LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

NEP Vocational Class 11

LAPT — London Academy of Professional Training

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38	190	1140	3800	60%	Lifetime
SUBJECTS	CHAPTERS	CLASSES	TOTAL MARKS	PASS MARK	VALIDITY

AT A GLANCE

AWARD	**Certificate**
ASSESSMENT	**3800 marks — 2280 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1 Accounting & Taxation

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — GST Registration, Returns and Compliance** — 6 classes
  - 1.1 Understand GST Registration Process
  - 1.2 Identify GST Registration Requirements
  - 1.3 Explain Types of GST Returns
  - 1.4 Demonstrate How to File GST Returns
  - 1.5 Analyze Common Compliance Issues in GST
  - 1.6 Apply GST Compliance Best Practices
- **2 Unit 2 — Income Tax — Heads of Income and Computation** — 6 classes
  - 2.1 Identify the Different Heads of Income in Income Tax
  - 2.2 Analyze the Components of Salary Income
  - 2.3 Explore Income from House Property and Its Computation
  - 2.4 Understand Profits and Gains from Business or Profession
  - 2.5 Examine Capital Gains and Their Tax Implications
  - 2.6 Compute Total Income and Calculate Income Tax Liability
- **3 Unit 3 — Tally ERP and Accounting Software Mastery** — 6 classes
  - 3.1 Explore the Tally ERP Interface and Navigation Tools
  - 3.2 Configure Company Settings in Tally ERP
  - 3.3 Create and Manage Ledgers in Tally ERP
  - 3.4 Record Financial Transactions Using Daybook in Tally ERP
  - 3.5 Generate Financial Statements and Reports in Tally ERP
  - 3.6 Implement GST and Tax Compliance in Tally ERP
- **4 Unit 4 — Business Accounting — Final Accounts and Ledgers** — 6 classes
  - 4.1 Understand the Purpose of Final Accounts
  - 4.2 Identify Components of Final Accounts
  - 4.3 Analyze the Structure of a Profit and Loss Account
  - 4.4 Construct a Simple Balance Sheet
  - 4.5 Understand Ledger Accounts and Their Functions
  - 4.6 Apply Closing Entries to Prepare Final Accounts
- **5 Unit 5 — Taxation Compliance Project and Case Studies** — 6 classes
  - 5.1 Understand the Basics of Taxation Compliance
  - 5.2 Identify Key Tax Regulations and Their Impact
  - 5.3 Analyze Case Studies in Tax Compliance Scenarios
  - 5.4 Apply Tax Compliance Principles to Real-World Situations
  - 5.5 Develop a Tax Compliance Project Plan
  - 5.6 Evaluate the Effectiveness of Tax Compliance Strategies

2 Artificial Intelligence

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Machine Learning Concepts and Algorithms** — 6 classes
  - 1.1 Define Key Machine Learning Concepts
  - 1.2 Explore Types of Machine Learning: Supervised vs. Unsupervised
  - 1.3 Understand the Role of Data in Machine Learning
  - 1.4 Examine Common Machine Learning Algorithms
  - 1.5 Analyze Performance Metrics for Machine Learning Models
  - 1.6 Apply Machine Learning Algorithms to Real-World Problems
- **2 Unit 2 — Neural Networks and Deep Learning Fundamentals** — 6 classes
  - 2.1 Define Neural Networks and Their Components
  - 2.2 Explain the Role of Activation Functions in Neural Networks
  - 2.3 Describe the Architecture of a Simple Neural Network
  - 2.4 Analyze the Function of Backpropagation in Learning
  - 2.5 Implement a Basic Neural Network Using Python
  - 2.6 Evaluate the Performance of Neural Networks with Real-World Data
- **3 Unit 3 — AI Tools — TensorFlow Lite, Teachable Machine** — 6 classes
  - 3.1 Introduction to TensorFlow Lite: Understanding Its Core Features
  - 3.2 Setting Up Your Environment for TensorFlow Lite Development
  - 3.3 Creating a Basic Model Using Teachable Machine
  - 3.4 Exporting and Importing Models Between Teachable Machine and TensorFlow Lite
  - 3.5 Implementing a Simple Application with TensorFlow Lite Models
  - 3.6 Evaluating Model Performance and Making Improvements
- **4 Unit 4 — Natural Language Processing Introduction** — 6 classes
  - 4.1 Define Natural Language Processing and Its Importance
  - 4.2 Identify Key Components of Natural Language Processing Systems
  - 4.3 Explore Common NLP Applications in Everyday Life
  - 4.4 Analyze Different Techniques Used in Natural Language Processing
  - 4.5 Implement a Basic Text Analysis Project with NLP Tools
  - 4.6 Evaluate the Impact of NLP on Communication and Industry
- **5 Unit 5 — AI Real-World Project — Data to Deployment** — 6 classes
  - 5.1 Identifying Project Goals and Objectives in AI
  - 5.2 Collecting and Preparing Data for AI Models
  - 5.3 Exploring AI Algorithms for Data Analysis
  - 5.4 Training Your AI Model: Best Practices and Techniques
  - 5.5 Evaluating Model Performance: Metrics and Analysis
  - 5.6 Deploying Your AI Project: Steps and Considerations

3 Automotive

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Vehicle Systems — EFI, ABS, Airbags** — 6 classes
  - 1.1 Understand the Principles of Electronic Fuel Injection (EFI)
  - 1.2 Explore the Components of an EFI System
  - 1.3 Examine the Functionality of Anti-lock Braking Systems (ABS)
  - 1.4 Identify the Key Components of ABS and Their Roles
  - 1.5 Analyze the Safety Features of Airbag Systems
  - 1.6 Apply Knowledge by Diagnosing Common Issues in EFI, ABS, and Airbags
- **2 Unit 2 — Vehicle Electrical and Electronic Diagnostics** — 6 classes
  - 2.1 Understand Basic Electrical Concepts in Vehicles
  - 2.2 Identify Key Electrical Components and Their Functions
  - 2.3 Learn the Basics of Automotive Wiring Systems
  - 2.4 Apply Diagnostic Tools for Electrical Faults
  - 2.5 Interpret Diagnostic Trouble Codes (DTCs)
  - 2.6 Develop Troubleshooting Strategies for Electrical Issues
- **3 Unit 3 — Transmission, Suspension and Steering Systems** — 6 classes
  - 3.1 Understand the Basics of Transmission Systems
  - 3.2 Explore the Types of Gearboxes and Their Functions
  - 3.3 Analyze Suspension System Components and Their Roles
  - 3.4 Investigate Steering System Mechanisms and Their Importance
  - 3.5 Compare and Contrast Different Types of Suspension Systems
  - 3.6 Apply Knowledge to Diagnose Common Issues in Transmission and Steering Systems
- **4 Unit 4 — Workshop Management and Service Protocols** — 6 classes
  - 4.1 Understand Workshop Layout and Design
  - 4.2 Identify Key Workshop Equipment and Tools
  - 4.3 Develop Standard Operating Procedures for Services
  - 4.4 Implement Health and Safety Protocols in the Workshop
  - 4.5 Manage Customer Service and Communication Skills
  - 4.6 Evaluate Workshop Performance and Improvement Strategies
- **5 Unit 5 — Automotive Project — Inspect, Service and Report** — 6 classes
  - 5.1 Identify Key Components of Automotive Systems
  - 5.2 Conduct a Pre-Inspection Check on Vehicles
  - 5.3 Perform Routine Maintenance Tasks Safely
  - 5.4 Analyze Common Automotive Issues and Symptoms
  - 5.5 Document Findings and Create Service Reports
  - 5.6 Present Inspection Results to Stakeholders

4 Banking & Financial Services

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Banking Operations and Treasury** — 6 classes
  - 1.1 Explore Advanced Banking Operations and Their Importance
  - 1.2 Analyze Key Components of Treasury Management
  - 1.3 Examine Risk Management Strategies in Banking
  - 1.4 Apply Financial Instruments for Treasury Operations
  - 1.5 Implement Effective Liquidity Management Techniques
  - 1.6 Evaluate the Impact of Regulatory Frameworks on Banking Operations
- **2 Unit 2 — Financial Instruments — Bonds, Equity, Derivatives** — 6 classes
  - 2.1 Define and Differentiate Between Bonds, Equity, and Derivatives
  - 2.2 Explore Types of Bonds and Their Characteristics
  - 2.3 Analyze Different Equity Instruments and Their Market Roles
  - 2.4 Investigate Derivatives: Purpose and Types
  - 2.5 Assess the Risks and Returns Associated with Financial Instruments
  - 2.6 Apply Financial Instruments to Real-world Investment Scenarios
- **3 Unit 3 — Credit Analysis and Lending Decisions** — 6 classes
  - 3.1 Understanding Credit: Define and Differentiate Types of Credit
  - 3.2 Analyzing Borrower Profiles: Assessing Creditworthiness Criteria
  - 3.3 Financial Ratios: Calculating and Interpreting Key Indicators
  - 3.4 The Role of Credit Reports: Tools for Informed Lending Decisions
  - 3.5 Risk Assessment: Identifying and Mitigating Lending Risks
  - 3.6 Practical Application: Simulating a Lending Decision Case Study
- **4 Unit 4 — Risk Management and Regulatory Compliance (RBI)** — 6 classes
  - 4.1 Identify Key Types of Risks in Banking
  - 4.2 Analyze the Importance of Risk Management
  - 4.3 Explore Regulatory Frameworks in Financial Services
  - 4.4 Evaluate Risk Assessment Tools and Techniques
  - 4.5 Implement Risk Mitigation Strategies in Banking
  - 4.6 Review Compliance Requirements and Best Practices
- **5 Unit 5 — Banking and Financial Services Project** — 6 classes
  - 5.1 Identify Key Banking Concepts and Terminology
  - 5.2 Explore Different Types of Financial Institutions
  - 5.3 Understanding the Role of Banking in the Economy
  - 5.4 Analyze Financial Products and Services Offered by Banks
  - 5.5 Evaluate Case Studies of Banking Practices and Their Impacts
  - 5.6 Design a Simple Banking Services Project Proposal

5 Beauty & Wellness

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Cosmetology — Skin and Hair Science** — 6 classes
  - 1.1 Understand Skin Anatomy and Physiology
  - 1.2 Identify Common Skin Types and Conditions
  - 1.3 Explore Advanced Hair Structure and Growth
  - 1.4 Analyze the Effects of Nutrition on Skin and Hair Health
  - 1.5 Demonstrate Skincare Product Selection for Different Needs
  - 1.6 Apply Hair Care Techniques for Diverse Hair Types
- **2 Unit 2 — Spa Treatments — Body Wraps, Massages and Therapies** — 6 classes
  - 2.1 Explore the Benefits of Body Wraps in Spa Treatments
  - 2.2 Identify Different Types of Body Wraps and Their Ingredients
  - 2.3 Demonstrate the Steps to Prepare and Apply a Body Wrap
  - 2.4 Understand the Principles of Massage Therapies for Wellness
  - 2.5 Practice Basic Massage Techniques for Relaxation
  - 2.6 Evaluate the Effectiveness of Various Spa Therapies on Clients
- **3 Unit 3 — Make-up Artistry — Day, Evening and Bridal** — 6 classes
  - 3.1 Analyze Day Make-up Techniques for Natural Looks
  - 3.2 Explore Evening Make-up Styles for Glamorous Effects
  - 3.3 Identify Key Elements of Bridal Make-up Application
  - 3.4 Demonstrate Day Make-up Application on a Model
  - 3.5 Create a Complete Evening Look: Step-by-Step Guide
  - 3.6 Assess and Perfect Bridal Make-up for Varying Skin Types
- **4 Unit 4 — Salon Business Management and Pricing** — 6 classes
  - 4.1 Understand Key Concepts of Salon Business Management
  - 4.2 Identify Essential Components of a Salon Pricing Strategy
  - 4.3 Analyze Competitive Pricing Models in the Beauty Industry
  - 4.4 Develop a Pricing Structure for Salon Services
  - 4.5 Create an Effective Promotion Plan to Enhance Profitability
  - 4.6 Evaluate Customer Feedback to Adjust Pricing and Services
- **5 Unit 5 — Cosmetology Portfolio and Practical Exam** — 6 classes
  - 5.1 Explore Portfolio Components and Structure
  - 5.2 Gather Evidence of Skills through Documentation
  - 5.3 Create a Visual Presentation of Your Work
  - 5.4 Develop a Personal Brand in Cosmetology
  - 5.5 Prepare for the Practical Exam: Techniques and Tips
  - 5.6 Conduct a Mock Practical Exam: Assessment and Feedback

6 Biotechnology

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Cell Biology and Molecular Biology Basics** — 6 classes
  - 1.1 Identify Cell Structures and Their Functions
  - 1.2 Explore the Principles of Cell Theory
  - 1.3 Examine the Composition and Functions of Biomolecules
  - 1.4 Analyze the Process of Cellular Respiration
  - 1.5 Investigate DNA Structure and Replication
  - 1.6 Apply Molecular Techniques in Biotechnology
- **2 Unit 2 — Genetic Engineering and Recombinant DNA Technology** — 6 classes
  - 2.1 Explore the Basics of Genetic Engineering
  - 2.2 Understand the Role of Recombinant DNA in Biotechnology
  - 2.3 Identify Enzymes Used in Genetic Engineering
  - 2.4 Investigate the Process of Gene Cloning
  - 2.5 Evaluate Applications of Recombinant DNA Technology
  - 2.6 Assess Ethical Considerations in Genetic Engineering
- **3 Unit 3 — Fermentation, Bioreactors and Downstream Processing** — 6 classes
  - 3.1 Explore the Basics of Fermentation Processes
  - 3.2 Identify Different Types of Fermentation Microorganisms
  - 3.3 Describe the Structure and Function of Bioreactors
  - 3.4 Analyze Factors Affecting Fermentation Efficiency
  - 3.5 Examine Downstream Processing Techniques in Biotechnology
  - 3.6 Apply Knowledge of Fermentation and Processing in Real-World Scenarios
- **4 Unit 4 — Bioinformatics — Databases, Tools and Analysis** — 6 classes
  - 4.1 Explore the Basics of Bioinformatics Databases
  - 4.2 Navigate Key Bioinformatics Tools for Data Retrieval
  - 4.3 Understand Data Types and Formats in Bioinformatics
  - 4.4 Analyze Biological Data Using Bioinformatics Software
  - 4.5 Compare Different Bioinformatics Algorithms and Their Applications
  - 4.6 Evaluate Case Studies of Bioinformatics in Research and Industry
- **5 Unit 5 — Biotechnology Industry Application Project** — 6 classes
  - 5.1 Explore the Role of Biotechnology in Industry
  - 5.2 Identify Key Biotech Applications in Agriculture
  - 5.3 Analyze Biotechnological Advances in Healthcare
  - 5.4 Evaluate the Environmental Impact of Biotech Industries
  - 5.5 Design a Biotech Project Proposal for a Local Issue
  - 5.6 Present and Critique Biotech Solutions in a Group Format

7 Data Science

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Python for Data Science — pandas, numpy, scipy** — 6 classes
  - 1.1 Explore the Basics of Python Programming for Data Science
  - 1.2 Understand and Utilize NumPy for Numerical Data Manipulation
  - 1.3 Implement Array Operations with NumPy for Data Analysis
  - 1.4 Dive into Pandas for Data Structures: Series and DataFrames
  - 1.5 Analyze Data Using Pandas: Cleaning and Transforming Datasets
  - 1.6 Apply SciPy for Advanced Data Analysis Techniques
- **2 Unit 2 — Data Wrangling and Exploratory Data Analysis** — 6 classes
  - 2.1 Identify and Understand Data Sources for Wrangling
  - 2.2 Clean and Preprocess Raw Data Using Techniques
  - 2.3 Transform Data Structures for Analysis
  - 2.4 Explore Data Distributions and Patterns
  - 2.5 Visualize Data Insights with Graphical Representations
  - 2.6 Apply Data Wrangling Techniques to Real-World Scenarios
- **3 Unit 3 — Statistical Modelling and Regression** — 6 classes
  - 3.1 Understand Key Concepts of Statistical Modelling
  - 3.2 Explore Types of Regression Analysis
  - 3.3 Identify Variables and Data Collection Techniques
  - 3.4 Construct a Simple Linear Regression Model
  - 3.5 Interpret Regression Outputs and Coefficients
  - 3.6 Apply Regression Analysis to Real-World Data Sets
- **4 Unit 4 — Data Visualisation — Matplotlib, Seaborn, Plotly** — 6 classes
  - 4.1 Understand the Basics of Data Visualization Principles
  - 4.2 Explore Matplotlib: Creating Your First Line Plot
  - 4.3 Customize Your Matplotlib Plots with Styles and Annotations
  - 4.4 Introduction to Seaborn: Enhancing Statistical Graphics
  - 4.5 Create Interactive Visualizations Using Plotly
  - 4.6 Apply Your Knowledge: Build a Comprehensive Visual Data Story
- **5 Unit 5 — Industry Data Science Project — Full Pipeline** — 6 classes
  - 5.1 Identify Data Sources for Industry Projects
  - 5.2 Collect and Clean Data for Analysis
  - 5.3 Explore and Visualize Data Patterns
  - 5.4 Select Appropriate Analytical Models
  - 5.5 Implement and Evaluate Model Performance
  - 5.6 Present Findings and Insights from the Project

8 Design Thinking & Innovation

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Design Methodology and Double Diamond** — 6 classes
  - 1.1 Explore the Double Diamond Framework
  - 1.2 Identify Problem Spaces through Divergent Thinking
  - 1.3 Define User Needs with Empathy Mapping
  - 1.4 Generate Creative Solutions using Ideation Techniques
  - 1.5 Prototype Ideas for Effective Testing
  - 1.6 Evaluate and Revise Designs Based on User Feedback
- **2 Unit 2 — Human-Centred Design and Empathy Mapping** — 6 classes
  - 2.1 Explore the Fundamentals of Human-Centred Design
  - 2.2 Identify Key Principles of Empathy Mapping
  - 2.3 Develop User Personas to Understand Needs
  - 2.4 Conduct Empathy Interviews for Insight Gathering
  - 2.5 Create Empathy Maps to Visualize User Experiences
  - 2.6 Apply Insights to Prototype Solutions for Real-World Problems
- **3 Unit 3 — Service Design and Business Innovation Tools** — 6 classes
  - 3.1 Explore the Principles of Service Design
  - 3.2 Identify User Needs Through Empathy Mapping
  - 3.3 Develop Service Blueprints for Customer Journeys
  - 3.4 Utilize Ideation Techniques for Innovative Solutions
  - 3.5 Prototype Service Concepts Using Low-Fidelity Models
  - 3.6 Evaluate and Iterate Service Designs Based on Feedback
- **4 Unit 4 — High-Fidelity Prototyping and User Testing** — 6 classes
  - 4.1 Explore High-Fidelity Prototyping Techniques
  - 4.2 Develop Effective Prototypes for User Interaction
  - 4.3 Identify Key Elements for User Testing
  - 4.4 Conduct User Testing Sessions Effectively
  - 4.5 Analyze User Feedback for Design Improvement
  - 4.6 Present Prototyping Outcomes and User Insights
- **5 Unit 5 — Innovation Project — Social or Commercial Impact** — 6 classes
  - 5.1 Identify Social Issues for Innovation Projects
  - 5.2 Brainstorming Innovative Solutions for Social Impact
  - 5.3 Assessing Feasibility of Proposed Innovations
  - 5.4 Designing a Prototype for Social or Commercial Innovation
  - 5.5 Developing a Pitch for Your Innovation Project
  - 5.6 Evaluating the Impact of Innovations on Communities

9 Electronics & Hardware

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Microcontrollers — Arduino, Raspberry Pi Basics** — 6 classes
  - 1.1 Explore the Basics of Microcontrollers
  - 1.2 Understand Arduino Architecture and Components
  - 1.3 Set Up Your First Arduino Project
  - 1.4 Introduction to Raspberry Pi Hardware and Features
  - 1.5 Create a Simple Raspberry Pi Project
  - 1.6 Compare Arduino and Raspberry Pi for Project Applications
- **2 Unit 2 — IoT Architecture, Sensors and Actuators** — 6 classes
  - 2.1 Explore the Fundamentals of IoT Architecture
  - 2.2 Identify and Classify Different Types of Sensors
  - 2.3 Understand the Role of Actuators in IoT Systems
  - 2.4 Analyze the Interaction Between Sensors and Actuators
  - 2.5 Design a Basic IoT Sensor Network
  - 2.6 Implement a Simple IoT Project Using Sensors and Actuators
- **3 Unit 3 — PCB Design and Fabrication Techniques** — 6 classes
  - 3.1 Understand the Basics of PCB Design Principles
  - 3.2 Identify and Utilize PCB Design Software Tools
  - 3.3 Develop a Basic PCB Layout from a Schematic Diagram
  - 3.4 Explore Different Material Types for PCB Fabrication
  - 3.5 Apply PCB Fabrication Techniques: Etching and Drilling
  - 3.6 Evaluate the Quality of a Finished PCB Prototype
- **4 Unit 4 — Embedded Systems Programming — C/MicroPython** — 6 classes
  - 4.1 Understand the Basics of Embedded Systems and Their Applications
  - 4.2 Explore C Language Fundamentals for Embedded Systems
  - 4.3 Introduce MicroPython and Its Advantages in Embedded Programming
  - 4.4 Write Simple Programs in C for Microcontroller Interaction
  - 4.5 Develop Basic MicroPython Scripts for Hardware Control
  - 4.6 Integrate Sensors with Embedded Systems Using C/MicroPython
- **5 Unit 5 — IoT/Hardware Project — Build and Present** — 6 classes
  - 5.1 Identify Key Components for IoT Hardware Projects
  - 5.2 Design Circuit Schematics for IoT Applications
  - 5.3 Build a Prototype of Your IoT Project
  - 5.4 Program Microcontrollers for IoT Integration
  - 5.5 Test and Troubleshoot Your IoT Hardware Setup
  - 5.6 Present Your IoT Project Effectively to an Audience

10 Fashion Studies

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Fashion History, Trends and Forecasting** — 6 classes
  - 1.1 Explore the Origins of Fashion: A Historical Overview
  - 1.2 Identify Key Fashion Movements: From Rococo to Streetwear
  - 1.3 Analyze Cultural Influences on Fashion Trends
  - 1.4 Examine the Role of Technology in Fashion Evolution
  - 1.5 Forecasting Fashion Trends: Methods and Tools
  - 1.6 Apply Trend Analysis to Create a Mini Fashion Collection
- **2 Unit 2 — Textile Science — Fibres, Fabrics and Finishes** — 6 classes
  - 2.1 Identify Different Types of Fibres: Natural vs. Synthetic
  - 2.2 Explore the Properties of Key Fibres Used in Fashion
  - 2.3 Investigate Fabric Construction Techniques: Weaving vs. Knitting
  - 2.4 Examine the Role of Fabric Finishes in Enhancing Textile Performance
  - 2.5 Compare the Environmental Impact of Various Fibres and Fabrics
  - 2.6 Apply Knowledge of Fibres and Fabrics in Fashion Design Projects
- **3 Unit 3 — Pattern Drafting — Basic and Advanced Blocks** — 6 classes
  - 3.1 Understand the Fundamentals of Pattern Drafting
  - 3.2 Identify Tools and Materials for Pattern Drafting
  - 3.3 Create Basic Blocks for Apparel Design
  - 3.4 Explore Advanced Block Techniques in Pattern Drafting
  - 3.5 Adjust Basic Blocks to Fit Different Body Types
  - 3.6 Apply Pattern Drafting Skills in a Mini Fashion Project
- **4 Unit 4 — Garment Construction — Tailoring and Couture Techniques** — 6 classes
  - 4.1 Explore Essential Tailoring Tools and Materials
  - 4.2 Demonstrate Basic Hand Sewing Techniques for Tailoring
  - 4.3 Construct and Fit a Basic Tailored Sleeve
  - 4.4 Master Couture Stitching Techniques for Quality Finishing
  - 4.5 Create a Simple Tailored Garment Using Couture Principles
  - 4.6 Evaluate and Present Finished Tailored Garments Professionally
- **5 Unit 5 — Fashion Collection Project and Portfolio** — 6 classes
  - 5.1 Research Fashion Trends and Influences
  - 5.2 Define Target Audience for Fashion Collection
  - 5.3 Develop a Concept Mood Board
  - 5.4 Create Initial Sketches of Design Ideas
  - 5.5 Compile a Collection Portfolio
  - 5.6 Present and Critique Fashion Collection

11 Financial Literacy

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Investment Planning — Equity, Debt, Real Estate** — 6 classes
  - 1.1 Define and Differentiate Investment Types: Equity, Debt, and Real Estate
  - 1.2 Analyze Risk and Return Profiles of Equity Investments
  - 1.3 Examine the Benefits and Drawbacks of Debt Investments
  - 1.4 Explore Real Estate as an Investment Option: Key Factors to Consider
  - 1.5 Create a Basic Investment Portfolio Using Equity, Debt, and Real Estate
  - 1.6 Reflect on Personal Investment Goals and Prepare a Customized Investment Plan
- **2 Unit 2 — Tax Planning — 80C Deductions and Tax Saving** — 6 classes
  - 2.1 Understand the Concept of 80C Deductions
  - 2.2 Identify Eligible Investments for 80C Deductions
  - 2.3 Calculate Potential Tax Savings through 80C Deductions
  - 2.4 Explore Long-term vs Short-term Benefits of 80C Investments
  - 2.5 Create a Personal Tax Savings Plan Using 80C Deductions
  - 2.6 Review Common Mistakes in Claiming 80C Deductions
- **3 Unit 3 — Insurance — Life, Health, Term and ULIP** — 6 classes
  - 3.1 Define and Differentiate Life and Health Insurance
  - 3.2 Explore the Types of Life Insurance: Term vs. ULIP
  - 3.3 Understand the Benefits of Health Insurance Coverage
  - 3.4 Analyze the Importance of Insurance in Financial Planning
  - 3.5 Calculate Insurance Needs and Coverage Amounts
  - 3.6 Evaluate Real-life Scenarios for Choosing the Right Insurance
- **4 Unit 4 — Retirement Planning — NPS, PPF and Pension** — 6 classes
  - 4.1 Understand the Importance of Retirement Planning
  - 4.2 Explore the National Pension System (NPS) Features
  - 4.3 Analyze Public Provident Fund (PPF) Benefits and Limitations
  - 4.4 Compare NPS and PPF for Retirement Savings
  - 4.5 Evaluate Different Pension Plans Available in the UK
  - 4.6 Create a Personalized Retirement Savings Strategy
- **5 Unit 5 — Personal Wealth Management Plan and Presentation** — 6 classes
  - 5.1 Define Personal Wealth Management and Its Importance
  - 5.2 Identify Key Components of a Personal Wealth Management Plan
  - 5.3 Assess Individual Financial Goals and Risk Tolerance
  - 5.4 Explore Different Investment Vehicles and Strategies
  - 5.5 Develop a Personal Wealth Management Plan Template
  - 5.6 Present and Review Personal Wealth Management Plans

12 Food Production

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Culinary Techniques — French, Italian, Indian** — 6 classes
  - 1.1 Mastering French Knife Skills and Classic Cuts
  - 1.2 Exploring Italian Pasta Types and Their Uses
  - 1.3 Understanding Indian Spices and Flavor Profiles
  - 1.4 Preparing French Sauces: Techniques and Applications
  - 1.5 Crafting Authentic Italian Risotto: Method and Tips
  - 1.6 Creating Signature Indian Curries: Balancing Flavors
- **2 Unit 2 — Bakery and Patisserie — Artisan Breads, Cakes, Pastries** — 6 classes
  - 2.1 Explore the Fundamentals of Artisan Bread Making
  - 2.2 Identify Key Ingredients and Their Roles in Bread Production
  - 2.3 Master Essential Techniques for Kneading and Shaping Dough
  - 2.4 Understand Rising and Fermentation Processes in Baking
  - 2.5 Create a Variety of Artisan Breads: From Sourdough to Focaccia
  - 2.6 Design and Present Artisan Bread Platters for Service
- **3 Unit 3 — Kitchen Management — Planning, Costing and Staffing** — 6 classes
  - 3.1 Identify Key Principles of Kitchen Management
  - 3.2 Analyze Kitchen Layouts for Efficient Workflow
  - 3.3 Develop a Basic Food Production Costing Sheet
  - 3.4 Evaluate Staffing Needs for Different Kitchen Operations
  - 3.5 Create a Staff Scheduling Plan for a Busy Kitchen
  - 3.6 Implement Cost Control Strategies in Food Production
- **4 Unit 4 — Food Safety Systems — HACCP, ISO 22000** — 6 classes
  - 4.1 Define HACCP Principles and Their Importance in Food Safety
  - 4.2 Identify the Seven Steps of HACCP Implementation
  - 4.3 Explore ISO 22000 Standards and Their Role in Food Safety Management
  - 4.4 Distinguish Between HACCP and ISO 22000: Key Differences and Similarities
  - 4.5 Analyze Case Studies of Successful HACCP and ISO 22000 Implementations
  - 4.6 Develop a Simple HACCP Plan for a Food Production Scenario
- **5 Unit 5 — Culinary Project — Design Menu and Cook for Panel** — 6 classes
  - 5.1 Research Culinary Trends and Themes for Menu Design
  - 5.2 Identify and Select Ingredients for Menu Items
  - 5.3 Create a Balanced Menu with Nutritional Considerations
  - 5.4 Develop Cooking Techniques for Selected Dishes
  - 5.5 Prepare and Present Dishes for Panel Evaluation
  - 5.6 Receive and Reflect on Feedback from Panel Presentation

13 Front Office Operations

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Front Office Systems — PMS, GDS, OTA** — 6 classes
  - 1.1 Explore the Features and Benefits of Property Management Systems (PMS)
  - 1.2 Analyze the Role of Global Distribution Systems (GDS) in Hotel Bookings
  - 1.3 Investigate the Functionality of Online Travel Agencies (OTA)
  - 1.4 Compare and Contrast PMS, GDS, and OTA: Tools for Front Office Success
  - 1.5 Demonstrate the Use of PMS for Efficient Front Office Operations
  - 1.6 Implement Strategies to Enhance Collaborations with GDS and OTA Platforms
- **2 Unit 2 — Revenue Management and Yield Management** — 6 classes
  - 2.1 Define Key Concepts of Revenue Management
  - 2.2 Analyze the Importance of Yield Management in Hospitality
  - 2.3 Examine Different Revenue Management Strategies
  - 2.4 Explore Tools and Technologies for Yield Management
  - 2.5 Apply Revenue Management Techniques to Case Studies
  - 2.6 Evaluate the Effectiveness of Revenue Management Practices
- **3 Unit 3 — Night Audit Procedures and Financial Reporting** — 6 classes
  - 3.1 Understand the Purpose of Night Audit Procedures
  - 3.2 Identify Key Components of the Night Audit Process
  - 3.3 Explore Common Tools Used in Night Auditing
  - 3.4 Analyze Financial Reporting Standards in Hospitality
  - 3.5 Execute a Sample Night Audit Procedure
  - 3.6 Evaluate Financial Reports and Discuss Best Practices
- **4 Unit 4 — Front Office Leadership and Team Management** — 6 classes
  - 4.1 Define Leadership Styles in Front Office Operations
  - 4.2 Explore the Role of Effective Communication in Team Management
  - 4.3 Identify Key Characteristics of Successful Front Office Teams
  - 4.4 Develop Strategies for Conflict Resolution in Team Settings
  - 4.5 Implement Team Building Activities for Enhanced Collaboration
  - 4.6 Assess Team Performance and Provide Constructive Feedback
- **5 Unit 5 — Hotel Operations Project and Management Report** — 6 classes
  - 5.1 Analyze Hotel Operation Fundamentals
  - 5.2 Identify Key Components of a Hotel Management Report
  - 5.3 Explore Effective Guest Service Techniques
  - 5.4 Implement Solutions for Common Front Office Challenges
  - 5.5 Design a Comprehensive Hotel Operations Project Plan
  - 5.6 Present a Hotel Management Report to Stakeholders

14 Geospatial Technology

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — GIS Fundamentals — Coordinate Systems and Projections — 6 classes

- 1.1 Define and Differentiate Between Coordinate Systems
- 1.2 Explore Types of Coordinate Systems: Geographic vs. Projected
- 1.3 Understand the Importance of Projection in GIS
- 1.4 Identify Common Map Projections and Their Uses
- 1.5 Analyze the Impact of Distortion in Map Projections
- 1.6 Apply Coordinate Systems and Projections to Real-World Scenarios

• 2 Unit 2 — Remote Sensing — Satellite Imagery and Interpretation — 6 classes

- 2.1 Explore the Basics of Remote Sensing Technology
- 2.2 Identify Different Types of Satellite Imagery
- 2.3 Analyze the Spectral Bands Used in Satellite Imagery
- 2.4 Understand the Process of Image Acquisition and Processing
- 2.5 Interpret Satellite Images: Recognizing Features and Patterns
- 2.6 Apply Remote Sensing Techniques to Real-World Scenarios

• 3 Unit 3 — QGIS Software — Data Entry, Analysis and Mapping — 6 classes

- 3.1 Exploring QGIS Interface: Navigating Tools and Menus
- 3.2 Importing Spatial Data: Formats and Techniques
- 3.3 Creating and Editing Vector Layers: Practical Workflow
- 3.4 Conducting Spatial Analysis: Basic Operations in QGIS
- 3.5 Visualizing Data: Creating Effective Maps in QGIS
- 3.6 Exporting and Sharing Maps: Best Practices in QGIS

• 4 Unit 4 — Spatial Data Analysis and Geospatial Applications — 6 classes

- 4.1 Analyze and Interpret Spatial Data Patterns
- 4.2 Examine Data Sources for Geospatial Applications
- 4.3 Employ GIS Tools for Spatial Analysis
- 4.4 Compare Different Spatial Data Formats
- 4.5 Demonstrate the Use of Map Projections in Analysis
- 4.6 Develop a Geospatial Project Using Real-World Data

• 5 Unit 5 — Geospatial Project — Map and Analyse a Local Issue — 6 classes

- 5.1 Identify a Local Issue for Geospatial Analysis
- 5.2 Gather Geospatial Data Relevant to the Local Issue
- 5.3 Create a Basic Map Using Collected Data
- 5.4 Analyze Geospatial Data to Understand Patterns
- 5.5 Interpret Findings and Draw Conclusions from the Analysis
- 5.6 Present the Geospatial Project to the Community

15 Graphics & Animation

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — 2D Animation — Principles, Timing and Motion — 6 classes

- 1.1 Define and Explain the Key Principles of 2D Animation
- 1.2 Explore Timing: Understanding Frames and Timing in Animation
- 1.3 Analyze Motion: The Importance of Motion in 2D Animation
- 1.4 Illustrate the Twelve Principles of Animation with Examples
- 1.5 Develop a Simple Animation Using Basic Timing Techniques
- 1.6 Evaluate and Refine Your Animation for Fluidity and Motion

• 2 Unit 2 — 3D Modelling and Animation — Blender/Maya Introduction — 6 classes

- 2.1 Explore Blender and Maya Interfaces
- 2.2 Understand 3D Modeling Basics
- 2.3 Create Basic Shapes in Blender
- 2.4 Construct Objects with Maya Tools
- 2.5 Apply Textures and Materials to Models
- 2.6 Animate Basic Movements in Blender

• 3 Unit 3 — Adobe Suite — Illustrator, After Effects, Premiere — 6 classes

- 3.1 Explore Adobe Illustrator Interface and Tools
- 3.2 Create Basic Shapes and Paths in Illustrator
- 3.3 Integrate Text and Graphics in Adobe Illustrator
- 3.4 Introduction to Animation Principles in After Effects
- 3.5 Animate a Simple Graphic in After Effects
- 3.6 Edit and Compile a Short Video in Adobe Premiere

• 4 Unit 4 — Visual Effects (VFX) and Motion Graphics Basics — 6 classes

- 4.1 Explore the Fundamentals of Visual Effects
- 4.2 Identify Key Techniques in Motion Graphics
- 4.3 Analyze the Role of Compositing in VFX
- 4.4 Demonstrate Basic Animation Principles
- 4.5 Create Simple Motion Graphics Using Software Tools
- 4.6 Evaluate and Present a Short VFX Project

• 5 Unit 5 — Animation Portfolio Project — Short Film or Ad — 6 classes

- 5.1 Brainstorming Ideas for a Short Film or Ad
- 5.2 Developing a Storyboard for Your Animation
- 5.3 Creating Characters and Environments for Animation
- 5.4 Incorporating Sound and Music into Your Project
- 5.5 Editing and Finalizing Your Animation Portfolio
- 5.6 Presenting Your Short Film or Ad to an Audience

16 Health Care

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Anatomy and Physiology — Systems Review** — 6 classes
  - 1.1 Explore the Major Body Systems and Their Functions
  - 1.2 Examine the Structure and Function of the Cardiovascular System
  - 1.3 Investigate the Respiratory System: Anatomy and Physiology
  - 1.4 Analyze the Digestive System: Key Components and Processes
  - 1.5 Assess the Nervous System: Structure and Signal Transmission
  - 1.6 Apply Knowledge of Body Systems to Real-World Health Scenarios
- **2 Unit 2 — Clinical Skills — Vitals, Blood Pressure, Dressing** — 6 classes
  - 2.1 Measuring Vital Signs: Understanding Temperature, Pulse, and Respiration
  - 2.2 Assessing Blood Pressure: Techniques and Equipment Overview
  - 2.3 Interpreting Blood Pressure Readings: Normal vs. Abnormal Values
  - 2.4 Demonstrating Accurate Blood Pressure Measurement Techniques
  - 2.5 Wound Care Fundamentals: Principles of Dressing and Infection Control
  - 2.6 Applying Dressings: Practical Skills for Safe and Effective Application
- **3 Unit 3 — Medical Records and Health Information Systems** — 6 classes
  - 3.1 Understand the Importance of Medical Records in Healthcare
  - 3.2 Identify Types of Medical Records Used in Health Care
  - 3.3 Explore Health Information Systems and Their Functions
  - 3.4 Learn Data Privacy and Security in Medical Records Management
  - 3.5 Analyze the Role of Electronic Health Records (EHRs) in Patient Care
  - 3.6 Apply Knowledge of Medical Records through a Case Study Exercise
- **4 Unit 4 — Community Health and Preventive Healthcare** — 6 classes
  - 4.1 Understand the Importance of Community Health
  - 4.2 Identify Key Components of Preventive Healthcare
  - 4.3 Explore Common Community Health Issues
  - 4.4 Evaluate Strategies for Health Promotion
  - 4.5 Analyze the Role of Healthcare Workers in Communities
  - 4.6 Develop a Community Health Improvement Plan
- **5 Unit 5 — Healthcare Field Visit Report and Case Study** — 6 classes
  - 5.1 Explore the Importance of Field Visits in Healthcare
  - 5.2 Identify Key Elements of a Healthcare Field Visit Report
  - 5.3 Analyze a Case Study: Observations and Findings
  - 5.4 Develop Effective Communication in Healthcare Reporting
  - 5.5 Create a Sample Healthcare Field Visit Report
  - 5.6 Present a Case Study Findings: Skills and Techniques

17 Home Science

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Human Development and Family Studies** — 6 classes
  - 1.1 Explore Key Concepts of Human Development
  - 1.2 Analyze Stages of Human Growth Across the Lifespan
  - 1.3 Investigate Factors Influencing Family Dynamics
  - 1.4 Assess the Role of Culture in Family Structures
  - 1.5 Develop Strategies for Effective Communication in Families
  - 1.6 Apply Knowledge of Developmental Theories to Real-Life Scenarios
- **2 Unit 2 — Nutrition Science — Macros, Micros and Meal Planning** — 6 classes
  - 2.1 Understand Macronutrients and Their Functions
  - 2.2 Explore Micronutrients and Their Role in Health
  - 2.3 Analyze Daily Nutritional Requirements for Different Age Groups
  - 2.4 Identify Food Sources for Essential Nutrients
  - 2.5 Create a Balanced Meal Plan Incorporating Macros and Micros
  - 2.6 Evaluate Meal Plans for Nutritional Adequacy and Diversity
- **3 Unit 3 — Textiles and Apparel — Consumer Selection and Care** — 6 classes
  - 3.1 Identify Key Factors in Textile Selection
  - 3.2 Analyze Fabric Properties and Their Care Requirements
  - 3.3 Evaluate Sustainable and Ethical Apparel Choices
  - 3.4 Compare Different Laundry Techniques for Delicate Fabrics
  - 3.5 Demonstrate Proper Storage Methods for Textiles
  - 3.6 Create a Care Label for a Chosen Garment
- **4 Unit 4 — Consumer Education, Rights and Resource Management** — 6 classes
  - 4.1 Understand Consumer Rights and Responsibilities
  - 4.2 Identify Types of Consumer Goods and Services
  - 4.3 Analyze Advertising Techniques and Consumer Influence
  - 4.4 Evaluate Product Labels and Quality Indicators
  - 4.5 Develop Effective Budgeting Skills for Consumer Purchases
  - 4.6 Practice Consumer Strategies for Smart Shopping
- **5 Unit 5 — Applied Home Science Project** — 6 classes
  - 5.1 Identify and Define a Home Science Project Topic
  - 5.2 Conduct a Literature Review for Home Science Applications
  - 5.3 Develop a Research Proposal for a Home Science Project
  - 5.4 Implement Data Collection Methods for Home Science Research
  - 5.5 Analyze and Interpret Data in Home Science Projects
  - 5.6 Present Findings and Recommendations from Home Science Research

18 Horticulture

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Plant Propagation — Seeds, Cuttings, Grafting** — 6 classes
  - 1.1 Explore the Basics of Seed Structure and Germination
  - 1.2 Identify Different Types of Seeds and Their Germination Requirements
  - 1.3 Demonstrate the Techniques for Sowing Seeds Effectively
  - 1.4 Understand the Principles of Plant Cuttings and Their Uses
  - 1.5 Practice Taking and Preparing Cuttings for Propagation
  - 1.6 Apply Grafting Techniques to Propagate Desired Plant Varieties
- **2 Unit 2 — Floriculture — Flower Cultivation and Arrangement** — 6 classes
  - 2.1 Identify Common Flower Types and Their Characteristics
  - 2.2 Understand Soil Requirements and Preparation for Flower Cultivation
  - 2.3 Explore Cultivation Techniques for Healthy Flower Growth
  - 2.4 Learn the Principles of Flower Arrangement and Design
  - 2.5 Practice Creating Simple Flower Arrangements for Different Occasions
  - 2.6 Evaluate and Care for Flower Arrangements to Extend Their Lifespan
- **3 Unit 3 — Landscape Design — Principles and Garden Planning** — 6 classes
  - 3.1 Explore the Principles of Landscape Design
  - 3.2 Identify Key Elements of Garden Planning
  - 3.3 Analyze Different Garden Styles and Themes
  - 3.4 Assess Site Conditions for Effective Garden Layout
  - 3.5 Create a Conceptual Garden Design Plan
  - 3.6 Present and Evaluate Garden Design Proposals
- **4 Unit 4 — Nursery Management — Production and Marketing** — 6 classes
  - 4.1 Identify Key Components of Nursery Management
  - 4.2 Analyze Plant Production Techniques in Nurseries
  - 4.3 Evaluate Soil and Environmental Requirements for Nursery Plants
  - 4.4 Develop Effective Marketing Strategies for Nursery Products
  - 4.5 Assess Economic Considerations in Nursery Operations
  - 4.6 Create a Simple Business Plan for a Nursery Venture
- **5 Unit 5 — Horticulture Project — Design and Maintain a Garden** — 6 classes
  - 5.1 Analyze Site Conditions for Garden Design
  - 5.2 Select Appropriate Plants for Diverse Environments
  - 5.3 Create a Garden Layout Using Design Principles
  - 5.4 Develop a Planting Schedule for Seasonal Gardening
  - 5.5 Implement Maintenance Techniques for Healthy Growth
  - 5.6 Evaluate Garden Success and Plan for Future Improvements

19 Hospital & Clinical Management

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Hospital Organisation, Structure and Departments** — 6 classes
  - 1.1 Identify Key Components of Hospital Organisation
  - 1.2 Describe the Structure of a Typical Hospital
  - 1.3 Explain the Roles and Responsibilities of Hospital Departments
  - 1.4 Analyze the Interconnections Between Departments
  - 1.5 Evaluate the Importance of Effective Communication in Hospitals
  - 1.6 Apply Knowledge to Simulate a Hospital Organisational Chart
- **2 Unit 2 — Patient Admission, Discharge and Medical Records** — 6 classes
  - 2.1 Understand the Patient Admission Process
  - 2.2 Identify Key Documentation Required for Admission
  - 2.3 Explore Roles and Responsibilities during Patient Admissions
  - 2.4 Learn Effective Discharge Planning Strategies
  - 2.5 Implementing Accurate Medical Record Keeping
  - 2.6 Evaluate Ethical Considerations in Patient Admissions and Discharges
- **3 Unit 3 — Healthcare Quality Management and Accreditation** — 6 classes
  - 3.1 Understand the Importance of Healthcare Quality Management in Clinical Settings
  - 3.2 Identify Key Components of Quality Management Systems in Healthcare
  - 3.3 Explore Common Healthcare Accreditation Standards and Frameworks
  - 3.4 Analyze Case Studies of Successful Quality Management Implementation
  - 3.5 Evaluate the Role of Stakeholders in Achieving Healthcare Quality
  - 3.6 Develop a Quality Improvement Plan for a Healthcare Facility
- **4 Unit 4 — Healthcare Laws, Ethics and Patient Rights** — 6 classes
  - 4.1 Understand Key Healthcare Laws Affecting Patient Care
  - 4.2 Explore the Ethical Principles in Healthcare Delivery
  - 4.3 Identify Patient Rights and Responsibilities in Clinical Settings
  - 4.4 Analyze Case Studies of Ethical Dilemmas in Healthcare
  - 4.5 Discuss the Role of Consent and Confidentiality in Patient Care
  - 4.6 Apply Knowledge of Healthcare Laws to Real-World Scenarios
- **5 Unit 5 — Hospital Administration Project and Field Visit** — 6 classes
  - 5.1 Analyze the Role of Hospital Administration in Healthcare Delivery
  - 5.2 Explore Key Components of a Successful Hospital Management Project
  - 5.3 Identify Stakeholders Involved in Hospital Administration
  - 5.4 Develop a Project Proposal for a Hospital Administration Initiative
  - 5.5 Conduct a Field Visit to Evaluate Hospital Administration Practices
  - 5.6 Present Findings and Recommendations from Field Visit Observations

20 Human Rights & Gender Studies

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Human Rights Frameworks — Universal Declaration, Indian Constitution** — 6 classes
  - 1.1 Explore the Universal Declaration of Human Rights: Key Principles and Articles
  - 1.2 Analyze the Historical Context and Impact of the Universal Declaration
  - 1.3 Examine the Indian Constitution: Fundamental Rights and Duties
  - 1.4 Compare the Universal Declaration with the Indian Constitution
  - 1.5 Discuss the Role of Human Rights in Everyday Life
  - 1.6 Apply Human Rights Frameworks to Current Social Issues in India
- **2 Unit 2 — Gender Studies — Concepts, Stereotypes and Equality** — 6 classes
  - 2.1 Define and Differentiate Key Concepts in Gender Studies
  - 2.2 Analyze Historical Contexts of Gender Roles and Stereotypes
  - 2.3 Examine Media Representations of Gender: Impact and Implications
  - 2.4 Identify and Challenge Common Gender Stereotypes in Society
  - 2.5 Explore the Intersectionality of Gender with Other Social Identities
  - 2.6 Develop Strategies for Promoting Gender Equality in Everyday Life
- **3 Unit 3 — Social Justice, Discrimination and Legal Remedies** — 6 classes
  - 3.1 Define Social Justice and Its Importance in Society
  - 3.2 Identify Forms of Discrimination in Different Contexts
  - 3.3 Explore Historical Cases of Discrimination and Their Impact
  - 3.4 Understand Legal Frameworks for Addressing Discrimination
  - 3.5 Analyze the Role of Institutions in Promoting Social Justice
  - 3.6 Develop Action Plans for Advocating Legal Remedies for Discrimination
- **4 Unit 4 — Civic Engagement, Advocacy and Rights Movements** — 6 classes
  - 4.1 Explore the Concept of Civic Engagement and Its Importance
  - 4.2 Identify Key Advocacy Strategies Used in Rights Movements
  - 4.3 Analyze Historical Case Studies of Successful Rights Movements
  - 4.4 Discuss the Role of Social Media in Modern Advocacy
  - 4.5 Develop a Personal Advocacy Plan for a Social Issue
  - 4.6 Present and Reflect on Advocacy Plans in Peer Groups
- **5 Unit 5 — Human Rights Research Project and Presentation** — 6 classes
  - 5.1 Identify and Define Key Human Rights Concepts
  - 5.2 Explore Case Studies in Human Rights Violations
  - 5.3 Conducting Effective Research on Gender Rights Issues
  - 5.4 Analyze and Interpret Data for Human Rights Reports
  - 5.5 Develop a Persuasive Presentation on Human Rights Topics
  - 5.6 Reflect and Critique Peer Presentations on Gender Studies

21 Information Technology

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Networking — TCP/IP, DNS, DHCP, Firewalls** — 6 classes
  - 1.1 Explore the TCP/IP Model and Its Layers
  - 1.2 Understand the Role of DNS in Networking
  - 1.3 Configure DHCP for Dynamic IP Addressing
  - 1.4 Investigate Different Types of Firewalls and Their Functions
  - 1.5 Analyze Network Security Protocols and Best Practices
  - 1.6 Implement a Small Network Using TCP/IP, DNS, and DHCP
- **2 Unit 2 — Cybersecurity — Threats, Encryption and Ethical Hacking Basics** — 6 classes
  - 2.1 Identify Common Cybersecurity Threats and Vulnerabilities
  - 2.2 Explore the Impact of Cyber Attacks on Organizations
  - 2.3 Understand the Fundamentals of Encryption and Its Types
  - 2.4 Demonstrate the Use of Basic Encryption Techniques
  - 2.5 Introduction to Ethical Hacking and Its Importance
  - 2.6 Apply Ethical Hacking Tools to Identify System Weaknesses
- **3 Unit 3 — Database Management — MySQL, RDBMS, SQL Queries** — 6 classes
  - 3.1 Define and Explain RDBMS Concepts and Terminology
  - 3.2 Install and Configure MySQL: A Step-by-Step Guide
  - 3.3 Create Your First Database and Tables in MySQL
  - 3.4 Understand and Write Basic SQL Queries for Data Retrieval
  - 3.5 Manipulate Data: Insert, Update, and Delete with SQL Commands
  - 3.6 Apply Joins and Subqueries to Enhance Data Retrieval Techniques
- **4 Unit 4 — Web Technologies — HTML5, CSS3, JavaScript Basics** — 6 classes
  - 4.1 Explore the Structure of HTML5 Documents
  - 4.2 Implement Basic HTML5 Elements and Attributes
  - 4.3 Style Web Pages Using CSS3 Fundamentals
  - 4.4 Create Responsive Designs with CSS3 Layout Techniques
  - 4.5 Understand JavaScript Basics and Syntax
  - 4.6 Integrate JavaScript for Dynamic Web Interactions
- **5 Unit 5 — IT Industry Project — Network or Web Application** — 6 classes
  - 5.1 Identify Key Components of Network and Web Applications
  - 5.2 Analyze the Requirements for IT Industry Projects
  - 5.3 Design User Interface Prototypes for Applications
  - 5.4 Develop a Basic Network Architecture Diagram
  - 5.5 Implement Testing Strategies for Network and Web Applications
  - 5.6 Present and Evaluate IT Project Outcomes

22 Insurance & Risk Management

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Insurance Industry Structure and Regulatory Bodies (IRDA)** — 6 classes
  - 1.1 Explore the Concept of Insurance: Understanding Basic Terminology
  - 1.2 Identify Key Components of the Insurance Industry Structure
  - 1.3 Examine the Role of Regulatory Bodies in the Insurance Sector
  - 1.4 Analyze the Functions and Powers of IRDA in India
  - 1.5 Discuss the Importance of Compliance with Insurance Regulations
  - 1.6 Apply Knowledge of Regulatory Guidelines to Real-world Scenarios
- **2 Unit 2 — Underwriting Principles and Risk Evaluation** — 6 classes
  - 2.1 Define Underwriting and Its Importance in Insurance
  - 2.2 Identify Key Risks in Underwriting Processes
  - 2.3 Analyze the Role of Risk Assessment Tools
  - 2.4 Explore Different Types of Insurance Underwriting
  - 2.5 Evaluate Case Studies in Underwriting Decisions
  - 2.6 Apply Underwriting Principles to Real-World Scenarios
- **3 Unit 3 — Claims Management — Process, Documentation, Settlement** — 6 classes
  - 3.1 Understand the Claims Management Process and its Importance
  - 3.2 Identify Key Documentation Required for Insurance Claims
  - 3.3 Explore Types of Insurance Claims and Their Unique Requirements
  - 3.4 Analyze the Steps in Filing an Insurance Claim Effectively
  - 3.5 Evaluate Common Challenges in Claims Settlement and How to Overcome Them
  - 3.6 Apply Best Practices for Successful Claims Management in Real Scenarios
- **4 Unit 4 — Reinsurance, Coinsurance and Treaty Basics** — 6 classes
  - 4.1 Understand the Fundamentals of Reinsurance
  - 4.2 Explore the Concepts of Coinsurance
  - 4.3 Differentiate Between Types of Reinsurance
  - 4.4 Analyze the Mechanics of Treaty Reinsurance
  - 4.5 Discuss the Advantages and Disadvantages of Coinsurance
  - 4.6 Apply Reinsurance Concepts to Real-World Scenarios
- **5 Unit 5 — Insurance Risk Management Project** — 6 classes
  - 5.1 Identify Key Concepts in Insurance Risk Management
  - 5.2 Analyze Different Types of Insurance Policies
  - 5.3 Assess Potential Risks within a Business Context
  - 5.4 Evaluate Risk Management Strategies in Insurance
  - 5.5 Develop a Risk Management Plan for a Case Study
  - 5.6 Present and Justify Risk Management Recommendations

23 IT System Maintenance

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Hardware Diagnosis — Motherboard, RAM, PSU, Drives** — 6 classes
  - 1.1 Identify Key Components of a Motherboard
  - 1.2 Diagnose Common Motherboard Issues
  - 1.3 Understand RAM Functionality and Types
  - 1.4 Test and Troubleshoot RAM Problems
  - 1.5 Evaluate Power Supply Unit (PSU) Performance
  - 1.6 Analyze Storage Drive Failures and Solutions
- **2 Unit 2 — Operating System Installation, Configuration and Troubleshooting** — 6 classes
  - 2.1 Understand Operating System Fundamentals
  - 2.2 Identify System Requirements for OS Installation
  - 2.3 Execute a Step-by-Step OS Installation Process
  - 2.4 Configure Basic OS Settings Post-Installation
  - 2.5 Explore Common Troubleshooting Techniques for OS Issues
  - 2.6 Assess and Implement OS Maintenance Best Practices
- **3 Unit 3 — Network Administration — LAN Setup, Wi-Fi, VPN** — 6 classes
  - 3.1 Identify Components of a Local Area Network (LAN)
  - 3.2 Configure Basic LAN Settings Using Router Interfaces
  - 3.3 Set Up and Secure a Wi-Fi Network
  - 3.4 Troubleshoot Common LAN Connection Issues
  - 3.5 Understand the Purpose and Functionality of VPNs
  - 3.6 Implement a VPN for Secure Remote Access
- **4 Unit 4 — IT Support Ticketing, SLA and Help Desk Management** — 6 classes
  - 4.1 Define IT Support Ticketing Systems and Their Purpose
  - 4.2 Explore Common Types of IT Support Tickets
  - 4.3 Understand Service Level Agreements (SLA) in IT Support
  - 4.4 Examine Key Performance Indicators (KPIs) for Help Desk Management
  - 4.5 Implement Effective Help Desk Communication Techniques
  - 4.6 Analyze Real-World Scenarios for Efficient Ticket Resolution
- **5 Unit 5 — Enterprise IT Maintenance Project** — 6 classes
  - 5.1 Analyze Current IT Infrastructure for Maintenance Needs
  - 5.2 Identify Common Issues in Enterprise IT Systems
  - 5.3 Develop a Maintenance Schedule for IT Components
  - 5.4 Implement Troubleshooting Techniques for IT Systems
  - 5.5 Evaluate Maintenance Tools and Software for Efficiency
  - 5.6 Create a Report on Maintenance Outcomes and Improvements

24 Legal Studies

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Indian Legal System — Sources, Hierarchy and Courts** — 6 classes
  - 1.1 Identify the Sources of Law in the Indian Legal System
  - 1.2 Analyze the Hierarchy of Laws in India
  - 1.3 Explore the Role of the Constitution as the Supreme Law
  - 1.4 Differentiate Between Statutory and Non-Statutory Laws
  - 1.5 Examine the Structure and Function of Indian Courts
  - 1.6 Apply Knowledge of Legal Sources in Real Case Scenarios
- **2 Unit 2 — Constitutional Law — Fundamental Rights and Duties** — 6 classes
  - 2.1 Explore the Historical Evolution of Fundamental Rights in India
  - 2.2 Identify Key Fundamental Rights Enshrined in the Constitution
  - 2.3 Examine the Significance of Fundamental Duties in Shaping Citizenship
  - 2.4 Analyze Landmark Supreme Court Cases Related to Fundamental Rights
  - 2.5 Discuss the Balance Between Fundamental Rights and Responsibilities
  - 2.6 Apply Fundamental Rights to Case Studies and Real-Life Scenarios
- **3 Unit 3 — Civil Procedure — Suits, Trials and Decrees** — 6 classes
  - 3.1 Identify and Understand Key Terminology in Civil Procedure
  - 3.2 Explore the Stages of a Civil Suit: From Pleadings to Judgments
  - 3.3 Analyze the Role of the Plaintiff and Defendant in Civil Litigation
  - 3.4 Examine the Process of Evidence Submission in Trials
  - 3.5 Differentiate Between Decrees and Judgments in Civil Cases
  - 3.6 Apply Civil Procedure Principles to Hypothetical Case Scenarios
- **4 Unit 4 — Criminal Procedure — FIR, Investigation, Trial** — 6 classes
  - 4.1 Understand the Importance of the FIR in Criminal Procedure
  - 4.2 Identify the Key Elements Required in a First Information Report
  - 4.3 Outline the Process of Criminal Investigation Following an FIR
  - 4.4 Analyze the Roles of Law Enforcement and Investigators in Criminal Cases
  - 4.5 Explore the Steps Involved in a Criminal Trial
  - 4.6 Apply Knowledge of FIR and Investigation Process to Real-Life Scenarios
- **5 Unit 5 — Moot Court Exercise and Legal Research Project** — 6 classes
  - 5.1 Understanding the Fundamentals of Moot Court Simulations
  - 5.2 Developing Legal Arguments and Case Strategies
  - 5.3 Conducting Effective Legal Research Techniques
  - 5.4 Drafting Persuasive Court Documents and Briefs
  - 5.5 Presenting Legal Arguments in a Structured Moot Court Setting
  - 5.6 Reflecting on Performance and Feedback in Moot Court Exercises

25 Library & Information Science

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Library Classification — Dewey, Colon Classification** — 6 classes
  - 1.1 Explore the Fundamentals of Library Classification
  - 1.2 Understand the Dewey Decimal System: Key Principles
  - 1.3 Analyze the Structure of Dewey Decimal Numbers
  - 1.4 Introduce Colon Classification: Basic Concepts
  - 1.5 Compare and Contrast Dewey and Colon Classification Systems
  - 1.6 Apply Classification Techniques to Organize a Mini Library
- **2 Unit 2 — Cataloguing — AACR2, MARC Records and OPAC** — 6 classes
  - 2.1 Understand the Principles of AACR2 in Cataloguing
  - 2.2 Explore the Components of MARC Records
  - 2.3 Analyze the Structure and Function of an OPAC
  - 2.4 Apply AACR2 Standards to Create Sample Catalog Records
  - 2.5 Evaluate the Accuracy of MARC Records in a Library Database
  - 2.6 Design an OPAC Search Strategy for Specific Information Needs
- **3 Unit 3 — Information Retrieval — Databases, Search Engines** — 6 classes
  - 3.1 Understanding Databases: Types and Structures
  - 3.2 Exploring Search Engines: How They Work
  - 3.3 Constructing Effective Search Queries
  - 3.4 Evaluating Information Sources: Credibility and Accuracy
  - 3.5 Utilizing Advanced Search Techniques
  - 3.6 Practical Application: Conducting a Research Task Using Databases
- **4 Unit 4 — Digital Libraries — E-Resources and Knowledge Portals** — 6 classes
  - 4.1 Explore the Definition and Importance of Digital Libraries
  - 4.2 Identify Key E-Resources Used in Digital Libraries
  - 4.3 Analyze Different Types of Knowledge Portals
  - 4.4 Evaluate the Benefits and Challenges of Digital Libraries
  - 4.5 Demonstrate How to Access and Navigate E-Resources
  - 4.6 Create a Personal Knowledge Portal Using Available E-Resources
- **5 Unit 5 — Library Digitisation Project** — 6 classes
  - 5.1 Understand the Importance of Library Digitisation
  - 5.2 Explore Digitisation Technologies and Tools
  - 5.3 Identify Steps in Planning a Digitisation Project
  - 5.4 Assess Metadata Standards for Digital Libraries
  - 5.5 Implementing Quality Control in Digitisation Processes
  - 5.6 Present and Evaluate a Sample Digitisation Project

26 Logistics & Supply Chain

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — Supply Chain Management — Procurement to Delivery — 6 classes

- 1.1 Identify Key Components of Supply Chain Management
- 1.2 Understand the Procurement Process and its Importance
- 1.3 Explore Supplier Relationship Management Strategies
- 1.4 Analyze Inventory Management Techniques in Supply Chains
- 1.5 Evaluate Logistics Strategies for Efficient Delivery
- 1.6 Apply Supply Chain Concepts to a Real-World Scenario

• 2 Unit 2 — Warehousing Operations — Layout, Handling and Inventory — 6 classes

- 2.1 Analyze Warehouse Layout Designs for Efficiency
- 2.2 Explore Different Material Handling Techniques
- 2.3 Identify Key Inventory Management Strategies
- 2.4 Evaluate the Impact of Technology on Warehouse Operations
- 2.5 Implement Best Practices for Inventory Control
- 2.6 Design a Warehouse Workflow for Optimal Performance

• 3 Unit 3 — Transportation and Logistics — Modes and Route Planning — 6 classes

- 3.1 Identify Different Modes of Transportation in Logistics
- 3.2 Analyze Advantages and Disadvantages of Each Transportation Mode
- 3.3 Understand Key Concepts in Route Planning
- 3.4 Utilize Technology for Efficient Route Optimization
- 3.5 Assess Real-World Case Studies of Logistics Route Planning
- 3.6 Design a Transportation Plan for a Supply Chain Scenario

• 4 Unit 4 — Freight Documentation — Bill of Lading, Airway Bill — 6 classes

- 4.1 Understand the Purpose of Freight Documentation
- 4.2 Explore the Components of a Bill of Lading
- 4.3 Analyze Different Types of Bills of Lading
- 4.4 Examine the Structure and Uses of an Airway Bill
- 4.5 Compare and Contrast Bill of Lading and Airway Bill
- 4.6 Apply Knowledge by Creating Sample Freight Documents

• 5 Unit 5 — Supply Chain Project — Map and Optimise a Process — 6 classes

- 5.1 Identify Key Components of a Supply Chain
- 5.2 Map the Current Supply Chain Process
- 5.3 Analyze Inefficiencies in the Supply Chain
- 5.4 Develop Optimization Strategies for the Supply Chain
- 5.5 Create a Visual Representation of an Optimized Supply Chain
- 5.6 Present and Evaluate the Optimized Supply Chain Process

27 Marketing & Sales

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — Advanced Marketing Strategy and 4Ps/7Ps — 6 classes

- 1.1 Analyze the Foundations of Advanced Marketing Strategy
- 1.2 Explore the 4Ps of Marketing: Product, Price, Place, Promotion
- 1.3 Examine the Expanded 7Ps Framework in Marketing
- 1.4 Evaluate Market Segmentation and Targeting Strategies
- 1.5 Design a Marketing Mix for a New Product Launch
- 1.6 Implement KPI Measurement for Marketing Strategy Success

• 2 Unit 2 — Digital Marketing — SEO, SEM, Social Media and Analytics — 6 classes

- 2.1 Understand the Basics of SEO and Its Importance in Digital Marketing
- 2.2 Explore Key On-Page SEO Techniques for Enhanced Visibility
- 2.3 Analyze Off-Page SEO Strategies and Their Impact on Rankings
- 2.4 Discover Effective SEM Campaigns: Google Ads Basics
- 2.5 Leverage Social Media Platforms for Targeted Marketing
- 2.6 Utilize Analytics Tools to Measure and Optimize Digital Marketing Efforts

• 3 Unit 3 — Brand Management — Identity, Equity and Repositioning — 6 classes

- 3.1 Explore Brand Identity: Understanding Key Components
- 3.2 Assessing Brand Equity: Measuring Value and Perception
- 3.3 Analyze Successful Brand Repositioning Strategies
- 3.4 Develop a Brand Identity Profile for a Product
- 3.5 Create a Brand Equity Measurement Framework
- 3.6 Design a Brand Repositioning Plan for a Real-World Brand

• 4 Unit 4 — Sales Analytics, CRM and Performance Metrics — 6 classes

- 4.1 Understand Sales Analytics Fundamentals
- 4.2 Explore Key Performance Metrics in Sales
- 4.3 Analyze Data for Effective Customer Relationship Management (CRM)
- 4.4 Implement CRM Tools for Sales Optimization
- 4.5 Evaluate Sales Performance Using Analytics
- 4.6 Apply Sales Analytics to Real-World Scenarios

• 5 Unit 5 — Marketing Campaign Project — Plan and Execute — 6 classes

- 5.1 Define Your Marketing Campaign Objectives
- 5.2 Conduct Market Research to Identify Target Audience
- 5.3 Develop Creative Concepts for Your Marketing Campaign
- 5.4 Choose the Right Marketing Channels for Execution
- 5.5 Create a Timeline and Budget for Your Campaign
- 5.6 Evaluate Campaign Performance and Gather Feedback

28 Mass Media Studies

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Media Theory — Mass Communication Models** — 6 classes
  - 1.1 Identify Key Concepts in Mass Communication Models
  - 1.2 Explore Linear Communication Models and Their Applications
  - 1.3 Analyze Interactive Communication Models in Modern Media
  - 1.4 Evaluate the Role of Audience in Mass Communication Models
  - 1.5 Compare and Contrast Traditional and Digital Media Models
  - 1.6 Create a Multimedia Presentation of a Selected Mass Communication Model
- **2 Unit 2 — Print Journalism — Reporting, Writing and Editing** — 6 classes
  - 2.1 Identify the Key Elements of News Reporting
  - 2.2 Analyze Various Types of News Articles
  - 2.3 Develop Strong Interviewing Techniques for Journalists
  - 2.4 Practice Writing Clear and Concise News Leads
  - 2.5 Explore the Editing Process: From First Draft to Final Copy
  - 2.6 Evaluate Ethical Considerations in Print Journalism
- **3 Unit 3 — Broadcast Media — Radio, TV Production Basics** — 6 classes
  - 3.1 Explore the History and Evolution of Radio Broadcast
  - 3.2 Understand the Components of a Radio Studio
  - 3.3 Identify Key Roles in Radio Production
  - 3.4 Analyze the Fundamentals of Television Production
  - 3.5 Create a Basic Script for a Radio or TV Segment
  - 3.6 Present and Evaluate a Short Radio or TV Production
- **4 Unit 4 — Digital Media — Blogging, Podcasting, Social Journalism** — 6 classes
  - 4.1 Explore the Evolution of Digital Media: From Blogs to Podcasts
  - 4.2 Identify Key Features and Functions of Blogging Platforms
  - 4.3 Develop Engaging Content: Writing for Blogs and Podcasts
  - 4.4 Investigate the Role of Social Journalism in Modern Reporting
  - 4.5 Create a Podcast Episode: Planning and Recording Techniques
  - 4.6 Analyze the Impact of Social Media on Digital Journalism
- **5 Unit 5 — Media Project — Produce a News Package or Feature** — 6 classes
  - 5.1 Identify Key Components of a News Package
  - 5.2 Research Current News Stories for Relevance
  - 5.3 Develop a Story Outline and Script Structure
  - 5.4 Select and Utilize Appropriate Media Tools
  - 5.5 Create a Visual and Audio Storyboard
  - 5.6 Present and Critique Your News Package

29 Multimedia & Web Technology

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced HTML5 and CSS3 — Responsive Web Design** — 6 classes
  - 1.1 Understand the Fundamentals of Responsive Web Design
  - 1.2 Explore Flexible Layouts Using CSS Grid
  - 1.3 Implement Media Queries for Dynamic Content Adaptation
  - 1.4 Optimize Images for Responsive Design
  - 1.5 Create a Responsive Navigation Menu with HTML5 and CSS3
  - 1.6 Test and Troubleshoot Responsive Design Across Devices
- **2 Unit 2 — JavaScript Fundamentals — DOM, Events, AJAX** — 6 classes
  - 2.1 Explore the Document Object Model (DOM) Structure
  - 2.2 Manipulate DOM Elements with JavaScript
  - 2.3 Implement Event Handling in JavaScript
  - 2.4 Create Interactive Web Pages Using Events
  - 2.5 Understand AJAX and Its Role in Web Development
  - 2.6 Build a Simple AJAX Application to Fetch Data
- **3 Unit 3 — Web Design Tools — Figma, Adobe XD, Wireframing** — 6 classes
  - 3.1 Explore Figma Interface and Tools
  - 3.2 Create a Basic Layout in Figma
  - 3.3 Introduction to Adobe XD Features
  - 3.4 Design a Simple User Interface in Adobe XD
  - 3.5 Understanding Wireframing Principles
  - 3.6 Develop a Wireframe for a Website Prototype
- **4 Unit 4 — Multimedia Content — Infographics, Video, Animation** — 6 classes
  - 4.1 Explore the Elements of Effective Infographics
  - 4.2 Design Compelling Infographics using Data Visualization Tools
  - 4.3 Understand the Principles of Video Production
  - 4.4 Create Engaging Video Content with Basic Editing Techniques
  - 4.5 Discover Animation Techniques for Multimedia Presentations
  - 4.6 Integrate Infographics, Video, and Animation into a Cohesive Project
- **5 Unit 5 — Web Project — Design and Deploy a Multi-Page Site** — 6 classes
  - 5.1 Analyze the Purpose and Goals of a Multi-Page Website
  - 5.2 Create a Sitemap to Organize Site Structure
  - 5.3 Design Wireframes for Key Web Pages
  - 5.4 Develop Page Layouts Using HTML and CSS
  - 5.5 Integrate Multimedia Elements for Enhanced User Experience
  - 5.6 Deploy the Multi-Page Site and Test Functionality

30 Physical Activity Trainer

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — Exercise Physiology — Cardio, Strength, Flexibility — 6 classes

- 1.1 Explore the Basics of Cardiovascular Exercise
- 1.2 Understand the Anatomy of Strength Training
- 1.3 Investigate the Benefits of Flexibility in Fitness
- 1.4 Apply Cardiovascular Principles in Workout Design
- 1.5 Create a Strength Training Plan for Beginners
- 1.6 Develop a Flexibility Routine for Improved Performance

• 2 Unit 2 — Sports Nutrition — Macros, Hydration and Supplements — 6 classes

- 2.1 Identify Key Macronutrients and Their Functions in Athletic Performance
- 2.2 Analyze Daily Macronutrient Needs for Different Types of Athletes
- 2.3 Explore Hydration Strategies for Optimal Performance and Recovery
- 2.4 Evaluate the Impact of Dehydration on Physical Performance
- 2.5 Investigate Common Sports Supplements and Their Benefits and Risks
- 2.6 Create a Personalized Nutrition and Hydration Plan for Athletes

• 3 Unit 3 — Coaching Methodology — Planning and Periodisation — 6 classes

- 3.1 Define Coaching Methodology and Its Importance in Physical Training
- 3.2 Explore Key Concepts of Planning in Coaching Methodology
- 3.3 Identify Different Models of Periodisation in Training
- 3.4 Develop a Weekly Training Plan Incorporating Periodisation Principles
- 3.5 Evaluate the Impact of Various Coaching Methodologies on Athlete Performance
- 3.6 Apply Coaching Methodologies to Create a Tailored Training Session

• 4 Unit 4 — Fitness Assessment — VO2 Max, BMI, Flexibility Tests — 6 classes

- 4.1 Understand VO2 Max: Definition and Importance
- 4.2 Measure VO2 Max: Techniques and Equipment
- 4.3 Calculate and Interpret BMI: Understanding Body Composition
- 4.4 Explore Flexibility: Benefits and Key Exercises
- 4.5 Administer Flexibility Tests: Methods and Assessment
- 4.6 Create Personalized Fitness Assessment Plans

• 5 Unit 5 — Personal Training Portfolio and Assessment Plan — 6 classes

- 5.1 Define Personal Training Goals for Clients
- 5.2 Create Nutritional Guidelines for Personal Training
- 5.3 Design a Comprehensive Fitness Assessment Plan
- 5.4 Develop Tailored Personal Training Programmes
- 5.5 Implement Strategies for Client Motivation and Retention
- 5.6 Evaluate and Adjust Personal Training Plans Based on Feedback

31 Python & Data Visualization

5 chapters · 30 classes **100 marks**

• 1 Unit 1 — Python Programming — OOP, Modules and Libraries — 6 classes

- 1.1 Understand Object-Oriented Programming Concepts in Python
- 1.2 Create Classes and Objects in Python
- 1.3 Implement Inheritance and Polymorphism in Python
- 1.4 Explore Python Modules: Importing and Utilizing Libraries
- 1.5 Develop a Simple Project Using Custom Modules
- 1.6 Apply Data Visualization Techniques with Python Libraries

• 2 Unit 2 — Data Structures — Lists, Dicts, DataFrames (pandas) — 6 classes

- 2.1 Understand the Basics of Lists in Python
- 2.2 Manipulate Lists: Adding, Removing, and Sorting Elements
- 2.3 Introduction to Dictionaries: Key-Value Pairs in Python
- 2.4 Explore and Modify Dictionaries: Accessing and Updating Values
- 2.5 Introduction to DataFrames using pandas Library
- 2.6 Data Analysis with DataFrames: Filtering and Visualizing Data

• 3 Unit 3 — Data Visualisation — Matplotlib, Seaborn, Plotly — 6 classes

- 3.1 Understand the Basics of Data Visualization with Matplotlib
- 3.2 Create Your First Line Plot Using Matplotlib
- 3.3 Explore Data Distribution with Seaborn's Histogram and Box Plot
- 3.4 Enhance Visual Appeal with Seaborn Themes and Color Palettes
- 3.5 Build Interactive Visualizations Using Plotly
- 3.6 Apply Data Visualization Techniques to Real-World Data Sets

• 4 Unit 4 — Statistical Analysis and Hypothesis Testing in Python — 6 classes

- 4.1 Understand Key Statistical Concepts in Python
- 4.2 Explore Descriptive Statistics Using Python Libraries
- 4.3 Visualize Data Distributions with Histograms and Boxplots
- 4.4 Formulate Hypotheses for Statistical Testing
- 4.5 Conduct Hypothesis Tests Using SciPy in Python
- 4.6 Interpret and Report Statistical Findings Effectively

• 5 Unit 5 — Data Visualisation Project — Dashboard and Storytelling — 6 classes

- 5.1 Understand the Principles of Effective Data Visualization
- 5.2 Explore Python Libraries for Data Visualization
- 5.3 Design an Interactive Dashboard Layout
- 5.4 Implement Data Source Connections in Python
- 5.5 Craft a Narrative Using Visual Storytelling Techniques
- 5.6 Present and Evaluate Your Data Visualization Project

32 Retail

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Retail Strategy — Formats, Positioning and Value Proposition** — 6 classes
  - 1.1 Define Retail Formats and Their Importance
  - 1.2 Analyze Different Retail Positioning Strategies
  - 1.3 Explore the Concept of Value Proposition in Retail
  - 1.4 Evaluate the Impact of Retail Formats on Customer Experience
  - 1.5 Develop a Retail Positioning Statement for a Sample Brand
  - 1.6 Create a Value Proposition Canvas for a Chosen Retail Format
- **2 Unit 2 — Merchandise Planning and Category Management** — 6 classes
  - 2.1 Define Merchandise Planning and Its Importance in Retail
  - 2.2 Identify Key Components of Category Management
  - 2.3 Analyze Merchandise Planning Techniques and Strategies
  - 2.4 Explore Consumer Behavior and Its Impact on Category Management
  - 2.5 Develop a Merchandise Plan for a Retail Store Scenario
  - 2.6 Evaluate the Success of Category Management Initiatives
- **3 Unit 3 — Supply Chain in Retail — Vendors, DC and Last Mile** — 6 classes
  - 3.1 Identify Key Components of the Retail Supply Chain
  - 3.2 Analyze the Role of Vendors in Supply Chain Management
  - 3.3 Explore Distribution Centres: Functions and Importance
  - 3.4 Understand Last Mile Delivery Challenges and Solutions
  - 3.5 Evaluate Supply Chain Strategies for Retail Efficiency
  - 3.6 Implement a Basic Supply Chain Model for a Retail Scenario
- **4 Unit 4 — E-commerce and Omnichannel Retail Strategies** — 6 classes
  - 4.1 Define E-commerce and Its Importance in Retail
  - 4.2 Explore Key Components of Omnichannel Retail Strategies
  - 4.3 Analyze Customer Journey in E-commerce Experiences
  - 4.4 Examine Technology's Role in Enhancing Omnichannel Retail
  - 4.5 Implement Best Practices for E-commerce Website Design
  - 4.6 Develop a Strategic Plan for Integrating Omnichannel Retail
- **5 Unit 5 — Retail Business Plan and Analytics Project** — 6 classes
  - 5.1 Analyze Market Trends for Your Retail Business Plan
  - 5.2 Identify Target Customer Segments for Retail Success
  - 5.3 Develop Financial Projections for Retail Operations
  - 5.4 Create a Marketing Strategy to Attract Customers
  - 5.5 Outline Key Performance Indicators for Retail Analytics
  - 5.6 Present and Evaluate Your Retail Business Plan Effectively

33 Rural & Agricultural Innovation

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Agripreneurship — Starting a Farm-Based Enterprise** — 6 classes
  - 1.1 Identify Market Opportunities for Farm-Based Enterprises
  - 1.2 Assess Resources and Inputs Needed for Starting a Farm
  - 1.3 Develop a Business Plan for a Farm-Based Startup
  - 1.4 Explore Sustainable Agricultural Practices in Agripreneurship
  - 1.5 Evaluate Financial Management Strategies for Farm Operations
  - 1.6 Implement Marketing Techniques for Farm Products
- **2 Unit 2 — Rural Markets — Value Chains, FPOs and Cooperatives** — 6 classes
  - 2.1 Analyze the Importance of Rural Markets in Agricultural Innovation
  - 2.2 Identify Key Components of Value Chains in Agriculture
  - 2.3 Explore the Role of Farmer Producer Organizations (FPOs) in Rural Development
  - 2.4 Evaluate the Benefits of Cooperatives for Smallholder Farmers
  - 2.5 Assess the Challenges Faced by FPOs and Cooperatives in Rural Markets
  - 2.6 Design a Value Chain Strategy for a Local Agricultural Product
- **3 Unit 3 — Organic Farming — Certification, Methods and Marketing** — 6 classes
  - 3.1 Explore the Principles of Organic Farming
  - 3.2 Identify Certification Standards for Organic Products
  - 3.3 Investigate Sustainable Organic Farming Methods
  - 3.4 Demonstrate Organic Pest Management Techniques
  - 3.5 Analyze the Market Trends for Organic Products
  - 3.6 Develop a Marketing Plan for Organic Produce
- **4 Unit 4 — Government Agricultural Schemes — PM-KISAN, eNAM, MNREGA** — 6 classes
  - 4.1 Explore the Objectives of PM-KISAN Scheme
  - 4.2 Analyze the Benefits of the eNAM Platform
  - 4.3 Investigate MNREGA's Role in Rural Employment
  - 4.4 Compare the Impact of PM-KISAN and MNREGA on Farmers
  - 4.5 Demonstrate How to Register on eNAM for Farmers
  - 4.6 Propose Improvements for Government Agricultural Schemes
- **5 Unit 5 — Rural Innovation Project — Idea to Prototype** — 6 classes
  - 5.1 Identify and Explore Rural Challenges for Innovation
  - 5.2 Brainstorm Innovative Solutions for Agricultural Issues
  - 5.3 Research and Validate Ideas with Stakeholder Input
  - 5.4 Develop a Clear Prototype Plan and Design
  - 5.5 Create a Functional Prototype for Agricultural Innovation
  - 5.6 Present and Evaluate Your Prototype in Real-World Context

34 Stenography & Computer Applications

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Shorthand — Pitman/Gregg Speed Practice** — 6 classes
  - 1.1 Mastering Basic Pitman Strokes
  - 1.2 Advanced Gregg Symbols Recognition
  - 1.3 Speed Drills for Pitman Shorthand
  - 1.4 Gregg Shorthand Practice Sentences
  - 1.5 Real-time Dictation Exercises
  - 1.6 Assessing and Improving Shorthand Speed
- **2 Unit 2 — Advanced Typing — Speed, Accuracy and Special Characters** — 6 classes
  - 2.1 Enhance Typing Speed through Timed Drills
  - 2.2 Master Accuracy Techniques for Typing
  - 2.3 Identify and Use Special Characters Effectively
  - 2.4 Implement Touch Typing Strategies for Efficiency
  - 2.5 Analyze Common Typing Errors and How to Avoid Them
  - 2.6 Evaluate Personal Progress in Speed and Accuracy
- **3 Unit 3 — Office Automation — MS Office Advanced and Google Workspace** — 6 classes
  - 3.1 Explore Advanced Features of MS Word for Document Formatting
  - 3.2 Utilize Excel for Data Analysis and Visualization Techniques
  - 3.3 Create Professional Presentations Using Advanced PowerPoint Tools
  - 3.4 Implement Google Docs Collaboration Tools for Team Projects
  - 3.5 Organize and Manage Tasks with Google Workspace Applications
  - 3.6 Integrate MS Office and Google Workspace for Enhanced Office Productivity
- **4 Unit 4 — Secretarial Practices — Minutes, Agenda, Office Management** — 6 classes
  - 4.1 Identify Key Elements in Meeting Agendas
  - 4.2 Draft Effective Meeting Agendas
  - 4.3 Understand the Importance of Meeting Minutes
  - 4.4 Record Accurate Meeting Minutes
  - 4.5 Review and Revise Meeting Minutes
  - 4.6 Implement Efficient Office Management Techniques
- **5 Unit 5 — Stenography and Office Administration Project** — 6 classes
  - 5.1 Overview of Stenography Techniques and Tools
  - 5.2 Mastering Shorthand Symbols and Their Applications
  - 5.3 Practicing Stenographic Notation Through Exercises
  - 5.4 Integrating Stenography with Office Administration Tasks
  - 5.5 Developing Effective Document Formatting Skills
  - 5.6 Creating and Presenting a Stenography Project

35 Tourism & Hospitality

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Tourism Management — Planning, Operations and Policy** — 6 classes
  - 1.1 Define Key Concepts in Tourism Management
  - 1.2 Analyze the Components of a Successful Tourism Plan
  - 1.3 Explore the Role of Stakeholders in Tourism Operations
  - 1.4 Assess Local and Global Trends Impacting Tourism Policy
  - 1.5 Develop Strategies for Effective Tourism Marketing
  - 1.6 Create an Action Plan for Sustainable Tourism Practices
- **2 Unit 2 — Hospitality Operations — Front Office, F&B, Housekeeping** — 6 classes
  - 2.1 Understand Front Office Operations and Guest Services
  - 2.2 Explore Food and Beverage Service Techniques
  - 2.3 Identify Key Roles in Housekeeping Management
  - 2.4 Analyze Customer Service Standards in Hospitality
  - 2.5 Evaluate Health and Safety Regulations in Hotels
  - 2.6 Apply Front Office Software for Booking Management
- **3 Unit 3 — Event Management — Conferences, MICE and Weddings** — 6 classes
  - 3.1 Identify Key Components of Conference Planning
  - 3.2 Explore MICE Industry Trends and Opportunities
  - 3.3 Analyze the Role of Technology in Event Management
  - 3.4 Develop a Budget for a Successful Event
  - 3.5 Create a Timeline for Wedding Planning
  - 3.6 Evaluate Case Studies of Successful MICE Events
- **4 Unit 4 — Tourism Marketing and Digital Promotion** — 6 classes
  - 4.1 Analyze Target Audiences for Tourism Marketing
  - 4.2 Explore Digital Marketing Channels in Tourism
  - 4.3 Create Compelling Marketing Messages for Tourist Attractions
  - 4.4 Implement Social Media Strategies for Destination Promotion
  - 4.5 Assess the Impact of User-Generated Content on Tourism
  - 4.6 Develop a Digital Marketing Campaign for a Local Tourism Initiative
- **5 Unit 5 — Tourism and Hospitality Project — Event Plan** — 6 classes
  - 5.1 Define Event Objectives and Target Audience
  - 5.2 Research and Select Event Venue Criteria
  - 5.3 Develop a Detailed Event Budget and Funding Sources
  - 5.4 Create a Comprehensive Event Schedule and Timeline
  - 5.5 Design and Implement Marketing Strategies for the Event
  - 5.6 Evaluate Event Success and Gather Feedback for Future Improvements

36 Travel & Tourism

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Travel Agency Operations — IATA, GDS and Ticketing** — 6 classes
  - 1.1 Understand the Role of Travel Agencies in Modern Tourism
  - 1.2 Explore the IATA Structure and Its Significance
  - 1.3 Learn About Global Distribution Systems (GDS) in Travel
  - 1.4 Navigate Different GDS Platforms Used by Travel Agencies
  - 1.5 Master Ticketing Processes and Regulations in Travel
  - 1.6 Apply GDS Tools to Create a Sample Travel Itinerary
- **2 Unit 2 — Tour Packaging — FIT, GIT and Specialty Tours** — 6 classes
  - 2.1 Define and Differentiate Between FIT and GIT Tours
  - 2.2 Explore the Key Components of Tour Packages
  - 2.3 Identify the Benefits of Specialty Tours for Diverse Travelers
  - 2.4 Analyze Customer Preferences in Tour Packaging
  - 2.5 Develop a Sample Itinerary for a Specialty Tour
  - 2.6 Present and Market a Customized Tour Package Effectively
- **3 Unit 3 — Destination Management — Geography and Visa Procedures** — 6 classes
  - 3.1 Identify Key Geographic Features of Popular Travel Destinations
  - 3.2 Explore Cultural and Historical Significance of Selected Destinations
  - 3.3 Examine the Role of Climate in Destination Selection
  - 3.4 Understand Visa Requirements for International Travel
  - 3.5 Analyze Case Studies of Visa Application Processes
  - 3.6 Create a Destination Management Plan Incorporating Geography and Visa Considerations
- **4 Unit 4 — Customer Relationship Management in Travel** — 6 classes
  - 4.1 Understand the Importance of Customer Relationship Management in Travel
  - 4.2 Identify Key Components of Effective Customer Relationship Strategies
  - 4.3 Explore Tools and Technologies for Managing Customer Relationships
  - 4.4 Analyze Customer Feedback and Its Role in Service Improvement
  - 4.5 Develop Customer Segmentation Techniques for Targeted Marketing
  - 4.6 Create an Action Plan for Enhancing Customer Relationships in Travel
- **5 Unit 5 — Travel Agency Simulation — Book, Package and Sell** — 6 classes
  - 5.1 Identify Tourist Demographics and Preferences
  - 5.2 Research and Select Travel Destinations
  - 5.3 Create Attractive Travel Packages
  - 5.4 Develop Essential Booking Procedures
  - 5.5 Implement Effective Sales Techniques
  - 5.6 Simulate Real-World Travel Agency Operations

37 Web Application

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Frontend Development — HTML, CSS, JavaScript (Advanced)** — 6 classes
  - 1.1 Structure a Web Page with Semantic HTML Elements
  - 1.2 Style Web Pages Using Advanced CSS Techniques
  - 1.3 Implement Responsive Design with CSS Grid and Flexbox
  - 1.4 Enhance User Experience with CSS Animations and Transitions
  - 1.5 Add Interactivity Using JavaScript Events and Functions
  - 1.6 Create a Dynamic Web Application Using APIs and JavaScript
- **2 Unit 2 — Backend Basics — PHP/Python and MySQL Integration** — 6 classes
  - 2.1 Understand PHP and Python: Key Differences and Use Cases
  - 2.2 Setting Up the Development Environment for PHP and MySQL
  - 2.3 Exploring Python with MySQL: Introduction to Libraries and Drivers
  - 2.4 Connecting PHP to MySQL: Writing Your First Database Query
  - 2.5 Building a Simple Web Application: CRUD Operations with Python and MySQL
  - 2.6 Debugging and Troubleshooting: Common Issues in PHP/Python and MySQL Integration
- **3 Unit 3 — React or Vue Introduction — Components and State** — 6 classes
  - 3.1 Explore the Basics of React and Vue Frameworks
  - 3.2 Identify the Structure and Purpose of Components
  - 3.3 Create Your First Component in React
  - 3.4 Develop a Simple Vue Component
  - 3.5 Understand State Management in React
  - 3.6 Implement State Features in Vue Applications
- **4 Unit 4 — Database Design — ER Diagrams, Normalisation, Queries** — 6 classes
  - 4.1 Identify Components of ER Diagrams
  - 4.2 Construct Basic ER Diagrams from Requirements
  - 4.3 Apply Normalisation Principles to Database Designs
  - 4.4 Transform ER Diagrams into Relational Schemas
  - 4.5 Formulate SQL Queries for Data Retrieval
  - 4.6 Evaluate Query Performance and Optimisation Strategies
- **5 Unit 5 — Full-Stack Web Application Project — Build and Deploy** — 6 classes
  - 5.1 Identify Key Components of a Full-Stack Application
  - 5.2 Design User Interface Wireframes for Web Applications
  - 5.3 Develop Back-End Functionality Using Node.js
  - 5.4 Implement Front-End Features with HTML, CSS, and JavaScript
  - 5.5 Connect Front-End and Back-End with RESTful APIs
  - 5.6 Deploy a Full-Stack Application to Cloud Platforms

38 Yoga

5 chapters · 30 classes **100 marks**

- **1 Unit 1 — Advanced Yoga Asanas — Backbends, Inversions, Twists** — 6 classes
  - 1.1 Explore the Basics of Backbends
  - 1.2 Mastering Key Backbend Asanas
  - 1.3 Introduction to Inversions: Finding Your Balance
  - 1.4 Practicing Inversion Techniques Safely
  - 1.5 Understanding and Executing Twists
  - 1.6 Combining Asanas: Creating a Backbend and Inversion Flow
- **2 Unit 2 — Therapeutic Yoga — Managing Stress, Diabetes, Back Pain** — 6 classes
  - 2.1 Understand the Connection Between Stress and Physical Health
  - 2.2 Explore Breathing Techniques for Stress Management
  - 2.3 Analyze Yoga Poses that Alleviate Back Pain
  - 2.4 Learn Dietary Practices to Manage Diabetes
  - 2.5 Develop a Personalized Therapeutic Yoga Routine
  - 2.6 Evaluate the Impact of Therapeutic Yoga on Well-being
- **3 Unit 3 — Pranayama Mastery — Kapalbhati, Anulom Vilom, Bhramari** — 6 classes
  - 3.1 Understand the Basics of Pranayama and Its Benefits
  - 3.2 Learn the Steps and Techniques of Kapalbhati
  - 3.3 Practice Kapalbhati: Rhythm and Breath Control
  - 3.4 Explore Anulom Vilom: Foundation and Methodology
  - 3.5 Engage in Guided Anulom Vilom Practice for Balance
  - 3.6 Integrate Bhramari for Stress Relief and Relaxation
- **4 Unit 4 — Yoga Philosophy — Patanjali, Hatha and Nidra** — 6 classes
  - 4.1 Explore the Philosophy of Patanjali's Yoga Sutras
  - 4.2 Understand the Eight Limbs of Yoga
  - 4.3 Examine Hatha Yoga: History and Physical Practices
  - 4.4 Analyze the Benefits of Hatha Yoga for Mind and Body
  - 4.5 Discover the Principles and Techniques of Yoga Nidra
  - 4.6 Apply Yoga Philosophy to Daily Life and Wellness Practices
- **5 Unit 5 — Yoga Instructor Basics — Class Structuring and Cueing** — 6 classes
  - 5.1 Define the Role of a Yoga Instructor in Class Structuring
  - 5.2 Identify Essential Components of a Yoga Class Plan
  - 5.3 Develop Effective Warm-Up Sequences for Yoga Classes
  - 5.4 Practice Clear and Effective Cueing Techniques
  - 5.5 Create a Balanced Yoga Class Flow with Asanas
  - 5.6 Evaluate and Adapt Class Structures Based on Student Needs