

Appendix-B

Scheme of Teaching and Examinations for Semester & Credits Pattern of Graduate Diploma in Food Business Planning Semester-I

TABLE-I

Sr. No	Subject	Subject Code	TeachingScheme			ExaminationScheme					
						Theory/Practical			Internal		Total Marks
			Theory Credits	Practical Credits	Total Credits	Dur.	Max Mar.	Min. Mar.	Max. Mar.	Min. Mar.	
1.	Principles of Food Science	DIFBP- 1	04		04	14 Hr	80	40	20	08	100
2.	Basics of Accounting	DIFBP -2	04		04	14 Hr	80	40	20	08	100
3.	Business Economics	DIFBP- 3	04		04	14 Hr	80	40	20	08	100
4.	Foundations of Food Business Management	DIFBP -4	04		04	14Hr	80	40	20	08	100
5	Programming Fundamentals	DIFBP-5	04		04	14 Hr	80	40	20	08	100
6	Internship			04	04	14 Hr	80	40	20	08	100
	Total		20	04	24	84	480	240	120	48	600

Appendix-B

Scheme of Teaching and Examinations for Semester & Credits Pattern of Graduate Diploma in Food Business Planning Semester-II

TABLE-II

Sr. No	Subject	Subject Code	TeachingScheme			ExaminationScheme					
						Theory/Practical			Internal		Total Marks
			Theory Credits	PracticalCredits	Total Credits	Dur.	Max Mar.	Min. Mar.	Max. Mar.	Min. Mar.	
1.	Fundamentals of Project Planning and Management	DIBA 11	04		04	14 Hr	80	40	20	08	100
2.	Material Management	DIBA 22	04		04	14 Hr	80	40	20	08	100
3.	Supply Chain Management in Food Industry	DIBA 33	04		04	14 Hr	80	40	20	08	100
4.	Banking Practices	DIBA 44	04		04	14Hr	80	40	20	08	100
5	Quality Assurance and Control	DIBA 55	04		04	14 Hr	80	40	20	08	100
6	Internship	DYW66		04		14 Hr	80	40	20	08	100
	Total		20	04	24	84	480	240	120	48	600

Syllabus Of Food Business Planning

Subject 1:

Principles of food Science

Unit 1:

Introduction To Food science, Different kinds of Food Industries, Components of Food industries. Scope of food processing and technology, Food and agriculture: The politics of food from a global perspective.

Unit 2:

Microbiology, Microbial Control: sterilization and disinfection techniques. Physical and chemical methods of sterilization, The chemical nature of food, The physical nature of food

Unit 3

Nutrition, Food and humans:

Organic & In-organic Nutrient: Difference & Importance Nutritional and sensory considerations, Role of lipids Nutrition, Role of water Nutrition

Unit 4

Method Benefits and Drawback of food Business

Introduction to Food preservation techniques. Define: Pasteurization, Sterilization, Ultra High temperature, Blanching, etc. Low temperature preservation techniques: Cooling, Evaporation, refrigeration and freezing.

Subject 2

Basics of Accounting

Unit 1:

Introduction to Accounting Definition and Role of Accounting, Accounting Principles and Concepts, Accounting Equation, Types of Business Entities, Accounting Cycle, Double-Entry Accounting, Chart of Accounts, Ethical Issues in Accounting

Unit 2:

Recording Transactions Debits and Credits, Journal Entries, General Ledger, Trial Balance, Adjusting Entries, Accrual Accounting, Prepaid and Unearned Revenue, Closing Entries

Unit 3:

Financial Statements Income Statement, Statement of Retained Earnings, Balance Sheet, Statement of Cash Flows, Financial Statement Analysis, Accounting Ratios, Cash vs. Accrual Accounting, Interpreting Financial Statements

Unit 4:

Accounting for Assets and Liabilities Accounts Receivable and Bad Debt, Inventory Valuation, Property, Plant, and Equipment, Intangible Assets, Current and Non-current Liabilities, Bonds and Long-Term Debt, Leases and Contingent Liabilities, Accounting for Income Taxes

Reference Books: -

1. Gupta, M. C. (2020). Fundamentals of Financial Accounting. New Delhi Publishers.
2. Agarwal, S. K. (2018). Principles and Practices of Accounting. Mumbai Books.
3. Reddy, G. V. (2017). Managerial Accounting: Concepts and Applications. Bangalore Publications.
4. Jain, P., & Mehta, R. (2019). Advanced Financial Accounting and Reporting. Chennai Press.
5. Sharma, A., & Kumar, S. (2016). Cost Accounting: Principles and Practice. Delhi Prints.
6. Kapoor, N., & Verma, R. (2021). Accounting for Business Decisions. Hyderabad Publications

Subject 3 :

Business Economics

Unit 1:

Introduction to Economics Definition and Scope of Economics, Microeconomics vs. Macroeconomics, Economic Systems, Key Economic Concepts, Supply and Demand

Unit 2:

Microeconomic Analysis Consumer Behavior and Utility, Elasticity of Demand and Supply, Production and Cost Analysis, Market Structures, Pricing and Output Decisions

Unit 3:

Macroeconomic Analysis National Income and GDP, Unemployment and Inflation, Aggregate Demand and Supply, Fiscal Policy and Government Spending, Monetary Policy and the Central Bank.

Unit 4:

International Economics Trade and Comparative Advantage, Exchange Rates and Currency Markets, Balance of Payments, Globalization and Trade Policy, Economic Integration

Reference Books:

1. Ahuja, H. L. (2021). Principles of Microeconomics. XYZ Publications.
2. Dutt, R., & Gupta, S. (2019). Macroeconomic Theory and Policy. ABC Publishers.
3. Kapoor, G., & Nanda, A. (2018). International Economics. LMN Books.
4. Verma, S. (2020). Managerial Economics: Concepts and Applications. PQR Publications.
5. Kumar, A., & Singh, B. (2017). Indian Economic Development: Issues and Policies. RST Printers.
6. Jain, S., & Agarwal, M. (2016). Economics of Environmental Conservation and Natural Resource Management. STU Press

Subject 4:

Foundation of Food Business Management

Unit 1

What is Food Business Management?

Scope in Food Business Industry with spot light on Food Processing

Career Opportunities in Food Processing

Overview of the food Industry its Stakeholders

Unit 2

Food Safety And hygiene, Basic Step in Food Safety And its Importance, Concept of food safety and standards, food safety strategies. Preventive food safety systems - monitoring of safety, wholesomeness and nutritional quality of food. Prevention and control of microbiological and chemical hazards.

Unit 3

Components of food Control system, Important Principles in Food Control, Entrepreneurship In food Business, Basic planning, financing and risk Management in food Business

Unit 4

Scope and Significance Of food Business, Locational factor Influencing the food Business Study of Supply Chain Management in food Planning, Constrains and Challenges in food Processing Industries, Various Market trends, Consumer Behaviour in Food Businesses

Subject 5:

Food Business Planning Management

Unit 1.

Food Product Development and Innovation, Recipe development, sensory evaluation, and product testing, Packaging and labelling requirements.

Unit 2. Food Packaging

Definition and functions of Food Packaging: Containment, Protection, Convenience, Communication, Requirements for effective food packaging, Packaging Innovation, Types of containers: primary, secondary and tertiary.

Unit 3: Risk Management and Contingency Planning:

Supply Chain Risks and Uncertainties, Risk Assessment and Risk Mitigation, Developing Contingency Plans, Supply Chain Disruption Recovery Strategies, Case Studies on Supply Chain Resilience

Unit 4.

Human Resource Management, Financial Management & Financing for Food Industries

Recruitment, training, and performance evaluation in food , Marketing and Sales in the Food Industry ,Marketing strategies for food products, Sales techniques and distribution channels

Subject 6

Internship

Practical application of concepts learned in previous semesters through an internship in a food-related business or a project related to food business management

Semester 2

Subject 1

Fundamentals Of Planning and Forecasting in Food Business

Unit 1: Introduction to Planning and Forecasting:

Basics of Forecasting and Planning, Forecasting Methods and Techniques, Data Collection and Analysis, Forecasting Accuracy and Error Measurement, Forecasting Tools and Software

Unit 2: Demand Planning and Forecasting:

Demand Forecasting vs. Sales Forecasting, Consumer Behaviour and Demand Shaping, Sales and Operations Planning (S&OP), Collaborative Planning, Forecasting, and Replenishment (CPFR) Case Studies in, Demand Forecasting

Unit 3: Inventory Planning and Management:

Role of Inventory in the Supply Chain, Inventory Types and Costs, ABC Analysis and Inventory Classification, Economic Order Quantity (EOQ) and Reorder Point, Inventory Control Models and Safety Stock

Unit 4: Supply Chain Network Design and Optimization:

Network Design in Supply Chain Planning, Distribution Centre Location Decisions, Transportation Network Design, Network Optimization Techniques, Sustainability Considerations in Network Design

Subject 2

Material Management

Unit 1

Introduction Materials Management - Evolution, Importance, Scope and objectives , Interface with other functions, evolution to 3 pl Trade off Customer service & cost.

Materials Handling - Principles of Materials Handling systems - Materials handling equipment's - Safety issue

Unit 2

Inventory - Need of inventory - Cost associated with inventory - Types of inventory , basic EOQ model - EOQ with discounts- ABC analysis classifications of materials, VED, HML, FSN, GOLF, SOS, (Numerical expected on basis EOQ , EOQ with discounts) - Inventory control & cost reduction Techniques, inventory turnover ratio codification concept and benefits

Unit 3

Materials Requirement Planning Advantage over conventional Planning Input and output of MRP system -Forecasting – overview of qualitative and quantitative methods of forecasting bill of materials explosion- Materials flow in MRP, Concepts of ERP

Materials – Preservation, packing and packaging

Unit 4

Purchasing Management: -Responsibility of Purchase Department, Purchase Cycle , Negotiation & Bargaining, Vendor Relation & Development, Purchasing methods, Global Sourcing Store – Function, Importance, Organization of stores Layout, stores procedure and documentation

Subject 3

Supply Chain Management in Food Industry

Unit 1 :

Fundamentals of Supply Chain Management:

Understanding Supply Chain Concepts, Role and Importance of Supply Chain Management, Historical Evolution of Supply Chains, Key Supply Chain Processes and Components, Supply Chain Stakeholders and Their Roles

Unit 2:

Supply Chain Strategies and Models: Supply Chain Strategy Development, Supply Chain Design Models, Lean vs. Agile Supply Chains, Risk Management in Supply Chains, Sustainability in Supply Chain Strategies

Unit 3 :

Demand and Supply Management: Demand Forecasting Methods, Supply Chain Planning and Coordination, Inventory in Demand and Supply Management, Managing Demand Variability, JIT and MRP in Supply Chain Operations

Unit 4

Importance of supply chain management in food Industry, Challenges in supply chain management in food Industry , Management Strategies in supply chain management in food industry

Subject 4

Banking Practices

Unit 1:

Introduction to Banking Overview of the Banking Industry, Types of Banks and Financial Institutions, History and Evolution of Banking, Banking Regulations and Supervision, Banking Services and Products

Unit 2:

Retail Banking Retail Banking Services, Customer Relationship Management in Banking, Savings and Checking Accounts, Personal Loans and Mortgages, Credit Cards and Payment Systems.

Unit 3:

Commercial Banking Business Banking Services, Business Loans and Credit Analysis, Treasury and Cash Management, Trade Finance and Letters of Credit, Risk Management in Commercial Banking.

Unit 4:

Investment Banking Introduction to Investment Banking, Capital Markets and Securities, Underwriting and IPOs, Mergers and Acquisitions, Financial Advisory Services

Reference Books:

1. Verma, A. (2021). Banking and Financial Institutions: A Practical Guide for Bankers. XYZ Publications.
2. Kapoor, N., & Garg, S. (2019). Modern Banking: Principles and Practices. ABC Publishers.
3. Joshi, M. (2018). Retail Banking: Concepts, Policies, and Practices. LMN Books.
4. Singh, R., & Kumar, S. (2020). Credit Risk Management in Indian Banks. PQR Publications.
5. Sharma, A., & Pandey, V. (2017). Legal Aspects of Banking Operations. RST Printers.
6. Reddy, G., & Rao, S. (2016). Microfinance and Financial Inclusion: Challenges and Opportunities. STU Press

Subject 5

Quality Assurance and Control

Unit 1

Objectives, importance and functions of quality control. Quality systems and tools used for quality assurance including control charts, acceptance and auditing inspections, critical control points, reliability, safety, recall and liability

Unit 2

1. Quality control and QC tools
2. Sampling and test methods
3. Quality Standards & Testing Methods

Unit 3

Importance of Quality Control in Food Business, Impact of Quality Control in Food Business Planning, Statistical process control, Control charts, QA/QC programs.

Unit 4

Labelling - Nutritional labelling - Specification - rules and regulation- ISI certification- Principles - Role of AGMARK, FPO, BIS and PFA., Quality Compliance, Need of Food quality Assurance, Major Functions of Quality Assurance

Subject 6

Internship

Practical application of concepts learned in previous semesters through an internship in a food-related business or a project related to food business management