

**INSTITUTE OF ACTUARIES OF INDIA**  
**EXAMINATIONS**

**19<sup>th</sup> November 2024**

**Subject CB1 – Business Finance**

**Time allowed: 3 Hours 15 Minutes**

**Total Marks: 100**

- Q. 1)** Which one of the following is the goal of the Treasurer?
- A. How the cash for the investment should be raised.
  - B. To invest in projects that display a positive net present value.
  - C. To determine a range of social objectives beyond making profits.
  - D. To determine which real asset the firm should invest in. [2]
- Q. 2)** Which of these statements about the ethical responsibilities of a company's manager is most appropriate?
- A. Manager only have ethical responsibility if they are members of a professional body.
  - B. Ethical responsibilities of company's manager are met provided the company complies with all relevant regulation.
  - C. Manager doesn't have any ethical responsibility.
  - D. Ethical responsibilities of a company's manager are met provided the company acts in line with managers' personal ethical principles. [2]
- Q. 3)** Investors in the ordinary shares of company have their liability limited to:
- A. Market price of shares less any dividend due
  - B. Fully paid value of shares
  - C. Nominal value of holding
  - D. Capital value less any dividend due [2]
- Q. 4)** What is the person known as who draws a bill of exchange
- A. Drawer
  - B. Payee
  - C. Drawee
  - D. None of the above [2]
- Q. 5)** Government of country ABC wants to build a new farm for which a fund is set up. This fund will ensure all the finances related to construction, operation for an agreed term. Which of the following type describes the above type of project financing?
- A. Non-Recourse method
  - B. Special Purpose Vehicle
  - C. Off- Balance Sheet financing
  - D. Shadow Banking [2]
- Q. 6)** What would be the most likely purpose for a business to buy a forward option:
- A. Sell finished goods to customer.
  - B. Delivery of raw material at a known price.
  - C. Hedge price movements in commodity.
  - D. Stock market crash. [2]
- Q. 7)** From the following risk factors which will not impact the gearing decision:
- A. Business risk
  - B. Financial Risk [2]

- C. Political Risk
- D. Cost of raising and servicing the capital

**Q. 8)** What can be the most appropriate motive of travel chain acquiring a fashion clothing chain:

- A. Horizontal integration
- B. Vertical integration
- C. Conglomerate
- D. Diversification

[2]

**Q. 9)** Which of following factors doesn't influence the dividend decision:

- A. Stock market
- B. Tax
- C. Opportunity cost
- D. Number of shares

[2]

**Q. 10)** Which of the following techniques is appropriate to allow for systematic risk while analysing a project:

- A. Scenario Testing
- B. Appropriate Discount Rate
- C. Risk Matrix
- D. Sensitivity Analysis

[2]

**Q. 11)** What is the definition of "business entity concept"?

- A. Business will continue indefinitely.
- B. Affairs of business are separate from owner.
- C. Business figures published should be comparable one year to next.
- D. Every transaction will affect two figures in financials.

[2]

**Q. 12)** Last year, ABC sold good worth INR 5,00,000 to XYZ. During the last year, a payment of INR 3,00,000 was received. ABC expects to receive an amount of INR 2,00,000 in future. However other party was declared bankrupt during the year and only INR 1,50,000 is expected to be recovered. How much net sales ABC will show in accounts?

- A. INR 5,00,000
- B. INR 4,50,000
- C. INR 3,00,000
- D. INR 3,50,000

[2]

**Q. 13)** Identify situation from below where agency cost will likely to be least?

- A. Mangers running insurance business.
- B. Coal manufacturing in which government takes interest.
- C. Shop with one owner-manager.
- D. Car manufacturing with separate management.

[2]

**Q. 14)** A company has borrowed at variable interest rate in same currency. Which of the following instrument the company can use to protect itself from increase in market interest rate?

[2]

- A. Put option on interest rate future.
- B. Put option on Currency rate future.
- C. Call option on interest rate future.
- D. Call option on Currency rate future.

**Q. 15)** Sole director has lent a large amount of money to his friend. If the friend pays back the amount the company remains solvent, otherwise it will go bankrupt. In the given Scenario, the action that would not provide a “true and fair view” in the accounts is:

- A. To make disclosure in notes to accounts.
- B. To set up a default provision
- C. To write off the loan as a prudent measure.
- D. To show loan at book cost.

[2]

**Q. 16)** ABC company is ungeared, has ungeared beta of 1.5 and pay tax at 40%. Calculate Beta (round to 2 decimal places) of company’s equity shares if they issue debt equal to 50% of its market cap and use cash to repay half of existing shares.

- A. 1.92
- B. 1.50
- C. 2.40
- D. 0.60

[2]

**Q. 17)** A company ABC Ltd. wants to invest in a new asset for the future. The company wants to know whether the investment should be undertaken or not. Currently, ABC Ltd. estimates that the project will require an investment of INR 1,20,000 in the current year. From next year forward, the asset will generate cash flows of INR 25,000 for the next 8 years. ABC Ltd. has projected the total profit from the project to be INR 15,000 after 8 years before any interest and tax. ABC Ltd. has calculated its cost of capital to be 10%.

1) Calculate Return on Capital Employed (ROCE)?

- A. 12.5%
- B. 10%
- C. 5%
- D. 2%

[2]

2) Calculate Net Present Value of above project.

- A. INR 13,373
- B. INR 12,120
- C. INR 11,050
- D. INR 23,350

[2]

3) Calculate IRR (Round to 2 decimal places) for the above project.

- A. 13.16%
- B. 12.22%
- C. 10.23%
- D. 20.50%

[4]

**Q. 18)** Which of the following formula can determine if the company is solvent?

- A. Available Solvency Margin divided by Required Solvency Margin

- B. Assets divided by Current Liability
- C. Required Solvency Margin divided by Available Solvency Margin
- D. Current Asset divided by Current Liability [2]

**Q. 19)** Which of the following is not an agency cost?

- A. Senior partners dining at gourmet restaurants and upgrading to first-class flights.
- B. Paying bonus to management if share price increase.
- C. Making managements' salaries partial shares of company.
- D. Rent payment of office space occupied by company. [2]

**Q. 20)** ABC Ltd. has debt of INR 100 Cr. with Gross Redemption yield of 5% pa and INR 100 Cr. market value of equity with equity expecting 10% pa from it. Further ABC limited raises debt finance worth INR 50 Cr further to buy back shares INR 50 Cr how will this act impact Weighted Average Cost of Capital as per Modigliani and Miller Approach.

- A. Increase
- B. Decrease
- C. Same
- D. Will become zero. [3]

**Q. 21)** How purchase of inventory in cash should impact accounts as per Dual Aspect Concept?

- A. Inventory increases, cash reduces.
- B. Inventory reduces, cash increases.
- C. Inventory increases, cash increases.
- D. Inventory reduces, cash reduces. [2]

**Q. 22)** Which of following is not part of firm equity?

- A. Retained earnings.
- B. Revaluation Reserve.
- C. Share capital.
- D. Upward revaluation of non-current asset. [2]

**Q. 23)** Following are details of ABC Ltd. for share capital and retained earnings.

Particulars	Amount (in Cr.)
Share capital (INR 25 p shares)	INR 200
Share premium account	INR 70
Retained earnings reserve	INR 80

What would be the increase in share premium account if 1 for 5 right issue is done at INR 55 p?

- A. INR 48 Cr.
- B. INR 25 Cr.
- C. INR 20 Cr.
- D. INR 100 Cr. [2]

- Q. 24)** Which of the following is formula for Economic Value Added?
- A. Net Operating Profit after taxes- (Total Capital \* Weighted Average Cost of Capital)
  - B. Net Operating Profit before taxes- (Total Capital \* Weighted Average Cost of Capital)
  - C. Net Operating Profit after taxes- (Total Assets\* Weighted Average Cost of Capital)
  - D. Net Operating Profit before taxes- (Total Assets\* Weighted Average Cost of Capital) [2]
- Q. 25)** Which of the following value will be used if a share is issued at par?
- A. At its nominal value
  - B. More than nominal value
  - C. More than fair value
  - D. Fair Value [2]
- Q. 26)** A limited liability company decides to create a provision for doubtful debts. How does this affect its statement of financial position?
- A. Decrease the ordinary share capital
  - B. Increase the ordinary share capital
  - C. Decrease the retained earnings
  - D. Increase the retained earnings [2]
- Q. 27)** Mortgage debenture is type of debentures with charge\* as:
- A. Fixed charge
  - B. Floating Charge
  - C. Some part Fixed, other part Floating
  - D. No charge is applicable
- \*Where charge means coupon payment and capital repayment [2]
- Q. 28)** Which of the following statement is true?
- A. Loan Capital holders are creditors and share capital holders are owner.
  - B. Loan Capital holders as well as share capital holders are owner.
  - C. Loan Capital holders as well as share capital holders are creditor.
  - D. Loan Capital holders are owners and share capital holders are creditor. [2]
- Q. 29)** Which of the following is formula for Shareholders' equity ratio?
- A.  $\frac{\text{Shareholders' equity} - \text{intangibles}}{\text{Total assets} - \text{current liabilities} - \text{intangibles}}$
  - B.  $\frac{\text{Shareholders' equity} - \text{intangibles}}{\text{Total assets} - \text{current asset}}$
  - C.  $\frac{\text{Shareholders' equity}}{\text{Total assets} - \text{current asset}}$
  - D.  $\frac{\text{Shareholders' equity} - \text{intangibles}}{\text{Total assets} - \text{current asset} - \text{intangibles}}$  [2]
- Q. 30)** The balance sheet of Zany-Zest Company Ltd as at 31/03/2024 is as follows.

## Zany Zest Company Ltd

Balance sheet as at 31 March 2024

<b>Equity and Liabilities</b>	<b>Amount (INR)</b>	<b>Assets</b>	<b>Amount (INR)</b>
Share capital (INR 10 per share)	4,00,000	Intangibles	8,00,000
Retained Earnings	7,00,000	Property, Plant, Machinery	8,00,000
Secured loans	7,00,000	Inventory	2,50,000
Trade payable	2,00,000	Trade Receivables	2,50,000
Bank	1,00,000		
<b>Total liabilities</b>	<b>21,00,000</b>	<b>Total Assets</b>	<b>21,00,000</b>

[4]

Galore Ltd supplies raw material to Zany Zest Company Ltd. Zany Zest owes INR 300,000 to Galore and it is a part of trade payables. There is a news in the market that Zany Zest is in serious problem and is likely to be wound up.

The following information is available from various sources

1. The intangible non-current asset comprises the cost of buying a license for manufacturing a product that has been a cause of Zany Zest downfall.
2. The property plant and machinery offered for sale and is likely to realise INR 5,00,000
3. Inventories and trade receivables are likely to realise 50% of the book value

What is the amount that Galore is likely to receive from Zany Zest in the event the company is wound up?

- A. INR 1,00,000
- B. INR 50,000
- C. INR 3,00,000
- D. INR 2,00,000

**Q. 31)** Which of the following is not a possible objective of company's shareholder?

- A. Obtain an income from their investment.
- B. To make a capital gain.
- C. To maximise the overall return on their investment.
- D. To pay more corporation tax to government.

[2]

**Q. 32)** Companies are under pressure to meet and fulfil environmental and social governance goals. These relate to how companies:

- A. Performs as a steward of the environment.
- B. Manage relationship with employees, supply chain, customer and the communities in which they operate
- C. Deal with issues such as executive pay and shareholder rights.
- D. All of the above.

[2]

**Q. 33)** Following information are available for ABC Ltd. Financials who runs a factory:

ABC Ltd.

Balance Sheet as on 31.03.2024

Liabilities	Amount (In Cr. INR)	Asset	Amount (In Cr. INR)
Equity Share Capital	48	Fixed Asset	24.2
10% debentures	9.2	Cash	8.8
Sundry Creditors	6.6	Sundry Debtors	11
Bills Payable	8.8	Stock	33
Other Current Liabilities	4.4		
<b>Total</b>	<b>77</b>	<b>Total</b>	<b>77</b>

Statement of Profitability

For the year ending 31.3.2024

Particulars	Amount (In Cr.) (In INR)	Amount (In Cr.) (In INR)
Sales		110
Less: Cost of goods Material	41.8	
Wages	26.4	
Factory Overhead	12.98	
Gross Profit		28.82
Less: Selling and distribution cost	11	
Admin Cost	12.28	
Earnings before interest and tax		5.54
Less interest charges		0.92
Earnings before tax		4.62
Less: Tax (50%)		2.31

From the above information, calculate and choose correct answer:

- 1) Calculate profit margin (round to 2 decimal places).
  - A. 5.02%
  - B. 2.15%
  - C. 5.04%
  - D. 3.02%(2)
  
- 2) Calculate Reducing balance method depreciation on fixed asset (round to 2 decimal) which has estimated residual value of INR 2 Cr. and useful years is 20 years.
  - A. 12.20%
  - B. 11.72%
  - C. 15.03%
  - D. 16.24%(2)
  
- 3) Calculate Current Ratio of ABC Ltd (round to 2 decimal).
  - A. 2.67%

- B. 2.25%  
C. 4.22%  
D. 5.65% (2)
- 4) What will be Asset Utilisation ratio (round to 2 decimal)?  
A. 2.52  
B. 2.29  
C. 1.92  
D. 4.02 (2)
- 5) What would be return on equity (round to 2 decimal)?  
A. 4.81%  
B. 5.22%  
C. 2.50%  
D. 2.25% (2)
- 6) Calculate quick ratio for ABC Ltd.  
A. 50%  
B. 100%  
C. 200%  
D. 25% (2)
- 7) What would be inventory turnover period (round to 2 decimal places)?  
A. 109.50 days  
B. 120.20 days  
C. 100.00 days  
D. 50.25 days (2)

**[14]**

**Q 34)** Coughlin Motors is considering a project with the following expected cash flows:

Year	Project Cash Flow (In Cr.)
0	INR -700
1	INR 200
2	INR 370
3	INR 225
4	INR 700

The project's Weighted Average Cost of Capital is 10 percent. What is the project's discounted payback period (round to 2 decimal places)?

- A. 3.15 years  
B. 4.09 years  
C. 1.62 years  
D. 3.90 years (3)

**Q 35)** Which of the following is not a method for analysing risk in capital budgeting?

- A. Sensitivity analysis.  
B. Beta, or CAPM, analysis. (2)

- C. Monte Carlo simulation.
- D. Return on equity

**Q 36)** Which of the following is not an underlying principle of good practice as per Corporate Governance Code?

- A. Accountability
- B. Transparency
- C. Focus on long -term success of company
- D. Agility

(2)

**Q 37)** Which type of finance instrument is described below:

- Short- term bearer document issued at a discount and redeemed at par
- Issued by large companies who have to meet certain minimum requirements for ex: listing on stock exchange

- A. Bills of exchange
- B. Bank overdraft
- C. Commercial paper
- D. Forward contract

(2)

**Q 38)** Calculate value of shares (Round to 2 decimal) using dividend discount model where dividend paid are INR5, INR 7, INR10 for 3 years with share price estimated after 3 years to be INR 100 and Cost of equity is 10% and Cost of Debt is 5% where Equity and Debt are in ratio 4:1.

- A. 92.98
- B. 101.28
- C. 110.50
- D. 100.00

(2)

**Q 39)** What will be the most likely motivation of a private bank doing takeover of life insurance company?

- A. Reduce risk for supply chain management
- B. Increase profits by expanding product range to existing customers
- C. Reduce Risk by entering into different industry
- D. Increase profits by increasing the market power to set prices.

(2)

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