B.Voc (Aviation & Logistics) B.Voc (AL)

Year -1 Diploma FIRST SEMESTER

PAPERS CODE	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
BVAL-101	Fundamentals Of Aviation	40	60	100
BVAL-102	Aviation Industry	40	60	100
BVAL-103	Introduction to Logistic Management	40	60	100
BVAL-104	Domestic Logistics Management	40	60	100
BVAL-105	Computing Skills-I	40	60	100
BVAL-106	Functional English	40	60	100
PRACTICAL				
BVAL-107	Fundamentals Of Aviation Lab	60	40	100
BVAL-108	Aviation Industry Lab	60	40	100
BVAL-109	Introduction to Logistic Management Lab	60	40	100
BVAL-110	Domestic Logistics Management Lab	60	40	100
BVAL-111	Computing Skills-I Lab	60	40	100
Total		540	560	1100

SECOND SEMESTER

PAPERS CODE	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
BVAL-201	Principles Of Airline And Airport Management	40	60	100
BVAL-202	Logistics And Air Cargo Management	40	60	100
BVAL-203	Air Travel Management	40	60	100
BVAL-204	Warehouse Management	40	60	100
BVAL-205	Principles of Logistics Information Systems	40	60	100
BVAL-206	Basics of Economics and Market	40	60	100
PRACTICAL				
BVAL-207	Principles Of Airline And Airport Management Lab	60	40	100
BVAL-208	Logistics And Air Cargo Management Lab	60	40	100
BVAL-209	Air Travel Management Lab	60	40	100
BVAL-210	Warehouse Management Lab	60	40	100

BVAL-211	Principles of Logistics Information Systems Lab	60	40	100
Total		540	560	1100

THIRD SEMESTER

PAPERS	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
CODE				
BVAL-301	Aviation Ancillary Service	40	60	100
BVAL-302	Airline and Airport Organization	40	60	100
BVAL-303	Supply Chain Management	40	60	100
BVAL-304	Air Cargo Logistics Management	40	60	100
BVAL-305	Communication Skill	40	60	100
BVAL-306	Financial Literacy	40	60	100
PRACTICAL		100	~	
BVAL-307	Aviation Ancillary Service Lab	60	40	100
BVAL-308	Airline and Airport Organization Lab	60	40	100
BVAL-309	Supply Chain Management Lab	60	40	100
BVAL-310	Air Cargo Logistics Management Lab	60	40	100
BVAL-311	Communication Skill Lab	60	40	100
Total		540	560	1100

PAPERS CODE	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
CODE				
BVAL-401	Travel Agency Operation	40	60	100
BVAL-402	Airline Marketing And Aviation Safety Management	40	60	100
BVAL-403	Business Ethics and Global Business Management	40	60	100
BVAL-404	Enterprise Resource Planning (ERP)	40	60	100
BVAL-405	Basics of Accounting	40	60	100
BVAL-406	Computing Skill-II	40	60	100
PRACTICAL				
BVAL-407	Travel Agency Operation Lab	60	40	100
BVAL-408	Airline Marketing And Aviation Safety Management Lab	60	40	100
BVAL-409	Business Ethics and Global Business Management Lab	60	40	100

BVAL-410	Enterprise Resource Planning (ERP) Lab	60	40	100
BVAL-411	Computing Skill-II Lab	60	40	100
Total		540	560	1100

FOURTH SEMESTER

B.Voc (Aviation and Logistics)

B.Voc(AL) Year -3

FIFTH SEMESTER

PAPERS	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
CODE				
BVAL-501	Air Transport In Tourism	40	60	100
BVAL-502	Service Marketing And Public Relations In Aviation	40	60	100
BVAL-503	Transportation and Distribution Management	40	60	100
BVAL-504	Digital literacy	40	60	100
BVAL-505	Production and Operations Management	40	60	100
BVAL-506	Critical Thinking and Elementary Statistics	40	60	100
PRACTICAL				
BVAL-507	Air Transport In Tourism Lab	60	40	100
BVAL-508	Service Marketing And Public Relations In Aviation Lab	60	40	100
BVAL-509	Transportation and Distribution Management Lab	60	40	100
BVAL-510	Digital literacy Lab	60	40	100
BVAL-511	Critical Thinking and Elementary Statistics Lab	60	40	100
Total		540	560	1100

SIXTH SEMESTER

PAPERS CODE	PAPERS NAME	INTERNAL	EXTERNAL	TOTAL
BVAL-601	Air Transportation Safety AndSecurity	40	60	100

BVAL-602	Air Regulations	40	60	100
BVAL-603	Entrepreneurship	40	60	100
PRACTICAL				
BVAL-604	Air Transportation Safety AndSecurity Lab	60	40	100
BVAL-605	Air Regulations Lab	60	40	100
BVAL-605	Internship in hospital			300
BVAL-606	Project in Hospital			300
Total		240	260	1100

Detailed Syllabus

BVAL-101-FUNDAMENTALS OF AVIATION

Objectives:

On successful completion of this course, the students should have understood -Evolution of Aviation Industry and its growth World Aviation Bodies and their functions - Airport Services and Crisis Management

UNIT - 1

The Evolution of Aviation - Growth Drivers - Issues and Challenges - Global Aviation Industry- Aviation Industry in India - An Overview - Aircraft Types and Structures - Aircraft Manufacturers

UNIT - 2

Airports - Civil, Military - Training - Domestic/International - Passenger/Cargo Terminals

- World Airlines - World's Major Airports - IATA / ICAO - National Aviation Authorities & Role of State and Central Governments - Airports Authority of India

UNIT-3

Layout of an Airport & Ground Handling - Airport & Aircraft Security - Managerial Operations - Airline Catering & Various Bodies Handling of Unaccompanied minors and Disabled Passengers-Handling of Stretcher Passengers and Human Remains-Handling of CIP, VIP & VVIP

UNIT-4

Airport Services - Standard Operations - Ramp Services & Airside Safety - Freight Warehouse Management Airline Terminal Management-Flight Information Counter/Reservation and Ticketing-Check In/Issue of Boarding Pass-Customs and Immigration Formalities-Co-ordination-Security Clearance-Baggage

UNIT - 5

Various Crisis at Airport - SOP for Bomb Threat - Mitigating Hijack Crisis Situation - Response to Acts of Unlawful Interference: Developing Plans – Investigation Methods & Procedures – Troubleshooting the issues – Handling Situational Awareness.

BVAL-102-AVIATION INDUSTRY

Objectives:

On successful completion of this course, the students should have understood-Airside-Airport Definition, Function, Customers and Partners-Airport Business and its Economic Impact- Physical Components of Airside, Terminal Side and Landside

UNIT-1

The Airside-The Importance of the Air Transportation Industry-The Need for Air Transportation-The Providers of Air Transportation Services-History of Aviation and Airports-Technological Advancements-Overview-Protection of Environment-Statistics and Forecasts

UNIT-2

Airport Definition, Function, Customers and Partners-What is an airport-Customers-Operating Partners-Off- Site Associated Partners-Airport Management and Operation-Ownership and Operation-Airport Management as a Career-The Needs for Standardisation-Why Standardise

UNIT-3

The Airport Business and its Economic Impact-The Airport Business-The Economic Impacts of Airports-The Airport Master Planning-Why Plan-How to Plan? -Land Use Compatibility-The Planning Process-Public Consultation-How to use the Master Plan

UNIT-4

The Airside Area-Physical Components of the Airside-Service Components of Airside-Operational Procedures of Airside-The Terminal Area and Landside Area-Physical Components of Terminal-Types of Passengers-Processing of Passengers, Luggage and Freight-Different Types of Terminals-Operational procedures of Terminal-Physical Components of Landside-Processes-Operational Procedures of Landside

UNIT-5

Airport Certification and Overall Airport Operation- International Obligation of States-Obligations of CAA-Obligations of the Aerodrome Operator-The Need for Certification-The Aerodrome Certification Regulatory System-The Aerodrome Certification Concept- The Aerodrome Certifications Process- The Aerodrome Manual-Airport Operational System-How to Reach and Manage and Operational System

BVAL-103- INTRODUCTION TO LOGISTIC MANAGEMENT

Module - I

Logistics: Definition - History and Evolution - Objectives - Elements - activities importance - The work of logistics - Logistics interface with marketing - Retails logistics.

Module - II

Logistics Management: Definition - Evolution of the concept - model - process - activities. Achievement of competitive advantage through logistics Framework - Role of Logistics management - Integrated Logistics Management.

Module – III

Logistics Strategy: Strategic role of logistics – Definition - Role of logistics managers in strategic decisions - Strategy options, Lean strategy, Agile Strategies & Other strategies - Designing & implementing logistical strategy - Emerging concept in logistics.

Module - IV

Outsourcing Logistics: Reasons - Third party logistics provider - Fourth party Logistics providers (4PL) - Stages - Role of logistics providers.

Module - V

Quality Customer Service & Integrated Logistics: Customer service – importance elements - the order cycle system - distribution channels - Functions performed – Types designing

BVAL-104- DOMESTIC LOGISTICS MANAGEMENT

Module - I

Planning and Resourcing: Need for Planning – Fleet management – Main types of road freight transport – Transport resource requirements – Vehicle routing and scheduling issues – Data requirements – Manual methods of vehicle routing and scheduling – Computer routing and scheduling – Information system applications – GPS – RFID.

Module – II

Vehicle Selection: Types of vehicles – Types of operations – Load types and characteristics – Main types of vehicle body - Implications of vehicle selection – Vehicle acquisition.

Module – III

Vehicle Costing: Reasons for road freight transport vehicle costing – Main types of costing systems – Vehicle standing costs – Vehicle running costs – Overhead costs – Costing the total transport operation – Whole life costing – Vehicle cost comparisons – Zero-based budget.

Module - IV

DocumentingandInformationFlow:Advices—Planning—FTL—LTL—Documentation Road Receipts/Truck Receipts/Way Bills(RR/LR)-Consignment note CMR (EU & Canada) Booking — Invoicing & Information Flow - Long Haul — Coordination with terminals Exceptional Loads (Project Cargo).

Module - V

Legislation: Operator licensing – Driver licensing – Driver's hours regulations – Road transport directive – Tachographs – Vehicle dimensions.

BVAL-105-COMPUTING SKILLS-I

Unit-1

Introduction to Computers

History of Computer , Generations, Characteristics, Advantages and limitations of Computer, Classification of Computers, Functional Components of Computer, Imput ,Output and Processing, Concept of Hardware and Software, Data & Software, Information .Concept of data storage . Number system. Decimal, Binary, Hexadecimal ASCII .

UNIT-2

Introduction to GUI Based Operating System

Basics of Operating system, Basics of DOS & DOS

UNIT-3

Word Processing

Word processing basics, Menu Bar, Opening and closing documents, save & Documents, save as, Page setup print preview, and printing. Text creation and manipulation Editing, cut copy paste. Document creation, editing, Formatting the text – Paragraph indenting, bullets and numbering, changing case, Table manipulation – creation of table insertion and deletion of cell, row and column.

UNIT-4

Network basics, Internet, Basics of computer network LAN, WAN etc, Concept of Internet, Basic of Internet Architecture,

Services on Internet Architecture, World wide web and websites, Communication on Internet,

Internet Services, Preparing Computer for Internet Access, ISPs and Examples, Internet Access Technologies. Web Browsing, Configuring web browser, Popular search engines Downloading and printing web pages.

Internet application

Basics of E-mail, E-mail addressing, forwarding and searching, Composing

BVAL-106-FUNCTIONAL ENGLISH

Unit-1

1.The phonology of English - International Phonetic Alphabet [IPA]: consonants, vowels, Diphthongs and Consonant Clusters. Places and manners of articulation of sounds.

Unit II

- **2.** The syllable and stress patterns: strong and weak forms. Sentence-stress-pause.
- 3.Intonation: patterns of intonation and use of them for reading and speaking purposes

Unit-III

- a) Parts of speech, articles, tenses, verbs and modals.
- b) Practice of daily use words, numerals and tongue twisters
- c) Vocabulary building, construction of simple sentences: Basic sentence pattern, subject and predicate.
- d) Sentence construction simple, complex and compound
- E) English communication- About myself
- a) Let's talk, making conversation, meeting and greeting
- b) Introduction myself, my family and my friends
- c) My opinions, my likes and dislikes
- d) Life at collage, hostel and workplace

PRACTICAL

BVALP-105-COMPUTING SKILLS

- Starting MS WORD, Creating and formatting a document,
- Changing fonts and point size,
- Table Creation and operations, Autocorrect, Auto text, spell Check, Word Art, Inserting
- objects, Page setup, Page Preview, Printing a document, Mail Merge.
- Starting Excel, Work sheet, cell inserting Data into Rows/ Columns, Alignment, Text wrapping, Sorting data, Auto Sum, Use of functions, referencing formula cells in other
- formulae, Naming cells, Generating graphs, Worksheet data and charts with WORD, Creating Hyperlink to a WORD document, Page set up, Print Preview, Printing Worksheets.
- Starting MS-Power Point,, Creating a presentation using auto content Wizard, Blank
- Presentation, creating, saving and printing a presentation, Adding a slide to presentation,
- Navigating through a presentation, slide sorter, slide show, editing slides, Using Clipart, Word art gallery, Adding Transition and Animation effects, setting timings for slide show, preparing note pages, preparing audience handouts, printing presentation documents, MS- Access,
- Creating tables and database, Internet, Use of Internet (Mailing, Browsing, Surfing).

2ND SEMESTER

BVAL-201- PRINCIPLES OF AIRLINE AND AIRPORT MANAGEMENT

UNIT - 1

Introduction - History of Aviation- Development of Air transportation in India-Major players in Airline Industry-Market potential of Indian Airline Industry - Current challenges in Airline Industry-Competition in Airline Industry

UNIT-2

ICAO & IATA, ICAO - International Civil Aviation Organisation- International body comprising Governments of various Countries - Origin – Aims of ICAO, Functions of ICAO - Role of ICAO in International Air Transportation – Aims & Functions of IATA

UNIT - 3

Airport management-Airport planning- Operational area and Terminal planning, design, and operation-Airport Operations-Airport functions- Organization structure of Airports Sectors-Airport Authorities-Global and Indian scenario of Airport management – DGCA.

UNIT - 4

Organization structure of airline sectors – airline terminal management information counter/reservation and ticketing. Check in / issue of boarding pass – customs and immigration formalities. co-ordination security clearance –baggage – handling – handling of special passengers.

UNIT-5

International trends-Emerging Indian scenario- Private Participation International Developments - PPP: Public Private Participation in Indian Airport - Environmental Regulations-Regulatory issues - Airport fees, rates, and charges

BVAL-202- LOGISTICS AND AIR CARGO MANAGEMENT

Module – I

Introduction to Air Cargo: Aviation and airline terminology – IATA areas – country – currency – airlines – aircraft layout – different types of aircraft – aircraft manufacturers – ULD – International air routes – airports – codes – consortium – hub & spoke – process flow.

Module – II

Introduction to Airline Industry: History – Regulatory bodies – navigation systems – air transport system – functions – customers – standardization - management – airside – terminal area –landside operations – civil aviation – safety and security – aircraft operator's security program – security v/s facilitation – ICAO security manual – training and awareness – rescue and fire fighting – issues and challenges – industry regulations – future of the industry.

Module - III

Airline marketing and customer service standardization in logistics—

Airfreight exports and imports—sales and marketing — understanding marketing, environment, marketing research, strategies and planning, audits, segmentation, SWOT, marketing management control, consignee controlled cargo — sales leads — routing instructions — customer service, future trends.

Module – IV

Air Freight Forwarding: Air freight exports and imports – special cargoes – consolidation – documentation – Air Way Bill (AWB) – communication – handling COD shipments – POD – conditions of contract – dangerous (DGR) or hazardous goods.

Module - V

Advices - Booking - SLI - Labeling - Volume/Weight ratio - shipment planning - TACT - Air cargo rates and charges - cargo operations - customer clearance.

BVAL-203- AIR TRAVEL MANAGEMENT

UNIT - 1

Air Transportation Industry - Land Transportation Industry - Sea Transportation Industry - Multi-modal Transportation - Marketing and Marketing mix - Application of Marketing Principles to Airline Management-Airline Business and its Customers - Market segmentation - PESTE Analysis

UNIT - 2

Passport – VISA 's - Airlines Ticket or Authorization - Health Documents - Michel Porter 's Five Factors and their Application to Airline – Cost leadership –Focus strategies- Airline Business and Market Strategies – Common Mistake-Concept of Product and Relation to Airline – Fleet and schedules Related Product Features-Customer Service and Controlling Product Quality-Air Freight Product

UNIT - 3

Referring the TIM - Passport Requirements: Different Nations - VISA Requirements: Different Nations - Tax, Currency, Customs, Immigration requirements - Referring the OAG - Aircraft Types and Codes - World Terminals -Calculation of Flying time, Ground Time and Elapsed Time.

UNIT-4

Introduction – Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic Zones and approach areas. Context of Airport system planning – Development of Airport Planning process – Ultimate consumers – Airline decision – Other Airport operations

UNIT - 5

Building Block in Airline Pricing Policy-Uniform and Differential Pricing- The Structure of Air Freight Policy- Distribution Channel Strategies-Travel Agency Distribution System- Selling & Distribution Channel in Air Freight Market- Brand Building Strategies in Airline Industry- Relationship Marketing and Components of Marketing Strategies.

BVAL-204- WAREHOUSE MANAGEMENT

Module – I

BOCC213: WAREHOUSE MANAGEMENT

Introduction to Warehousing: Concepts – Decision making – Operations – Need for warehousing – Issues affecting warehousing – Various warehousing facilities – Different types of ware houses – Characteristics of ideal warehouses.

Module – II

Introduction to Inventory Management: Role in supply chain – Role in competitive strategy - Role of inventory – Functions of inventory - Types of inventory – WIP inventory – Finished goods inventory – MRO inventories – Cost of inventories – Need to hold inventory.

Module - III

Warehouse Management Systems: Introduction – The necessity of WMS – Logics of determining locations and sequences – Independent demand systems – Uncertainties in material management systems – Dependent demand systems – Distribution resource planning.

Module - IV

ABC Inventory Control: Managing inventories by ABC-Multi-echelon inventory systems - Managing inventory in multi echelon networks - Managing inventory in single echelon networks. Various approaches - Distribution approaches - The true multi echelon approach.

Module - V

The Principles and Performance Measures of Material Handling Systems: Introduction. Vehicle travel path(time) – Handling time – vehicle utilization – no of loads completed – congestion – Effective performance systems – Fundamentals of various types of material handling systems – automated storage and retrieval systems Bar coding technology and applications RFID technology.

BVAL-205- PRINCIPLES OF LOGISTICS INFORMATION SYSTEMS

Module - I

Information Technology and Logistics: Electronic Data Interchange – Personal Computers - Artificial Intelligence/Expert system - Communications Bar coding and Scanning - Electronic Data Interchange standards – Communication - Information and Future directions.

Module - II

Information Technology for Supply Chain Management: Bull whip effect - IT in supply chain - Business Process Reengineering - Enterprise Resource Planning - EDI Problems with EDI - Impact of Internet on SCM.

Module – III

Logistics Information: Meaning and Need Forms – LIS – Definition – Information functionality - activities involved in transaction system - Principles of designing or evaluating LIS applications.

Module - IV

LIS Architecture: Components - Two forms of activities - Planning and co-ordination flows and operating flows - Flow and use of integrated logistics information.

Module - V

Information Forecasting: Definition – Process – Component - Characteristic of forecast compound – Approaches - Forecast techniques - Forecast error – E-Commerce.

BVAL-206-BASICS OF ECONOMICS AND MARKET

Unit 1

Health Care Market An Introduction: Main Problems in the Market for Health Care, Health Care and Economic Basics, Analyzing Health Care Markets. Demand-Side Considerations: Demand for Health and Health Care, Market for Health Insurance

UNIT-2

Supply-Side Considerations: Managed Care, Health Care Professionals, Hospital Services, Confounding Factors Public Policy in Medical Care: Policies to Enhance Access, Policies to Contain Costs, Medical Care Systems Worldwide,

UNIT-3

Health Sector in India: An Overview Health Outcomes; Health Systems; Health Financing Evaluation of Health Programs Costing, Cost Effectiveness and Cost-Benefit Analysis; Burden of Diseases ,Role of WHO, Health Care Budget: purpose, types & Diseases in Indian context.

UNIT-4

Health Economics: Fundamentals of Economics: Scope & Development. Scope & Development.

Tools of Economics-Concepts of need, demand, supply & Demand; price in Health Services. Methods & Techniques of Economic Evaluation of Health Programmes: Cost benefit & cost effective methods-output & input analysis. Market, monopoly, perfect & imperfect competition. Health Financing from various sources – Public, Private, TPA.

Economics of Health Programmes for Nutrition, diet & population control, economics of abuse of tobacco & Description (STDs & Malaria) & non-communicable (IHD & Cancers) diseases.

PRACTICALS

BVALP-201- PRINCIPLES OF AIRLINE AND AIRPORT MANAGEMENT

- Functions of IATA, ICAO & DGCA
- Airport Planning, Operations & Management

3RD SEMESTER

BVAL-301- AVIATION ANCILLARY SERVICE

UNIT - 1

Role and Responsibilities of Ground Handlers - Ground Handling: Self Handling vs. Outsourcing - Ground Handling: Case Studies at India and Abroad - IATA Ground Handling Council

UNIT - 2

Passenger Handling: Departure Concourse - Passenger Handling: Transit and Arrivals - Passengers 'Baggage Handling - Specialized Handling of Passengers: VVIPs, VIPs, Physically Challenged

UNIT-3

Cargo Services at Export Shed - Cargo Services at Import Shed - Cargo Services at Transit Shed - Cargo Aircraft Handling, Air Cargo - Concept - Cargo Handling-Booking of Perishable Cargo and Live Animals - Industry Relation - Airway Bill.

UNIT - 4

Catering: Preparation, Escort and Security, Inter-terminus Transfers - Medical Services, Accommodation and Hospitality, Information Dissemination. - Airport Operations - Airport Management

UNIT-5

Planning and Design Considerations for Security at Airports - Annex 17: SARPs (Standard and Recommended Practices) - Access Control and Alarm Monitoring Mechanisms, Security Screening Infrastructure and Procedures.

BVAL-302- AIRLINE AND AIRPORT ORGANIZATION

UNIT - 1

History of Aviation- Development of Air transportation in India-Major players in Airline Industry-SWOT analysis in Airline Industry-Market potential of Indian Airline Industry—Current challenges in Airline Industry-Completion in Airline Industry-IATA & ICAO

UNIT - 2

RAMP SERVICES: GROUND HANDLING AGENCIES AND DOCUMENTS- Aircraft Handling - Catering Planning, Aircraft Fleet and its Maintenance - Ground Handling Agreements - Scheduling and Approvals - Crew Management and Documentation

UNIT-3

Airport operator - Passengers 'Terminal Management: Domestic - Passengers 'Terminal Management: International - Cargo Terminal: Domestic and International - Airside Management: Ground and Flight safety

UNIT-4

International tour and travel management - Tour Operators - Travel Agents and their role - The Hotel Industry - Tourist Attractions: Global and Indian - Handling of Unaccompanied minors and Disabled Passengers-Handling of Stretcher Passengers

UNIT - 5

Airport operations - Airport Planning-Operational area and Terminal planning, design, and operation-Airport - operations-Airport Functions-Organization structure of Airline and Airports Sectors-Airport - authorities-Global and Indian scenario of Airport management – DGCA –AAI

BVAL-303- SUPPLY CHAIN MANAGEMENT

Module-I

Supply Chain Management and Logistics: An Introduction – Integrated Logistics Management – Concept – Evolution and Development – Difference – Role – Scope – Functions and Importance – The new Manufacturing and Distribution Practices in the light of Globalized Economy – Local and International Supply Chains – Benefits and Issues – Types of Supply Chains and examples – Strategic, tactical, operational decisions in supply chain – SCM building blocks – Supply Chain Drivers and Obstacles – International Logistics and Supply Chain Management – The Total Cost Concept and Logistics and SCMTrade-Offs.

Module – II

Key Supply Chain Business Processes: Planning – Sourcing – Producing – Distributing and Paying – Managing material flow and distribution – Distribution and Planning Strategy – Warehousing and Operations Management – Transportation Management – Inventory Management.

Module -III

Purchasing and Supplier Management: Sourcing and Supplies Management, Outsourcing – Global Sourcing – Vendor Identification – Selection – Evaluation – Development – Supplier Relationship Management – Supplier Quality Management – Supply Chain Performance.

Module - IV

Forecasting Systems Design: Customer Service Management and Measurements – CRM – Manufacturing Logistics – Pricing Strategies – SCM Relationships – Third Party Logistics and Fourth Party Logistics – SCM Network Design and Facilities Development – SCM Planning and Development Strategies – Supply Chain Uncertainties – Supply Chain Vulnerabilities.

Module - V

Supply Chain Coordination and Integration: Role of IT, Impact of Internet and EBusiness – IT enabled SCM, Future of SCM.

BVAL-304- INTERNATIONAL LOGISTICS MANAGEMENT

Module - I

Integrated Logistics Management: Concept, Evolution and Development, Importance of logistics management in international business, International Logistics: functions and intermediaries. Issues involved in movement of goods. Logistics information system— positioning information in logistics, logistics information systems design, IT in logistics, strategic information linkage. Total cost approach to Logistics. Liabilities of carriers. Marine insurance for cargo.

Module - II

The General Structure of Shipping Industry: Cargo types, vessels and vessel characteristics, linear operations and tramp operations, chartering of bulk ocean carriers, the ocean linear conference system, freight structure and practices, coordination, role of intermediaries – forwarding and clearing agents, freight brokers, stevedors and shippers agents.

Module - III

Warehousing and Containerization: Warehousing, repacking and other value added service provided by logistics service providers. 3 PL and 4 PL logistics service. Performance measurement of logistic systems. Containerization: types of containers and ICDs. Layout and working of container terminals. Port system and sub systems, port organization and management. Responsibilities of port trusts, growth and status of ports in India, Inland water transport, issues in sea transport. Regulatory authorities for sea transport and their roles.

Module – IV

Introduction to Road Transport System: Classification of vehicles, road network in India, types of roads, road transport companies and their operation in full truckload business and in less than truckload business. Road parcel service business. Fleet management systems. Integrated logistics provided by road transport companies. Documents and permits required in road transport system. Problems in road transport, regulatory authorities involved with road transport system.

Module - V

Rail Transport Systems: Types of railway wagons, rakes, marshalling operations and yards, Railway goods freight structure, Railway Parcel service operations. Railway goods service operations. Procedure for availing railway parcel or goods service and the documentations involved. Operations at a railway goods yard/siding. Operations and control in the railways. Organization of Indian railways.

BVAL-305- COMMUNICATION SKILL

UNIT-1

- a) Application writing
- b) Paragraph writing, essay writing and précis writing
- c) Pre-testing of oral and writing skills

UNIT-2

Professional Skills

- a) Bio-data, CV and resume writing
- b) Joining letter, cover letter and resignation letter
- c) Inter- office memo, formal Business letter, informal notes
- d) Minutes of the meeting, reporting events, summary writing

UNIT-3

Presentation skills

- a) Power-point presentations and presenting techniques
- b) Body language
- c) Describing people, places and events
- d) Extempore, speech and just- a minute sessions

UNIT-4

Interview skills

- a) Developing skills to- debate, discussion, basics of GD and styles of GD
- b) Discussion in groups and group discussion on current issues
- c) Steps to prepare for an interview and mock interviews

Public speaking

- a) Art of public speaking
- b) Welcome speech
- c) Farewell speech
- d) Votes of thanks

Oral practice

- a) Debate
- b) Just-a-minute
- c) Group discussion
- d) Mock interviews

BVAL-306- FINANCIAL LITERACY

- 1. Company Final Accounts
- Books of Account.
- Introduction to Company Final Accounts.
- Formats of Financial Statements: Schedule III (Companies Act 2013).

- Familiarity with the Items of Financial Statements. (Preparation of Company Financial Statements is not required).
- 2. Financial Statements: Analysis and Interpretation
- Meaning and Types of Financial Statements.
- Nature of Financial Statements.
- Limitations of Financial Statements.
- Analysis and Interpretation of Financial Statements.
- Steps involved in the Financial Statement Analysis.
- Methodical Classification.
- Ratio Analysis.
- Advantages of Ratio Analysis.
- Limitations of Ratio Analysis.
- 3. Funds Flow Statement
- Meaning of Funds Flow Statement.
- Uses of Funds Flow Statement.
- Funds Flow Statement vs Income Statement.
- Treatment of Provision for Taxation and Proposed Dividends.
- 4. Cash Flow Statement
- Meaning of Cash Flow Statement.
- Uses of Funds Flow Statement.
- Treatment of Provision for Taxation and Proposed Dividends

4TH SEMESTER

BVAL-401-TRAVEL AGENCY OPERATION

UNIT – 1

Travel agent -Formation- Role and Responsibilities - Travel Agents Body in India – TAAI - Travel Agent and the Airline- Commercial Aviation-Air Taxi Operations-Private Operation-Airport Handling Functions of IATA-ICAO - Aims and Objectives. IATA Geography and Global indicators

UNIT – 2

Tour Operators Role and Responsibilities - Planning Tours and Preparation of Tour Brochures - Operating Conditions for Tour packages and Legal position in case of non-compliance and other reasons - Pricing of Tour packages

UNIT - 3

Airline Operational Management- Domestic- International Departure Formalities, -Security Check- In. Hand Baggage Screening -Personal Frisking- Boarding the Plane, Ground Announcements- Handling of Delayed Flight

UNIT-4

Tourism Management-Domestic and International Tourism-Discover India-Government Regulations on Tourism Management- Exploring new Destinations-Foreign Currency Earner-Disruptive Flights-Ramp Handling & Ramp Safety- Procedure - Airline Tickets Airlines Terminal Management

UNIT - 5

Aviation Industries terminologies – OAG – Pooling of baggage and Allowances - Weight and piece concept - Legal liability for Passengers and Baggage - Checked and Unchecked International travel documentation - Passports – Visas- Health documentation.

BVAL-402- AIRLINE MARKETING AND AVIATION SAFETY MANAGEMENT

UNIT I

Maintenance: Marketing Strategy: PESTE analysis: political factors – Economic factors – Social factors –

Technological factors – Environmental factors – Introduction of Airline Business and Marketing Strategies – Porters Five Forces and their Application to the Airline Industry – Strategic Families – Differentiation A airlines – The Future – Focus Strategies – Airline Business and Marketing strategies – Common Mistakes

UNIT II

Promotion Marketing – Fundamentals of Relationship Marketing – Components of a Relationship Marketing Strategy – Frequent Flyer Programmers – The Anatomy of a Sale – Sales Planning – Marketing Communication Techniques – Airline Advertising – Selling in the Air Freight Market – Glossary of Aviation Terms and Marketing Terms

UNIT III

Introduction – Sources of Financial Benefits – Labour Cost Reduction – Cost Reduction in Sourcing – Marking Financial Benefits come True – Airline Views or Financial Benefits – Traffic Increase – Revenue Enhancement – Cost Reduction – Profit Improvement – The problem of local rationales

UNIT IV

Major Accident Analysis & Managing Human Errors – Identifying Root Causes of Human Errors – Human Reliability Assessment – Safety Cultures in Airlines – Threat and Error Management (TEM) – Mid – Air Collisions – Runway Incursions – Weather Factors – Human Factors and Mechanical Failures

UNIT V

Nature of Accidents, Major Issues: A Contemporary Assessment Causes of Accidents – Major Aviation Disasters: Case Studies – Statistics of Aviation Disasters – Investigation, Analysis and Reporting Psychological Aspects and Training – Bird Strike: Airport Operators' responsibilities – Airside Discipline – Maintenance of Airport and Aircraft

BVAL-403- BUSINESS ETHICS AND GLOBAL BUSINESS MANAGEMENT

Module - I

Indian Ethos and Values: Values of Indian culture and society – Models of management in the Indian socio-political environment – Indian work ethos – Indian heritage in production and consumption – Indian mythologies and values/culture – western culture vs. Indian culture.

Module - II

Introduction to Business Ethics: Definition of ethics and business ethics – Law vs. Ethics – Ethical principles in business – approaches to business ethics: Teleology, Deontology and Utilitarianism – importance of business ethics – debate for and against business ethics.

Module - III

Ethical Decision Making in Business: Ethical dilemmas in business – ethical universalism and relativism in business – factors affecting the business ethics – process of ethical decision-making in business – individual differences in managers and ethical judgement– whistle blowing.

Module - IV

Ethics in Functional Areas: Ethical issues in functional areas: Marketing, HR, Production, IT/Systems and Finance – Environmental ethics – Gender ethics – CSR as business ethics – Ethics in international business

Module - V

Ethics Management: Role of organizational culture in Ethics – structure of ethics management: Ethics programmes, code of conduct, ethics committee, ethics officers and the CEO – communicating ethics: communication principles, channels, training programmes and evaluation – Ethics audit – corporate governance and ethical responsibility – transparency international and other ethical bodies – recent trends, issues and cases

BVAL-404- ENTERPRISE RESOURCE PLANNING (ERP)

Module – I

Enterprise Resource Planning: Evolution of ERP, MRP and MRP II, problems of system Islands, need for system integration and interface, enterprise wide software solutions, difference between integrated and traditional information systems, early and new ERP packages, overview of ERP packages, ERP products and markets – players and characteristics, benefits of ERP implementations, critical success factors, pitfalls.

Module – II

Selection and Implementation: Opportunities and problems in ERP selection and implementation, ERP implementation,, identifying ERP benefits, team formation consultant intervention – Business Process Reengineering (BPR) concepts, The emergence of reengineering, concepts of business process – rethinking of processes – identification of reengineering need preparing for reengineering Implementing change – change management – integrating with other systems, Post ERP implementation.

Module – III

Modules in ERP: Business modules of ERP package, functional architecture, salient features of each modules of ERP, comparison of ERP packages. Implementation of ERP systems, Business process modeling, Gap analysis, Framework for ERP implementation, business process, emerging trends in business process, selection of ERP process of ERP implementation-managing changes in IT organization – preparing IT infrastructure, measuring benefits of ERP, implementation obstacles, risk factors.

Module - IV

Technical Architecture of ERP Systems: Communication and networking facilities –distributed computing, client server systems, concepts of business objects, distributed object, computing architecture, support for data mining and warehousing, EDI – internet and related technologies – Net technologies.

Module - V

ERP and Supply Chain Management: Extending scope of ERP through SCM, The concept of value chain differentiation between ERP and SCM – issues in selection and implementation of SCM solutions – E-business and ERP – BI – SAAS – business opportunities – basic and advanced business models on internet – security and privacy issues – recent developments – future and growth of ERP – role of ERP in international business.

BVAL-405- BASICS OF ACCOUNTING

Unit-I – Introduction to Accounting :Need for Accounting – Definition – Objectives, Advantages – Book keeping and Accounting–Accounting concepts and conventions - Accounting Cycle - Classification of Accounts and its rules - Double Entry System - Journalization - Posting to Ledgers, Balancing of ledger Accounts (Simple problems).

Unit –**II**: Subsidiary Books: Types of Subsidiary Books - Cash Book, Three-column Cash Book- Petty cash Book (Simple Problems).

Unit-III- Bank Reconciliation Statement:Need for bank reconciliation - Reasons for difference between Cash Book and Pass Book Balances- Preparation of Bank Reconciliation Statement- Problems on both favorable and unfavorable balances (Simple Problems).

Unit-IV: Trail Balance and Rectification of Errors:Preparation of Trail balance - Errors - Meaning - Types of Errors - Rectification of Errors (Simple Problems).

Unit -V: Final Accounts: Preparation of Final Accounts: Trading account – Profit and Loss account – Balance Sheet – Final Accounts with adjustments (Simple Problems).

BVAL-406-COMPUTING SKILLS-II

Unit-1

Advance Word Processing Tools

Setting the layout of Table and documents, Mail merge techniques. Letter envelopes etc,

Using spell check and Thesaurus, Foot note nad Endnotes, Using Charts , shapes and pictures in word .

Unit-2

Basics of Spreadsheet

Functions of Spreadsheet, Applications, Elements of Electronic Spread sheet, creating

document saving and printing the worksheet, manipulation of cells ,Functions and charts, using formulas , Functions and charts

UNIT-3

Advance Spreadsheet Tools

Manipulations with charts and its types, Sorting, Filtering of data ,Pivot table, data validation techniques. Grouping and subtotaling of data. Text to column option . Printing of customized worksheet.

UNIT-4

Presentation Software

Using Powerpoint, Opening an powerpoint presentation, Saving a presentation, Entering and editing text, inserting and deleting slides in a presentations, preparation of slides, adding clip arts, charts etc., Providing Aesthetics, Enhancing text presentation, working with color lines styles and movie and sound, adding header and footer, presentation.

5TH SEMESTER

BVAL-501- AIR TRANSPORT IN TOURISM

UNIT I

Travel and Tourism: Principles – Scope and Operations – Perception of Travel worldwide – Perception of Tourism worldwide – India a tourist destination – Indian States, Capitals, Public holidays, Banks – Important Festivals and Tourist attractions – State Tourist Organisations – Important Travel Agents & Tour Operators.

UNIT II

World Tourism: Important Countries/Capitals/Currencies/Exchange – World Tourism Attractions – Indian Tourism – Types – Transportation Commercial Aviation – Air Taxi Operations – Private Operation – Airport Handling Functions of IATA-ICAO – Aims and Objectives – IATA Geography and Global indicators – Travel Agent Management – Travel Partners.

UNIT III

Hotels and Star Ratings: Resorts, Boarding and Lodging houses – Rating Systems and Classifications – Hotel Products, Facilities, Services, Room types, Bedding Types, Meal Plans Cancellations, Currency – Fluctuations and Commission Policies IATA Approved Travel Agency Appointment and Control – Bank guarantee – IATA Billing and Settlement Plan – Credit Period – Customer Service – Service Provider – Training and Development of Travel agent – GDS.

UNIT IV

Aviation – A National security asset: Importance of Air transportation – Airways – Development of the Aviation industry – Deregulation – Consequences of 9/11 to the industry – Emergency Funding – Protecting Public Air transportation – Hijacking – Security Measures – International Prospective – Trend begins – Diplomatic Conference on Air Law – Ministerial Conference on Terrorism – Financing of Terrorism – United Nations – ICAO/ECAC

UNIT V

Aircraft as Missiles: Early Hijackings – Terrorist Hijackings Spread – Initial Public response – Cockpit Doors – Profile of a Hijacker – Sky Marshal Program/Federal Air Marshal Program – History of Significant Air hijackings since 1972 – Terrorism – Middle East – Rival Claims – Palestinian Liberation Organisation – Abu Nidal – Hamas – Iranian Support of Terrorism – Hezbollah – Afghanistan: Osama Bin Laden – Europe – Japan – Peru – Russia – US – Domestic Terrorism – Nuclear Terrorism.

BVAL-502- SERVICE MARKETING AND PUBLIC RELATIONS IN AVIATION

UNIT I

Services Marketing – Meaning – Nature of Services – Types and Importance – Relationship Marketing – Mission, Strategy, Elements of Design, Marketing Plan Market Segmentation – Marketing Mix Decisions – Unique Features of Developing, Pricing, Promoting and Distributing Services.

UNIT II

Marketing of Hospitality – Perspective of Tourism, Hotel and Travel Services – Airlines, Railway, Passenger and Goods Transport – Leisure Services. Positioning and Differentiations Strategies, Quality of Service Industries -Achievement and Maintenance, Customer Support Service.

UNIT III

Public Relations – An essential in Aviation – Issues in PR: Airport Operators, Air Operators, Security Requisites of a Good PR professional – Challenges: Accessibility, Integrity of Information and Neutrality Handling the media – Types and Role of Media Handling – Do's and Don'ts in Media Handling – Preparation for Elective Media Handling – Electronic Media

UNIT IV

Public Relations and Crisis Management at Airports – Crisis at an Airport – Preparing for a Crisis – Managing the Crisis – PR: The Role during Crisis – Four Steps Public Relations Process, Defining PR Problems, Planning and Programming, Taking Action and Communicating.

UNIT V

Strategies for a successful PR personnel – Successful PR of an Organization: Strategy – Alternatives and Choices in Communication – PR Planning and Prioritization, Evaluating the Program, Elements of Public Relations, Human Relations, Empathy, Persuasion, Dialogue, Objectives of Public Relations.

BVAL-503- TRANSPORTATION AND DISTRIBUTION MANAGEMENT

Module - I

Introduction: Role of distribution in supply chain – transportation management – warehousing concepts – designing distribution channels – understanding distribution costs, Advantages of distribution models – disadvantages of distribution models – prerequisites of distribution – comparison of distribution networks.

Module - II

Distribution Network Planning: Various factors in distribution – delivery lead time and local facilities-optimization approach and techniques – material management process – role of transportation-transportation principles and participants – contribution of various agencies in transportation.

Module – III

Transportation Models: Performance characteristics and selection – various models of transportation (multimodal) – merits of each all models of transportation – transportation performance costs and value measures – understanding – comparing – cost components of multimodal transportation.

Module - IV

Transportation Routing Decisions: Transportation administration – transportation operations management – consolidation of freight – cost negotiations – various trends in transportation – application of information technology in transportation – E commerce – intelligent transport management system.

Module - V

Transit Operation Softwares: Geographic information systems – advanced fleet management systems-intermodal freight technology – transport security initiatives and role of technology – various inspection systems.

BVAL-504- DIGITAL LITERACY

Unit 1

Review of MS office

Advance options in MS excel

Power point

Introduction to internet learning platform

Using internet-based learning platform

Using google and you tube for learning

Using smart phone to become smart

UNIT-2

Benefits of digital learning

Using internet for personal requirement

Online payments method

Use of social media for advisement

Digital security and privacy

Various cybercrime and their safety guideline

Best practice for securing online and network transaction

Managing privacy and security and social media accounts.

BVAL-505- PRODUCTION AND OPERATIONS MANAGEMENT

Module - I

Introduction: Production and Operation Management as function, Nature and Scope, Decision areas. Operations Strategy. Process and Capacity Analysis.

Module - II

Design of Manufacturing Process, Design of Service Systems, Facility Location and Layout Decisions.

Module - III

Total Quality Management: Elements, Tools for TQM. Cost of Quality. ISO – Quality Stds– Statistical Process, Controls Charts. Concepts of acceptance sampling – OC Curve.

Module - IV

Supply Chain Management, Lean Management. Sourcing and Supply Management. Inventory Planning and Control for independent demand items.

Module - V

Resource Planning – MRP for dependent items. Aggregate production planning. Scheduling of operations. Maintenance Management.

BVAL-506- CRITICAL THINKING AND ELEMENTARY STATISTICS

Module - I

Introduction: Origin – Meaning - Scope and limitations of statistics - Relationship with business and industry.

Module – II

 $Collection\ of\ Data:\ Collection\ -\ Classification\ and\ tabulation\ of\ statistical\ data-Pie\ diagrams\ -\ Graphic\ representation.$

Module – III

Measures of Central Tendency: Mean - Median and Mode – Meaning and Computation – Standard deviation - Coefficient of variation.

Module - IV

Simple Correlation and Regression: Meaning - Karl Pearsion's Correlation Rank correlation - Computations - Uses - Regression equations - Forecasting.

Module - V

Time Series Analysis: Components of time series – Definition - Computation of Trend - Computation of seasonal variation (Simple average method only).

6TH SEMESTER

BVAL-601- AIR TRANSPORTATION SAFETY AND SECURITY

UNIT – 1

Importance of Air Transportation Safety and Security-Airport- Airways. - Protecting Public Transportation - Screening- Personnel's and Baggage's – Metal Detectors-X ray Inspections, Passive and Active Millimetres-Trace- Detection Techniques.

UNIT - 2

Terrorism – Introduction- Causes of Terrorism - Rival claim of pales tine- Palestine Liberation Organization - Nuclear Terrorism BBM/BBA - Aviation Management 2010-11 & onwards- CPOP Page 31 of 39 -Aircraft as Missiles - 9/11 Terrorist Act and its Consequences.

UNIT-3

Hijacking—Security measures- Airport Security Programmed and Steps taken to Contend with Hijacking-Cockpit doors- Sky Marshal Programme - Public Law about Hijacking - Air Transportation Security Act of 2001 - Crimes against Humanity.

UNIT - 4

Legislations and Regulations - ICAO/ECAC - Transportation security administration - International aviation safety assessment program. - Legislation after 9 Sep 2001- Biological &Chemical Warfare - Steps to Combat Terrorism - The Tokyo Convention & Act

UNIT - 5

Technological Improvements on Aviation Safety and Security -Introduction- Microwave Holographic Imaging -Body or Fire Security Scanner -New Generation of video Security Systems -Biosimmer-Biometric Systems - The way on Drug and Explosives.

BVAL-602- AIR REGULATIONS

UNIT 1

Civil Aviation Regulations Authority - DGCA-Introduction to Directorate General of Civil Aviation - DGCA functions-DGCA Organization-DGCA as Regulatory Authority

UNIT 2

Aircraft Rules - Aircraft Act 1934 - The Aircraft Rules 1937

UNIT 3

National Legislation - The Air corporations Act, 1953 (27 of 1953) - The Air Corporations (Transfer of Undertakings and Repeal) Ordinance, 1994 (4 of 1994) - The Air Corporations (Transfer of Undertakings and Repeal) Act, 1994 (13 of 1994) - The International Airports Authority of India act, 1971 (43 of 1971) - The National Airports Authority of India, 1985 (64 of 1985) - The Airports Authority of India Act 1994 (55 of 1994) - The Carriage by Air Act, 1972 (69 of 1972) - The Tokyo Convention Act, 1975 (20 of 1975) - The Anti-hijacking Act, 1982 (65 of 1975) - The suppression of unlawful acts against safety of Civil Aviation Act, 1982 (66 of 1982)

UNIT 4

Civil Aviation Requirements (CAR) - Section 1-General - Section 2-Airworthiness - Section 3-Air Transport - Section 4-Aerodrome standards and Air Traffic Services - Section 5-Air Safety - Section 6-Design standards and type certification - Section7-Flight crew standards, training and licensing - Section 8-Aircraft operations

UNIT 5

International Conventions: - The Chicago conventions, 1944 - The International Air Services Transit Agreement, 1944 - The International Air Transport Agreement, 1944 - The Warsaw Conventions, 1920 - The Geneva Convention, 1948 - The Rome Convention, 1952 - The Tokyo Convention, 1963

BVAL-603- ENTREPRENEURSHIP

Unit 1 Entrepreneurship: Concept and Functions

Unit 2 An Entrepreneur

Unit 3 Entrepreneurial Journey

Unit 4 Entrepreneurship as Innovation and

Unit 5 Understanding the Market

Unit 6 Business Finance and Arithmetic

Unit 7 Resource Mobilization

PRACTICALS

BVALP-601- AIR TRANSPORTATION SAFETY AND SECURITY

- Protecting Public Transportation
- Air Transportation Security Act
- Aviation Safety Assessment Program

BVALP-602- AIR REGULATIONS

- Maintenance: Role of the Engineer & Mechanic
- CRM: Evolution and Basics
- Data on Incidents/Accidents: Human Performance Analysis