NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

R24

MBA IV Semester Regular Examinations, April-2026

Sub Code: R24MBA401 **CORPORATE LEGAL FRAMEWORK**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. Case Study

ABC Traders is a registered partnership firm consisting of three partners - Ravi, Suresh, and Mahesh engaged in wholesale business. As per the partnership agreement, all partners had authority to act on behalf of the firm in the ordinary course of business. Without informing the other partners, Ravi took a loan of ₹20 lakhs from a bank in the name of the firm. However, instead of using the funds for business purposes, he diverted the amount for his personal investments, which later resulted in heavy losses.

When the firm failed to repay the loan, the bank initiated legal action against all three partners, claiming that partners are jointly and severally liable for the debts of the firm. Suresh and Mahesh argued that they were unaware of Ravi's actions and should not be held responsible. The dispute raised important questions regarding authority of partners and liability in partnership firms.

Questions:

1. Analyze the liability of partners for the acts of one partner under Partnership Act?
2. Evaluate the legal position of the innocent partners in this case?

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
2		Unit-I			
	a	i) Define a contract and explain its essential elements?	K1	1	6M
		ii) Discuss the different types of contracts and their classification?	K2	1	6M
		OR			
	b	What is breach of contract? Explain its types and remedies available?	K1	1	12M
3		Unit-II			
	a	Define contract of sale and explain its essential elements?	K1	2	12M
		OR			
	b	"The Negotiable Instruments Act promotes commercial certainty." Discuss?	K2	2	12M
4		Unit-III			
	a	Describe the formation and registration of a partnership firm**?**	K2	3	12M
		OR			
	b	Briefly discuss the components of Limited Liability Partnership (LLP) Act, 2008**.**	K2	3	12M
5		Unit-IV			
	a	Determine the rights of consumers under the Consumer Protection Act?	K3	4	12M
		OR			
	b	Analyse the effectiveness of the consumer redressal mechanism under the Consumer Protection Act, 1986?	K4	4	12M

6	Unit-V				
	a	Distinguish the Memorandum of Association (MOA) and Articles of Association (AOA)**?**	K4	5	12M
	OR				
	b	i) Review the various kinds of shares and its advantages & disadvantages?	K5	5	6M
		ii) Elucidate the duties and responsibilities of directors**?**	K3	5	6M

KL: Blooms Taxonomy Knowledge Level CO: Course Outcome   M: Mark

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R24

MBA IV Semester Regular Examinations, April-2026

Sub Code: R24MBA402 **SUPPLY CHAIN MANAGEMENT**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. **CASE STUDY**

FreshMart Retail Chain operates supermarkets across multiple cities. The company is facing:

- Frequent stockouts of fast-moving items
- Overstocking of slow-moving goods
- Lack of coordination between suppliers and stores
- Increasing logistics costs

Questions:

1. Analyse the inventory management issues faced by FreshMart.
2. Recommend solutions using demand planning and supply chain integration.

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
2		Unit-I			
	a	i) Analyze the role of supply chain drivers (facilities, inventory, and transportation) in achieving competitive advantage.	K4	1	12M
		OR			
	b	i) Explain Supply Chain Strategy and discuss how strategic fit is achieved.	K3	1	12M
3		Unit-II			
	a	i) Describe Strategic Network Planning and its role in supply chain analysis.	K2	2	12M
		OR			
	b	i) What is Available-to-Promise (ATP)? Explain	K3	2	6M
		ii) Explain coordination and integration in supply chains.	K3	2	6M
4		Unit-III			
	a	i) Explain advanced heuristics used in Vehicle Routing Problems (VRP) and their advantages.	K2	3	12M
		OR			
	b	i) Explain Set Covering Problem.	K3	3	6M
		ii) Write short notes on scheduling algorithms.	k3	3	6M
5		Unit-IV			
	a	i) Evaluate outsourcing strategies and benchmarking practices in supply chains.	K5	4	12M
		OR			
	b	i) Define Fuzzy Logic and its role in SCM.	K2	4	4M
		ii) Explain CRM vs SCM with suitable examples	K3	4	8M
6		Unit-V			
	a	i) Discuss inventory management techniques and network design decisions in supply chains.	K3	5	12M
		OR			
	b	i) Discuss the implementation process of supply chain projects.	K3	5	12M

NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

R24

MBA IV Semester Regular Examinations, April-2026

Sub Code: R24MBA403A3 **DEEP LEARNING**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists ~~of~~ Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. What is Probabilistic Modeling and Kernel Methods? Explain Overfitting and Underfitting with causes and solutions.

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
2		Unit-I			
	a	Define Artificial Intelligence? Explain Decision Trees and Random Forests with an example?	KL2	1	12M
		OR			
	b	Describe different branches of Machine Learning with suitable examples?	KL2	1	12M
3		Unit-II			
	a	Explain the architecture and working of Artificial Neural Networks?	KL2	2	12M
		OR			
	b	i)Compare Human Language and Machine Language?		2	6M
		ii) Describe training of deep networks and optimization techniques?	KL2	2	6M
4		Unit-III			
	a	Define Neural Network? Explain the anatomy of a neural network with an example?	KL2	3	12M
		OR			
	b	Explain binary and multiclass classification with examples?	KL2	3	12M
5		Unit-IV			
	a	i) Describe convolutional layers and their operations?	KL2	4	6M
		ii) Explain RNN architecture and its applications?	KL2	4	6M
		OR			
	b	What is a PyTorch Tensor? Explain implementation of CNN using PyTorch?	KL1	4	12M
6		Unit-V			
	a	What is Machine Vision? Explain various applications of deep learning in real-world scenarios?	KL1	5	12M
		OR			
	b	Explain Autoencoders and Deep Generative Models?	KL2	5	12M

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R24

MBA IV Semester Regular Examinations, April-2026

Sub Code: R24MBA403A4 **DATA VISUALIZATION**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. **CASE STUDY**

A retail company created a visualization system to analyse sales data across regions and product categories. The dashboard included time-series charts, scatter plots, and tree maps. However, analysts observed that correlations between products were not clearly visible, and hierarchical data was difficult to interpret.

The tree maps were cluttered, and scatter plots lacked proper scaling, making it hard to identify trends. The company improved the system by redesigning scatter maps, using better space-filling techniques for tree maps, and applying appropriate graph visualization methods such as node-link diagrams.

Questions:

1. How can visualization techniques like scatter plots, tree maps, and graphs be optimized to better represent correlations and hierarchies?
2. Compare different visualization methods for hierarchical and network data and justify the selection of appropriate techniques.

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
		Unit-I			
2	a	i)Discuss the importance of visualization design objectives in decision-making?	K2	1	6M
		ii) Explain the seven stages of data visualization with suitable examples?	K2	1	6M
		OR			
	b	i)List and explain different data representation techniques used in visualization design?	K2	1	6M
		ii) Describe various mapping techniques used in data visualization such as time series, scatter plots, and network graphs.	K3	1	6M
		Unit-II			
3	a	i) Explain visualization techniques for time-series data?	K2	2	6M
		ii) How are scatter plots and scatter maps used to identify correlations in data?	K3	2	6M
		OR			
	b	i) Compare space-filling and non-space-filling methods for hierarchical visualization.	K4	2	6M
		ii) Explain the role of infographics in data visualization?	K2	2	6M
		Unit-III			
4	a	i) Discuss tools and techniques for acquiring data from the internet?	K2	3	6M
		ii) Explain levels of effort and tools used for gathering clues?	K2	3	6M
		OR			
	b	i) Explain text markup languages and regular expressions with suitable examples.	K2	3	6M
		ii) How are grammars and BNF notation useful in text data processing?	K3	3	6M

5	Unit-IV				
	a	i) Explain the principles of drawing with data.	K2	4	6M
		ii) What are updates, transitions, and motion in interactive visualization. How do they improve user experience?	K3	4	6M
	OR				
	b	i) Explain different types of interactions with examples?	K2	4	6M
		ii) Discuss frameworks used for interactive visualization?	K2	4	6M
6	Unit-V				
	a	i) What is port scan visualization and explain its importance in network security analysis.	K2	5	6M
		ii) How do firewall log visualization techniques help in monitoring network security?	K3	5	6M
	OR				
	b	i) Design a secure data visualization system?	K6	5	6M
		ii) Discuss methods to defend against attacks on visualization systems	K2	5	6M

KL: Blooms Taxonomy Knowledge Level CO: Course Outcome M: Marks

NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

R24

MBA IV Semester Regular Examinations, April-2026

Sub Code: R24MBA403F3 **GLOBAL FINANCIAL MANAGEMENT**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. CASE STUDY

ABC Ltd., an Indian manufacturing company, is planning to expand its operations into Europe and the United States. To finance this expansion, the company is exploring different international financial markets and instruments.

Initially, ABC Ltd. approaches the international money market to meet its short-term working capital needs by issuing Commercial Papers (CPs) in foreign currency. At the same time, it considers taking a Euro Loan from a consortium of international banks through loan syndication to finance its long-term investment.

To manage interest rate fluctuations, ABC Ltd., also evaluates floating rate instruments. Additionally, the company deposits surplus funds in Euro Deposits to earn returns.

For raising large-scale capital, ABC Ltd., plans to access the international capital market by issuing Euro Bonds. It is also considering issuing Global Depository Receipts (GDRs) in Europe and American Depository Receipts (ADRs) in the U.S. to attract foreign investors.

The management is concerned about regulatory requirements, cost of capital, and exchange rate risks while choosing among these instruments.

Questions

(a) Identify and explain the different types of international financial markets accessed by ABC Ltd.,
(b) Describe any four international financial instruments used by ABC Ltd., and their key features.
(c) Analyze the advantages and risks associated with issuing Euro Bonds and ADRs/GDRs for ABC Ltd.,
(d) Explain the process of issuing ADRs or GDRs and how it helps ABC Ltd., raise international capital.

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
		Unit-I			
2	a	Explain the evolution of the International Monetary and Financial System.	K2	1	12M
		OR			
	b	Apply the concept of exchange rate regimes to analyze a country of your choice.	K3	1	12M
		Unit-II			
3	a	Describe the roles of different participants such as banks, corporations, and central banks in forex markets.	K2	2	12M
		OR			
	b	Explain the types of exchange rate exposure with suitable examples.	K2	2	12M
		Unit-III			
4	a	Explain the features and functions of international financial markets.	K2	3	12M
		OR			
	b	Demonstrate how firms use ADRs/GDRs to access global capital markets.	K3	3	12M
		Unit-IV			
5	a	Describe the types and motives of Foreign Direct Investment (FDI).	K2	4	12M
		OR			
	b	What is multinational capital budgeting? Explain the process of multinational capital budgeting.	K1	4	12M

6	Unit-V				
	a	Explain the different methods used in transfer pricing and their relevance to tax planning.	K2	5	12M
	OR				
	b	Compare the effectiveness of financial vs. non-financial performance metrics in evaluating an MNC’s operations.	K4	5	12M

KL: Blooms Taxonomy Knowledge Level CO: Course Outcome M: Mark

NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

R24

MBA IV Semester Regular Examinations, May-2026

Sub Code: R24MBA403F4 **FINANCIAL DERIVATIVES**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

Q1. Case Study (10 Marks)

Consider the following:

Stock price = Rs.50/-.
Months to expiration = 3 months.
Risk free rate of interest = 10% p.a.
Standard deviation of stock = 40%
Exercise price = Rs.55/-.
Option type = European call.
Calculate value of call option as per Black Scholes model.

PART-B

Answer either ‘a’ or ‘b’ from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
		Unit-I			
2	a	i) Define financial derivatives. State the meaning and need for derivatives in financial markets.	K1	1	6M
		ii) Describe the structure of derivative markets. Who are the participants in a derivative market and what functions do derivative markets perform in the economy?	K2	1	6M
		OR			
	b	i) Explain the types of financial derivatives — Forwards, Futures, Options, and Swaps — highlighting their key features and differences.	K2	1	6M
		ii) Explain the regulatory framework governing derivatives trading in India. What are the roles of SEBI and RBI in regulating derivative markets?	K1	1	6M
		Unit-II			
3	a	i) Distinguish between forward contracts and futures contracts. Explain the types of options available in derivative markets with suitable examples.	K2	2	6M
		ii) Explain the meaning and need for financial derivatives. How have financial derivatives grown in India since liberalization?	K1	2	6M
		OR			
	b	i) Describe the participants in a derivative market and discuss the major functions performed by derivative markets in a financial system.	K2	2	6M
		ii) What are swap contracts? Explain the types of swaps. Also outline the regulatory framework governing derivatives trading in India.	K1	2	6M
		Unit-III			
4	a	i) Explain the features of futures contracts and distinguish them from forward contracts. Briefly describe the types of financial futures.	K1	3	6M
		ii) What are currency futures and interest rate futures? Explain the pricing of futures contracts and the concept of Value at Risk (VaR).	K1	3	6M

	OR				
	b	i) Explain the hedging strategies used in futures markets. How are stock index futures used for hedging a portfolio? Illustrate with an example.	K3	3	6M
		ii) Describe the types of members and margining system in Indian futures markets. Explain the mechanism of futures trading on BSE and NSE.	K1	3	6M
5	**Unit-IV**				
	a	i) Explain the meaning and need for options contracts. Distinguish between options and futures contracts. What are the different types of options contracts?	K1	4	6M
		ii) Explain call options and put options with payoff diagrams. What are the factors that affect the pricing of an option contract?	K2	4	6M
	OR				
	b	i) State and explain the Put-Call Parity relationship. Describe the Binomial Option Pricing Model with a suitable numerical illustration.	K3	4	6M
		ii) Explain the Black-Scholes Option Pricing Model. State its assumptions, formula, and limitations. Illustrate with a numerical example.	K3	4	6M
6	**Unit-V**				
	a	i) Explain the meaning and overview of swap transactions. Describe the structure of a swap contract and the role of a swap dealer in the swaps market.	K1	5	6M
		ii) Explain Interest Rate Swaps and Currency Swaps with suitable examples. How do they help in reducing the cost of borrowing for the parties involved?	K2	5	6M
	OR				
	b	i) Explain Commodity Swaps and Equity Swaps with examples. Describe the important variants of swap contracts used in modern financial markets.	K1	5	6M
		ii) Discuss the economic functions of swap transactions. Explain Forward Rate Agreements (FRAs) and how they are related to interest rate swaps.	K2	5	6M

KL: Blooms Taxonomy Knowledge Level CO: Course Outcome M: Mark

NARASARAOPETA ENGINEERING COLLEGE
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MBA IV Semester Regular Examinations, May-2026

Sub Code: R24MBA403M3 **SERVICES MARKETING** **R24**

Time: 3 hours Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the Question from Part-A is compulsory

(1x 10M=10M)

PART-B:Answer either 'a' or 'b' from each question of PART-B (5 x 12M=60M)

1. A Case Study on Apollo Hospitals — Healthcare Service Excellence

Apollo Hospitals emphasizes service quality in healthcare by focusing on reliability, assurance, and empathy in patient care. Using customer feedback tools similar to SERVQUAL, Apollo tracks service performance across departments to identify improvement areas. Pricing objectives are set to balance affordability with premium care, while communication strategies include wellness campaigns, digital reminders, and health education. Relationship marketing is strong with patient history tracking, personalized care plans, and follow-ups. Staff training and process design aim to reduce waiting times and enhance patient satisfaction, making Apollo a trusted healthcare brand.

Q.1 How does Apollo Hospitals use service quality dimensions to enhance patient satisfaction?

Q.2 Explain strategic responses to the intangibility of healthcare services at Apollo.

Q.No		Questions	KL	CO	M
		Unit-I			
2	a	Explain the emerging service environment and classification of services.	K2	1	12M
		OR			
	b	Outline the process of market segmentation in service markets.	K2	1	12M
		Unit-II			
3	a	Analyze pricing objectives and their impact on service firms.	K4	2	12M
		OR			
	b	Describe the role of marketing communication in service promotion.	K2	2	12M
		Unit-III			
4	a	What are service failures? Discuss service recovery strategies.	K3	3	12M
		OR			
	b	Evaluate the effectiveness of relationship marketing in service industries.	K5	3	12M
		Unit-IV			
5	a	Explain the importance of managing physical evidence in service delivery.	K2	4	12M
		OR			
	b	Discuss the importance of managing service processes for efficient service delivery.	K3	4	12M
		Unit-V			
6	a	Design marketing strategies for hospitality services in a competitive environment.	K6	5	12M
		OR			
	b	Illustrate the marketing of professional services and public utility services.	K2	5	12M

NARASARAOPETA ENGINEERING COLLEGE
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R24

MBA IV Semester Regular Examinations, May-2026

Sub Code: R24MBA403M4 **SALES & DISTRIBUTION MANAGEMENT**

Time: 3 hours (MBA) Max. Marks: 70

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-A

Note: Answering the question from Part-A is compulsory (1 x 10M = 10M)

1. CASE STUDY

ABC Electronics, a mid-sized consumer durable company, has been experiencing a steady decline in sales over the past two years. Despite having a wide product portfolio and competitive pricing, the company is unable to meet its sales targets.

The sales team operates under a geographical structure, but recent market expansion has led to overlapping territories and confusion among sales representatives. Additionally, there is a lack of coordination between the sales and marketing departments, resulting in inconsistent promotional strategies.

Sales managers complain about unclear roles, excessive administrative workload, and lack of motivation among salespeople. The company also does not have a strong sales culture, and performance evaluation systems are outdated.

Questions:

1. Analyze the problems faced by ABC Electronics in terms of sales organization and management.
2. Suggest a suitable sales force structure and justify your recommendation.
3. How can the company improve coordination between sales and marketing?
4. Recommend strategies to build a strong sales culture and improve performance

PART-B

Answer either 'a' or 'b' from each question of **PART-B** (5 x 12M=60M)

Q.No		Questions	KL	CO	M
		Unit-I			
2	a	i) Explain the objectives of Sales Management.	L2	1	6M
		ii) Discuss how sales management integrates with Marketing Management.	L4	1	6M
		OR			
	b	i) Describe the types of sales force structure in an organization.	L2	1	6M
		ii) Explain the factors affecting the design of sales organization.	L4	1	6M
		Unit-II			
3	a	i)discuss in detail about Personal selling Process.	L2	2	6M
		ii)Explain any one theory of Personal selling.	L2	2	6M
		OR			
	b	Discuss the various methods of Budgeting for the sales force.	L4	2	12M
		Unit-III			
4	a	Explain the different methods of Sales Forecasting and discuss how to select an appropriate forecasting method.	L4	3	12M

	OR				
	b	i)Discuss the types of sales Quotas.	L2	3	6M
		ii)Explain the importance of sales force evaluation.	L4	3	6M
5	Unit-IV				
	a	Explain vertical, horizontal and Hybrid marketing channels.	L2	4	12M
	OR				
	b	i) Write a short note on channel conflicts.	L2	4	6M
		ii) Discuss in detail about the management of channel members.	L4	4	6M
6	Unit-V				
	a	i)Explain the types and functions of Wholesalers.	L2	5	6M
		ii) Discuss the challenges faced in wholesaling in India.	L4	5	6M
	OR				
	b	i) Discuss the evolution of Retailing in India.	L2	5	6M
		ii) Explain the strategic issues in Retailing.	L4	5	6M

KL: Blooms Taxonomy Knowledge Level CO: Course Outcome M: Mark