a 50% rise. *This is trading on equity.*

Step 6. **Caution.** If EBIT falls – say to Rs. 5 lakh – the same plan B becomes painful: Interest Rs. 5 lakh swallows entire EBIT, tax-saving disappears, PAT is zero, EPS is zero. With Plan A (no debt), Plan A would still have EPS of Rs. 3.5. This is the financial risk of trading on equity.

Final Answer: **Trading on equity** is the use of fixed-cost finance (debt and preference shares) to enhance the return to equity shareholders. *Why:* the spread between ROI and the after-tax cost of debt accrues entirely to equity holders, lifting EPS. *When:* only when ROI $>$ cost of debt, EBIT is stable, business risk is low, and ICR / DSCR are comfortably above 1. *How:* raise long-term debt or preference shares, invest in positive-spread projects, pay fixed charges out of EBIT, and let the surplus enrich equity EPS. Used in moderation it lowers WACC; used excessively it raises financial risk and can destroy value.

EXPERT'S SOLUTION *: Priya Iyer, M.Com, Christ University Bangalore*

Quick reading. Use debt to boost EPS – works only if ROI $>$ cost of debt.

Step 1. Why: spread $=$ ROI $-$ after-tax cost of debt goes to equity holders.

Step 2. When: ROI $>$ cost of debt $+$ stable EBIT $+$ low business risk.

Step 3. How: raise debt, invest in positive-spread projects, pay fixed charges.

Final Answer: Trading on equity $=$ use debt to lift EPS; safe only when ROI $>$ cost of debt and EBIT is stable.

Q 9.18 **'S' Limited is manufacturing steel at its plant in India. It is enjoying a buoyant demand for its products as economic growth is about 7-8 per cent and the demand for steel is growing. It is planning to set up a new steel plant to cash on the increased demand. It is estimated that it will require about Rs. 5000 crores to set up and about Rs. 500 crores of working capital to start the new plant. (a) Describe the role and objectives of financial management for this company. (b) Explain the importance of having a financial plan for this company. Give an imaginary plan to support your answer. (c) What are the factors which will affect the capital structure of this company? (d) Keeping in mind that it is a highly capital-intensive sector, what factors will affect the fixed and working capital? Give reasons in support of your answer.**

SOLUTION

Concept used. A textbook composite case-study. Four sub-parts that knit together the whole chapter: role/objectives of FM, financial planning, capital structure factors, and fixed/working capital factors. Steel is heavily *capital-intensive* with a *long production cycle* and *stable demand* – these properties drive each answer.

Step 1. **Part (a) – Role and objectives of financial management for 'S' Ltd.**

- *Role:* take the three financial decisions – (i) Investment / capital budgeting (whether and how to invest Rs. 5000 crore in the new plant); (ii) Financing (raise the funds through equity, debt or a mix); (iii) Dividend (how much of future profit to retain to keep funding the expansion).
- *Primary objective: wealth maximisation* of the equity shareholders – maximise the market price of 'S' Ltd. share.
- *Operational objectives:* ensure availability of Rs. 5500 crore at the right time; ensure no surplus idle funds; ensure reasonable return to shareholders; maintain liquidity; manage financial and business risk.

Step 2. **Part (b) – Importance of financial planning for 'S' Ltd.**

- Forecasts the funds required (Rs. 5000 crore fixed + Rs. 500 crore working) and the timing of each tranche.
- Avoids both shortage of funds (which would stall the project) and excess (which would be idle cost).
- Helps in coordinating purchase, construction, hiring and commissioning schedules with funding tranches.
- Provides links between investment and financing decisions.
- *Imaginary plan.*
  - Year 0: Equity issue Rs. 2000 crore (rights / IPO).
  - Year 0–1: Long-term debt Rs. 2000 crore (debentures, term loans).
  - Year 1–2: Retained earnings + working-capital loan Rs. 500 crore.
  - Year 2–3: Additional equity Rs. 1000 crore if needed.
  - Year 3 onwards: Plant operational; dividend kept low till loans repaid; surplus reinvested in capacity expansion.

Step 3. **Part (c) – Factors affecting capital structure of 'S' Ltd.**

- *Cash-flow position.* Steel demand is buoyant and stable → supports more debt.
- *ICR / DSCR.* Stable EBIT means coverage ratios will be comfortable → debt is feasible.
- *ROI vs cost of debt.* Expected ROI on the new plant must exceed after-tax cost of debt; if 7-8% growth holds, this is likely.
- *Tax rate.* Higher corporate tax makes debt's tax-shield more valuable.
- *Cost of equity.* Equity is costlier than debt.
- *Floatation cost.* A Rs. 2000 crore equity issue carries large merchant-banking and listing cost; a debt issue is cheaper to float.
- *Risk consideration.* Steel is cyclical; too much debt is dangerous in a

down-cycle.

- *Flexibility.* Some debt capacity must be kept in reserve for emergencies.
- *Control.* Fresh equity dilutes promoters' control; debt does not.
- *Regulatory framework.* SEBI guidelines for public issue; banking norms for term loans.
- *Stock market conditions.* A bullish market favours equity; a bearish one favours debt.
- *Capital structure of peers.* Tata Steel, JSW Steel, SAIL benchmark debt ratios – 'S' Ltd. uses these as a sanity check.

Step 4. **Part (d) – Factors affecting fixed and working capital in this capital-intensive sector.**

- *Fixed capital – factors.*
  - *Nature of business* – steel is capital-intensive (blast furnace, rolling mill, refractories) $\Rightarrow$ huge fixed capital.
  - *Scale of operations* – a green-field plant means very high fixed capital.
  - *Choice of technique* – automated, capital-intensive technology $\Rightarrow$ more fixed capital.
  - *Technology upgradation* – modern steel plants need continuous-casting, blast-furnace upgrades.
  - *Growth prospects* – 7-8% growth supports building extra capacity for the future.
  - *Diversification, financing alternatives, level of collaboration.*
- *Working capital – factors.*
  - *Nature of business* – manufacturing $\Rightarrow$ raw material (iron ore, coking coal), WIP (heavy and slow), finished goods $\Rightarrow$ *large* working capital. Trading concerns would need less.
  - *Scale of operations* – the larger the plant, the larger the inventory and debtor balances.
  - *Production cycle* – steel-making has a long cycle (weeks) $\Rightarrow$ more funds tied up.
  - *Business cycle* – the buoyant phase means high inventory and more debtors $\Rightarrow$ more working capital.
  - *Seasonal factors* – construction season pushes up demand, raising WC need.
  - *Credit allowed / availed* – B2B credit terms in steel are 30-90 days both ways; net effect depends on the gap.
  - *Availability of raw material* – erratic iron-ore supply forces higher stock

levels.

- *Operating efficiency, growth prospects, level of competition, inflation.*

Final Answer: (a) FM's role for 'S' Ltd. = take the three financial decisions (investment, financing, dividend) with the primary objective of wealth maximisation. (b) Financial planning ensures Rs. 5500 crore is available on schedule – imaginary plan: Rs. 2000cr equity + Rs. 2000cr debt + Rs. 500cr WC loan + Rs. 1000cr later equity. (c) Capital-structure factors: cash-flow, ICR/DSCR, ROI vs cost of debt, tax rate, floatation cost, risk, flexibility, control, regulatory framework, market conditions, peer structure. (d) In this capital-intensive sector, fixed capital is driven by nature of business, scale, capital-intensive technology, technology upgradation and growth prospects; working capital is driven by nature of business (manufacturing), scale, long production cycle, business cycle (buoyant), credit terms and raw material availability.

☞ Exam Tip

Composite case questions: tag every sub-part with the relevant NCERT concept (FM objectives, financial planning, capital structure factors, fixed/working capital factors). Apply each factor to the steel-industry context.

EXPERT'S SOLUTION *: Vivaan Mehta, M.Com, Symbiosis Pune*

Quick reading. Four sub-parts cover the whole chapter.

Step 1. (a) FM role: 3 decisions; objective: wealth max.

Step 2. (b) Financial plan: Rs. 5500 crore across equity + debt + WC loan.

Step 3. (c) Capital structure factors: 12 NCERT factors applied to steel.

Step 4. (d) Capital-intensive sector: nature, scale, tech, cycle all push WC and FC up.

Final Answer: Whole chapter answer in one case: role + plan + capital structure factors + fixed and working capital factors applied to the steel industry.

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