NEW SYLLABUS

524

Roll No. ....

Time allowed : 3 hours | ***Maximum marks : 100***

Total number of questions : 6 | ***Total number of printed pages : 12***

NOTE : *Answer* ***ALL*** *Questions.*

PART–I

1. Komal is a third-generation businesswomen in the dairy business ‘‘Bharat Ghee & Co.’’. The business is run under the brand "Pure Ghee". The company prepares milk-based products and is known for good quality in the market. The sales are made through self-owned stores, other retailers at locations where self-owned stores are not present and online.

The business is run by Komal's family on a strategic and operational basis. However, now the business is growing at a rapid pace. There is a need to get in professional management to run the business. ‘‘Bharat Ghee & Co.’’ hires a new CEO - Garima, who has three decades of experience in the dairy industry. Komal will now be Executive Chairman and provide a guiding role in the business. The first task that Garima has on hand is to identify issues that are hindering business growth.

Komal asks Garima to list major concerns that the business is facing :

- Lower margins where sales are made through other retailers and online. Online platforms are charging a big commission for making sales.
- High chance of spoilage due to perishable nature of the raw material. Due to perishable nature of material - inventories are kept at a negligible level.
- Capacity increase may be necessitated in the near future for which capital will have to be raised.

Garima requests the Accounts Head - Naina for key financial metrics of ''Bharat Ghee & Co''. Naina provides the following details to Garima :

Key Financials of Bharat Ghee & Co :

Credit Revenue (₹)	80,00,00,000/-
Cash Revenue	20% of total sales
Gross Profit ratio	30%
Indirect expenses (₹)	10,00,00,000/-
Tax rate	25%
Interest on debt	12%
Interest amount (₹)	12,00,00,000/-
Debt to equity ratio	2 : 1

Garima does some quick calculations to derive Return on Equity and Return on Capital Employed. Komal indicates willingness to contribute fresh equity in the business and payoff the loans. However, Garima is not in favour of repayment of loans.

Garima has made a business plan to change the strategy to decrease dependence from third party vendors. The new plan recommends creation of infrastructure to enable sales at locations which are serviced by channel partners. A new strategic business unit is to be created for implementation of the business plan

The following infrastructure facilities need to be created :

Items	**(₹)**
Cold chain warehousing facility	15,00,00,000
New trucks	5,00,00,000
Office premises	3,00,00,000
Furniture and computers	1,00,00,000

- The aforementioned infrastructure will be set up using debt and equity in the ratio of 2 : 1. The new debt will be raised at a rate of 14%.
- The average depreciation will be 30%.
- The above investment and raising of debt will be done on October 1. The organization follows an April to March financial year.
- The average receivables at the end of the financial year from the new business will be ₹ 10,80,00,000/-. The receivables turnover days will be 45 days. Assume 180 days to calculate receivables turnover ratio.
- The gross profit margin will be 20%.
- lndirect expenses other than depreciation will be ₹ 2,00,00,000/-.
- lncome tax rate is 25%.

Komal asks for the projected P&L before approving the required investment amount :

(*a*) Calculate current Net Profit Margin, Return on Equity and Return on Capital Employed.

(*b*) lf debt is paid off using fresh equity, what will be new Net Profit Margin and Return on Equity ? Assume debt is repaid on first day of financial year. Comment on change in return on equity.

(*c*) Prepare the projected Profit & Loss Account of the new business unit.

(*5+5+5=15 marks*)

2. (*a*) Alpha Ltd. has provided you the following information as on 31st March, 2024 :

Particulars	**Amt. in ₹**
Opening Inventory	2,28,750/-
Purchases	9,66,750/-
Closing Inventory	2,95,500/-
Sales	15,60,000/-
Sales Returns	60,000/-

Calculate Inventory Turnover Ratio and Gross Profit Ratio.

(*2+2=4 marks*)

(*b*) Micro Swift Ltd. issued 20,000 8% debentures of ₹ 100 each as per follows :

(1) Series A of ₹ 5,00,000 (Nominal) for cash at a premium of 20%

(2) Series B of ₹ 5,00,000 (Nominal) for cash at 90%

(3) Series C of ₹ 5,00,000 (Nominal) to Bharat Bank against a loan of ₹ 4,00,000 as collateral security.

(4) Series D of ₹ 5,00,000 to creditor for ₹ 4,50,000 on account of capital expenditure in satisfaction of his claim

Pass Journal Entries. (Ignore writing off discount on issue of debentures)

(*8 marks*)

(*c*) Shree Ltd. issued 5,00,000 equity shares. Applications for 4,50,000 shares were received. The following are details related to underwriters :

	Underwriter A	Underwriter B	Underwriter C
Underwriting ratio	40%	30%	30%
Marked Applications	1,00,000	50,000	45,000

The remaining applications did not have any stamp. Determine the liability of the underwriters.

(*3 marks*)

3. (*a*) Campa Ltd. issued 4,00,000 shares of ₹ 50 each at a premium of ₹ 15 per share. Application for 4,50,000 shares was received. The amount was payable as follows :

- On Application ₹ 15
- On Allotment ₹ 16 (including premium ₹ 6)
- On First Call ₹ 20 (including premium ₹ 5)
- On Final Call ₹ 14 (including premium ₹ 4)

(1) Alpha, who was allotted 6000 shares did not pay allotment and first call and thereafter his shares were forfeited.

(2) Beta, who was allotted 4000 shares did not pay first call and thereafter his shares were forfeited.

(3) Gama, who was allotted 15000 shares did not pay flnal call and thereafter his shares were forfeited.

Half of the shares of Alpha and Beta were reissued at ₹ 42

You are required to pass journal entries for the forfeiture and reissue of shares.

(*6 marks*)

(*b*) Rama Ltd. issued 5,000, 8% debentures of 1,000/- each at a discount of 5% on April 1, 2020. The debentures are repayable by equal annual drawings in four years.

You are required to show the amount of discount to be written off every year.

(*4 marks*)

(*c*) Central Textiles Ltd. has provided you its historical revenue and cost data :

Particulars	Amount (Crore)
Revenues	1,000
Variable Cost 70% of sales	700
Fixed Cost	115
Depreciation	101
Income Tax	25%

Central Textiles Ltd. management is attempting to project profitability for next year under different scenarios. The historical data will be the base case scenario. The details regarding optimistic scenario and worst-case scenario are given below :

Particulars	Optimistic Scenario	Worst-Case Scenario
Revenue change	40% increase	20% decrease
Variable cost	65% of sales	71% of sales
Fixed cost	113/- crore	120/- crore
Depreciation	Same as base case	Same as base case

Prepare Profitability projection with the given data.

(*5 marks*)

Attempt all parts of either Q. No. 4 or Q. No. 4A

4 **(*a*)** **Super Star Ltd.**

Balance Sheet as at March 31, 2024

Particulars	Amount (₹)	Amount (₹)
I. Equities and Liabilities		
1. Shareholder's funds		
Share Capital Divided in five lakh shares of 10/- each	50,00,000	
Reserves & Surplus	35,25,000	85,25,000
2. Long Term Borrowings		20,00,000
3. Current Liability: Trade Payables		3,00,000
		1,08,25,000
II. Assets		
1. Fixed Assets		66,50,000
2. Non-Current Investment		7,50,000
3. Current Assets		
Trade Receivables	5,00,000	
Inventories	5,00,000	
Cash and Cash Equivalents	24,25,000	34,25,000
		1,08,25,000
Reserves and Surplus include securities premium of ₹10,00,000/-		

On April 1, 2024 – shareholders of the company authorized buyback as under :

(*i*) 10% of equity shares would be bought back at ₹ 17/- per share.

(*ii*) 12% debentures to be issued for ₹ 1,00,000/- to finance the buyback and balance from general reserve to be utilized for this purpose.

(*iii*) Premium on buyback to be met from securities premium account.

(*iv*) lnvestments would be sold for ₹ 11,75,000/-.

Pass necessary journal entries to record above transactions.

(*5 marks*)

(*b*)

Balance Sheet of S Ltd. is given below

Particulars	Amount (₹)
Liabilities	
Share Capital of 10/- each fully paid	6,00,000
General Reserve	1,50,000
Profit and Loss Account	1,05,000
Creditors	1,80,000
	10,35,000
Assets	
Fixed Assets	3,00,000
Current Assets	7,35,000
	10,35,000

Other information :

- Holding company H Ltd. has bought 48,000 shares in its subsidiary S Ltd.
- Consideration for purchase of shares in S Ltd. ₹ 9,00,000/-

- General Reserve of S Ltd. on date of acquisition ₹ 1,20,000/-
- Profit and Loss Account on date of acquisition ₹ 24,000/-

Calculate :

(*i*) Minority lnterest and Goodwill.

(*ii*) How will goodwill be treated in consolidated books of accounts ?

(*4+1=5 marks*)

(*c*) The Capital structure of Sangam Ltd. is given below :

Particulars	₹ (Crore)
Share Capital (divided in shares of 10/- each)	5,000
Secured Loans	4,000
Unsecured Loans	2,500

ln the next year the company is undertaking an expansion project of ₹ 1,500/- crore. The project is to be financed in the ratio of 40% infusion of fresh owner capital and 60% secured debt capital. No old debt is repaid during the year.

The equity capital will be raised at ₹ 15/- per share. The average interest rate of the debt (old + new) will be 13%.

The income tax rate is 25%.

Prepare a statement showing forecast cash flow from financing activities.

(*5 marks*)

OR (Alternate question to Q. No. 4)

4A. (*i*) What are the conditions required to be fulfilled by a company in order to issue ESOP ?

(*ii*) What are requirements for consolidation of a subsidiary which is LLP or partnership ?

(*iii*) Write a short note on issue of bonus shares. Provide proforma journal entries.

(*5 marks each*)

PART–II

5. Metadex Ltd. is a clean-tech start-up focused on affordable solar energy solutions for urban households. Founded by two engineers, Amit and Sumit, in 2021, the company developed a new solar panel design that is highly efficient and affordable. The journey begins with Amit, an engineer working in a traditional energy company. For years, Amit had seen the damaging environmental impact of fossil fuels and the inefficiency of the power grid. Concerned about climate change and driven by the desire to make a difference, he started researching alternative energy solutions. Solar energy stood out as an abundant and clean source of power that remained underutilized, especially in underserved communities. In 2020, Amit quit his job and partnered with his college friend—Sumit, an expert in renewable energy policy and a software engineer. Their vision is to revolutionize the energy industry by making solar power accessible to middle-income families across the globe.

Starting the company was tough. The team faced numerous challenges, including high upfront costs for solar panels, stiff competition from larger energy companies, and difficulties in navigating government regulations. They initially struggled to secure funding, as many investors were sceptical of renewable energy start-up, thinking the market was oversaturated or too slow to provide returns.

Early-stage solar hardware companies often require significant capital for research, development, and manufacturing, making it a tough sell to investors looking for faster returns. The company navigated through the initial stages of challenges. They developed a robust marketing plan to target eco-conscious communities, partnering with influencers in the sustainability space and running ads on social media. The team scaled their operations by working with local solar panel manufacturers, reducing costs, and creating jobs in the communities they served.

Currently in the expansion process, Metadex needed around ₹ 15 lacs to scale up production and penetrate further in the market. Amit and Sumit decided to explore alternative fundraising options that would allow them to keep control of their company and align with their long-term vision.

The firm's condensed Balance sheet for the current year is as follows :

Liabilities	Amount (₹)	Assets	Amount (₹)
Equity Share Capital (₹10)	8,00,000	Fixed Assets	9,00,000
Reserves & surplus	2,00,000	Current Assets	6,00,000
10% Debentures of ₹100 each	4,00,000		
Current Liabilities	1,00,000		
Total	15,00,000	Total	15,00,000

Currently Earnings Before Interest and Tax (EBIT) = ₹ 8,00,000. Tax Rate 50%. Current Market Price per equity share ₹ 25, market value of debt equals its book value and cost of equity is 14%.

The financial advisors of Metadex Ltd. is assigned the task to calculate :

(*i*) the value of the firm and overall cost of capital before infusion of funds.

(*ii*) the Economic Value Added and Market Value Added.

The company has proposed to issue 8% 5000 Preference shares of ₹ 100 each and for the balance ₹ 10 lacs, it is considering two alternatives.

Alternative 1 : Raise 90% of funds required by issuing equity shares at current market price and the remaining by issuing 8% redeemable Debentures of ₹ 100 at par.

Alternative 2 : Raise 80% of the funds by issuing 9% Debentures of ₹ 100 at par and redeemable at a premium of 10% after 10 years and the balance by issuing Equity shares at 33.3333% premium.

Again, the financial advisor is asked to :

(*i*) Draft the final Capital Structure

(*ii*) Calculate the Earnings Per Share and Financial Leverage.

(*4+4+8+4=20 marks*)

Attempt all parts of either Q. No. 6 or Q. No. 6A

6. (*a*) Calculate Holding period returns for the following security :

Particulars	(₹)
Investment made on April 1, 2022	50,000/-
Dividends received during the year	2,500/-
Investment sold on March 31, 2023	75,000/-
Income Tax Rate on Dividends	30%
Income Tax Rate on Capital Gains	20%

(*b*) Zen & Co made sales for a certain period for ₹ 25,00,000/-. The net profit for the same period was ₹ 2,50,000/-. Fixed overheads were ₹ 3,75,000/-. Calculate :

(*i*) P/V Ratio

(*ii*) Sales needed to generate a profit of ₹ 3,75,000/-

(*iii*) Net profit when sales are ₹ 37,50,000/-

(*iv*) Break Even Point.

(*c*) A company has an EBIT of ₹ 10,00,00,000 and belongs to a risk class of 15% i.e., its overall cost of capital is 15%. What is the cost of equity capital if it employs 10% debt to the extent of 30%, 40% or 50% of total capital of ₹ 50,00,00,000/- Assume net operating income approach applies.

(*d*) Calculate Economic Order Quantity from the following details and also state the number of orders to be placed in a year :

Consumption of materials per annum	50,000 kg
Order placing cost per order	125/-
Cost per unit of raw material	10/-
Storage Costs	5% on average inventory

(*5 marks each*)

OR (Alternate to Q. No. 6)

6A. (*i*) Write a short note on Present Value of Annuity.

(*ii*) What are Primary Trends in terms of the "Dow Theory" related to Technical Analysis ?

(*iii*) Define Risk Adjusted Discount Rate and Certainty Equivalent Technique.

(*iv*) What is the connection between Risk and Leverage in terms of capital structure ?

(*5 marks each*)

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