



Syllabus for Chemical (Grade A)

1. Engineering Mathematics
2. Process Calculation & Thermodynamics
3. Fluid Mechanics & Mechanical Operations
4. Chemical Reaction Engineering
5. Instrumentation & Process Control
6. Plant Design and Economics
7. Heat Transfer
8. Mass Transfer
9. Chemical Technology



Syllabus for Electrical (Grade A)

1. Engineering Mathematics
2. Electrical Machines
3. Power Systems
4. Control Systems
5. Electric circuits
6. Electromagnetic Fields
7. Signals and Systems
8. Electrical and Electronic Measurements
9. Analog and Digital Electronics
10. Power Electronics



Syllabus for Instrumentation (Grade A)

1. Engineering Mathematics
2. Control Systems
3. Analog Electronics
4. Digital Electronics
5. Electricity and Magnetism
6. Electrical Circuits and Machines
7. Signals and Systems
8. Measurements
9. Sensors and Industrial Instrumentation
10. Communication and Optical Instrumentation



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Syllabus for Mechanical (Grade A)

1. Engineering Mathematics
2. Engineering Mechanics
3. Mechanics of Materials
4. Theory of Machines, Vibrations & Machine Design
5. Fluid Mechanics
6. Heat Transfer, Thermodynamics & Power Engineering
7. Fluid Mechanics and Thermal Sciences
8. Materials, Manufacturing and Industrial Engineering



Syllabus for Electronics and Communication Engineering (Grade A)

1. Engineering Mathematics
2. Networks, Signals and Systems
3. Electronic Devices
4. Analog Circuits
5. Digital Circuits
6. Control Systems
7. Communications
8. Electromagnetics



Syllabus for Civil Engineering (Grade A)

1. Engineering Mathematics
2. Structural Engineering
3. Geotechnical Engineering
4. Water Resources Engineering
5. Environmental Engineering
6. Transportation Engineering
7. Geomatics Engineering



Syllabus for Computer Science and Information Technology (Grade A)

1. Engineering Mathematics
2. Digital Logic
3. Computer Organization and Architecture
4. Programming and Data Structures
5. Algorithms
6. Theory of Computation
7. Compiler Design
8. Operating System
9. Databases
10. Computer Networks

Syllabus for Law (Grade A)

#	Laws/ legislations
Substantive laws (including rules framed thereunder, if any)	
1.	Indian Contract Act, 1872
2.	Specific Relief Act, 1963
3.	Sale of Goods Act, 1930
4.	Transfer of Property Act, 1882
5.	Companies Act, 2013
6.	Insolvency & Bankruptcy Code, 2016
7.	Constitution of India – Special focus on Articles 32 and 226
8.	Personal Digital Data Protection Act, 2023
9.	Competition Act, 2002
10.	Consumer Protection Act, 2019
11.	Right to Information Act, 2005
12.	Essential Commodities Act, 1955
13.	Legal Metrology Act, 2009
14.	Public Premises (Eviction of Unauthorised Occupants) Act, 1971
15.	Overview of most relevant SEBI guidelines applicable on IndianOil (LODR, Prohibition of Insider Trading, etc.)
Procedural laws	
Major statutes	
1.	Arbitration & Conciliation Act, 1996
2.	Mediation Act, 2023
3.	Code of Civil Procedure, 1908
4.	Bharatiya Nagarik Suraksha Sanhita, 2023
5.	Bharatiya Sakshya Adhiniyam, 2023
Minor procedural laws	
1.	Limitation Act, 1963
2.	Commercial Courts Act, 2015

- Test will not be based only on theoretical knowledge but also practical domain knowledge from the syllabus



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Syllabus for MBA (Marketing Management) (Grade A)

1. Introduction to Marketing - Concepts and Approaches

- Market
- Marketing
- Customer Needs, Wants and Demands
- Marketing Orientations
- Holistic Marketing
- Marketing Mix
- Recent Trends in Marketing

2. Developing Marketing Strategy

- Business Portfolio Strategies
- Marketing Strategy
- Porter Generic Strategies
- Value Chain Analysis
- SWOT Analysis
- Marketing Plan
- Marketing Control
- Go-to-Market (GTM) Strategies
- Customer Acquisition and Retention Strategies
- Rural Marketing Strategies
- B2B and B2C Marketing Approaches

3. Marketing Information and Forecasting

- Analyzing Marketing Environment
- Marketing Information System
- Demand Forecasting
- Estimating Current and Future Demand

4. Marketing Research

- Process of Marketing Research
- Research Instruments
- Sampling Plan
- Measuring Marketing Productivity

5. Consumer Behaviour and Industrial Markets

- Factors Influencing Consumer Behaviour
- Consumers' Buying Decision Process
- Consumers' Buying Decision Behaviour



- Buyer Decision Process in New Products
- Theories of Consumer Behaviour
- Business Buyer Behaviour
- Business Buyer Behaviour Model
- Industrial and Institutional Buying Behaviour
- Key Account Management
- Buying Behaviour in Energy and Fuel Markets

6. Segmentation, Targeting and Positioning

- Market Segmentation
- Market Targeting
- Differentiation and Positioning

7. Product Decisions

- Product Levels
- Product Classification
- Product Decisions
- New Product Development
- Product Adoption Process
- Product Life Cycle

8. Pricing Decisions

- Pricing Strategies
- New Product Pricing Strategies
- Product Mix Pricing Strategies
- Price-Adjustment Strategies
- Price Changes
- Public Policy and Pricing
- Pricing during PLC

9. Services Marketing

- Types of Service Marketing
- Managing Service Marketing
- Gap Analysis
- Service Quality Measurement (SERVQUAL Model)
- Customer Experience Management
- Service Recovery Strategies

10. Distribution Decisions

- Channel Management
- Channel Conflict



- Channel Integration and Systems
- Logistics Management
- International Logistics Management
- Supply Chain Management
- Retail Management
- Retail Marketing Decision
- Recent Trends in Retail in India
- Wholesaling
- Wholesale Marketing Decision

11. Promotion Decisions

- Integrated Marketing Communications (IMC)
- Marketing Communication Process
- Promotion Budget
- Promotion Mix Strategies
- Advertising Management
- Sales Promotion
- Sales Promotion Program
- Publicity
- Personal Selling
- Direct Marketing
- Trade Promotion and Dealer Engagement Programs
- Loyalty Programs and Customer Engagement
- Sales Force Management
- Integrated Digital Campaigns

12. Brand Management

- Brand Equity Models
- Brand Elements
- Designing Brand Strategy
- Brand Portfolios
- Managing Brand Equity
- Corporate Branding
- Brand Extension Strategies
- Premium and Branded Product Positioning
- Customer Perception and Brand Experience

13. Marketing Ethics

- Marketing Ethics
- Product Related Ethics



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- Price Related Ethics
- Place Related Ethics
- Promotion Related Ethics
- Consumer Protection
- 14. **Managing Marketing Organization and Control**
 - Organizing Marketing Department
 - Marketing Implementation and Control
- 15. **Digital Marketing**
 - Digital Marketing
 - Social Media Marketing
 - Search Engine Marketing (SEM) and Search Engine Optimization (SEO)
 - Mobile Marketing
 - Marketing Analytics and Performance Metrics
 - Digital Customer Journey Mapping
- 16. **Social and Not-for-Profit Marketing**
 - Socially Responsible Behaviour
 - Cause-Related Marketing
 - Sustainable Marketing
 - Marketing and Environmental Concerns
 - Social Marketing
 - Not-for-Profit Marketing
- 17. **Customer Value and Customer Relationship Management**
 - Customer Value
 - Customer Lifetime Value
 - Customer Profitability
 - Customer Loyalty
 - Customer Satisfaction
 - Customer Relationship Management
 - Database Marketing
 - Customer Acquisition Cost (CAC)
 - Customer Retention Metrics
 - Loyalty Management Programs
 - Data Analytics for Customer Insights
- 18. **International Marketing**
 - International Marketing Decisions



- Types of Global Firms
- 19. **Competition Analysis**
 - Analyzing Competition
 - Competitive Marketing Strategies
 - Competitive Positions
 - Balancing Customer and Competitor Orientations
 - Competitive Intelligence
 - Market Share Analysis
 - Benchmarking of Retail Networks
 - Differentiation Strategies in Commodity Markets
- 20. **New Topic: Retail and Channel Management**
 - Retail Business Models
 - Retail Site Selection and Network Planning
 - Forecourt Retailing Concepts
 - Category Management
 - Convenience Retailing
 - Visual Merchandising
 - Retail Performance Metrics
- 21. **Sales and Territory Management**
 - Sales Forecasting
 - Sales Force Effectiveness
 - Territory Planning
 - Key Performance Indicators (KPIs)
 - Relationship Management with Dealers/Distributors
- 22. **Non-Fuel Retail (NFR) Marketing**
 - NFR Business Models
 - Convenience Store Marketing
 - Partnerships and Alliances
 - Customer Footfall Monetization
 - Cross-selling and Up-selling Strategies
- 23. **Logos and Taglines**
- 24. **Strategic Management – Concept and Types**
 - Levels of Strategy
 - Forms of Strategy
 - Process of Strategy

25. **External Analysis**
 - PESTEL Framework
 - ETOP
 - QUEST
 - Porter's 5 Forces
 - Impact Matrix
 - Strategic Group Mapping
26. **Internal Analysis**
 - Competitive Advantage
 - Critical Success Factors
 - Value Chain Analysis
 - Benchmarking
 - SWOT Analysis
 - SFAS Matrix
 - Strategic Advantage Profile (SAP)
27. **Business Strategies**
 - Generic Competitive Strategies
 - First Mover Advantages
 - Cooperative Strategies
 - Industry Life Cycle
28. **Corporate Strategies**
 - Growth Strategy
 - Stability Strategy
 - Retrenchment Strategy
 - Combination Strategy
 - Turnaround Management
29. **Business Portfolio Analysis**
 - BCG's Matrix
 - Internal-External (IE) Matrix
 - GE McKinsey Matrix
 - Experience Curve
 - Grand Strategy Matrix
 - SPACE Matrix
30. **Strategy Implementation and Evaluation**
 - Strategy Implementation
 - Strategy and Structure



- Strategy Evaluation and Control
- Control Mechanisms
- Strategic Incentive Management
- McKinsey's 7S Model

31. **Management of Strategic Change**

- Barriers to Change
- Models of Strategic Change
- Change Requirements