

BACHELOR OF SCIENCE - AVIATION MANAGEMENT

SEMESTER - 1

Paper No	Subject	Contents Of Syllabus
Paper - I	History of Aviation- I	A historical perspective on Aviation. Aviation personnel, equipments, process and safety. Flight officers, pilots and aviators. Flight attendants, passenger safety and flight safety mechanisms.
Paper - II	Aviation Hospitality Management-I	An introduction. An overview of Typology, Classification and trends. Travel, recreation, tourism, ecotourism, mass tourism. A global overview of lodging facilities and lodging types.
Paper - III	Flight Reservation and Ticketing-I	Flight reservation and airlines ticketing. Airlines flight and computerized reservation system. Travel agency and airline ticket booking. Airport check-in, airport, boarding pass, arrival and departure.
Paper - IV	Ground handling and Management-I	Aircraft ground handling and maintenance, flight engineers, technicians and ground instructors. Aircraft round handling, ground crew, ground instructor and other staff. Flight inspection, flight plan and flight simulator. Flight instruction systems, cockpit, avrocs, display devices, data and voice recorder.
Paper - V	Cabin Safety and Security Management-I	Introduction Routine Procedures General Boarding Procedures Ramp Escorting Procedures Taxi-out Procedures Initial Climb/Cruise Responsibilities Initial Descent Procedures Final Descent Procedures Turbulence
Paper - VI	Aircraft Finance and Marketing-I	Introduction Industry Definition Civil Aerospace Sector: Current Market overview Military aerospace sector

SEMESTER - 2

Paper No	Subject	Contents Of Syllabus
Paper - I	History of Aviation- II	Flight instructors, flight training, pilot certification, licensing and associations. Major airlines, flights and jets; select case studies. Aircraft engine controls, indications and alert systems. An overview of civil aviation organization and authorities.
Paper - II	Aviation Hospitality Management-II	Problems and prospects of tourism planning. Survey of tourism functions and tourist satisfaction. Issues and options in tourism development.
Paper - III	Flight Reservation and Ticketing-II	Baggage allowance, claim and handling. Travel classes and class codes. Frequent flyer programme and other charter flights. Aircraft seating, airline timetable, flight cancellation and Related regulation.
Paper - IV	Ground handling and Management-II	Flight attitude, airspeed, direction, flight guidance computer, autopilot and collision avoidance system. Airfield traffic pattern, navigation and traffic control. Airport and aviation authorities and agreements.

Paper - V	Cabin Safety and Security Management-II	Emergency Procedures Emergency Landing- Planned Evacuation Overview Sea Ditching Fire in cabin Decompression Unruly Passengers Hijacking Dangerous food In- flight medical emergencies Bomb threats Hazard Reporting/Tracking Cabin Crew Training Internal Audits
Paper - VI	Aircraft Finance and Marketing-II	Canada's Competitiveness 2010-2020 global aerospace forecast model Policy Scenarios

SEMESTER - 3

Paper No	Subject	Contents Of Syllabus
Paper - I	Aircraft Typology-I	The early years: Military Aviation . Military hanger typology. Wire harnesses manufacturing and assembly. Introduction to the aircraft electrical system. Typologies of electrical wiring. Typologies of electrical connections.
Paper - II	Aviation Disaster Management- I	Aviation accident and incidents. List of accident and disasters by death tol aviation. Aviation safety. Aviation safety reporting system. List of accident and incidents involving commercial aircraft. List of accident and incidents involving airlines by location. Fuel tank. Mid-air collision. Uncontrolled decompression. Controlled flight into terrain. List of aircraft structural failures.
Paper - III	Airport Security- I	Airport security. Infrastructure security Airport policing in the United Kingdom. Airport police. Computer-assisted passenger prescreening system. Registered traveler. Airport racial profiling in the United States. Secondary security screening selection.
Paper - IV	Aviation Regulations-I	Executive summary. Introduction. Market structure and competition issues. Identification of anti-Competitive provision and practices. Analysis of the Identifies issue: Conclusion. Stakeholder interviews. Federal Aviation Regulations.
Paper - V	Indian Airport Management- I	Definitions and Interpretation Scope of grant. Condition precedent. Representation and Warranties. Transfer of rights in relation to airport on effective date and transition phase. Operation support. Acceptance of site/disclaimer. Construction/development, operation & management. Service quality requirement and development standards. Monitoring an information.
Paper - VI	Aviation and the Environment-I	Aviation and environment: intro. Aviation and environment. Current regulatory framework. Emission reduction potential. Policy options. Conclusion and policy recommendations for India. Critical issues in Aviation and the environment 2005.

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Paper No	Subject	Contents Of Syllabus
Paper - I	Aircraft Typology-II	Wire hardness manufacturing . Documentation for harnesses manufacturing. Wire harnesses manufacturing and assemble. Time estimation for manufacturing and assembly Control units.
Paper - II	Aviation Disaster Management- II	List of airship accidents. List of accidents and incidents involving general aviation. Accident analysis. Aircraft hijacking. List of fatalities from aviation accidents. List of sole survivors of airline accident or incidents. List of spaceflight related accident and incident. List of air show accident and incidents. Skydiving regulation in the United States. Talk down aircraft landing.
Paper - III	Airport Security- II	Secure flight. Indian airlines flight 814. Air India Flight 182. List of accidents and Incidents involving commercial aircraft. World's busiest airport. Timeline of airliner bombing attacks. World's busiest airport by passenger traffic. World's busiest airport by aircraft movements.
Paper - IV	Aviation Regulations-II	Airspace. National Security Area. Prohibited Airspace. Night Aviation Regulations in the US. Safety Pilot. Special Flight Rules Area. Special use airspace. Transport category. Aviation safety. Aviation law.
Paper - V	Indian Airport Management- II	Fees Tariff and regulation Financing arrangements and security Step in rights of AAI Disputes Force Majeure Default Term, expiry and transfer Transfer provision Schedule 1 to 28
Paper - VI	Aviation and the Environment-II	Noise. Air quality. Water quality. Environment. Tools. Technology deployment. Calculating the environmental impact of aviation emission. Sustainable aviation: future air transportation & the environment.

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Paper No	Subject	Contents Of Syllabus
Paper - I	Aviation Economics- I	Executive summary. Overview of Indian aviation. Issues. Opportunities. Scaling new heights.
Paper - II	Aircraft Maintenance-I	Mathematics. Aircraft drawings. Physics. Aircraft weight and balance. Aircraft material, processes and hardware.
Paper - III	Civil Aviation Organization-I	Applicability Definitions Recruitment and conditions of service Branches General Medical fitness certificate Age, Proof of age, Domicile Provincial quota Disqualification for appointment Verification of character/security clearance Commencement of service Classification of employees Permanent posts Temporary post Creation of abolition of post Appointments Appointing authority Initial appointments Policy for deputation Casual appointment Ex-cadre appointment Employment of contract
Paper - IV	Airline mergers and acquisitions- I	Empirical evidence of airline merger waves based on a: Selective entry model Intro Literature review Model Demand estimation Supply and equilibrium Solving game tree Estimation Parameters Importance of sampling estimator Monte carlo simulation Data Result Counterfactual Conclusion
Paper - V	Future of Aviation Industry- I	Introduction Civil Aerospace Sector: Current Market overview Military aerospace sector Canada's Competitiveness
SEMESTER - 6		
Paper No	Subject	Contents Of Syllabus

Paper - I	Aviation Economics- II	Abbreviation. Opportunities and challenges. Tax and regulatory aerospace industrial base. FDI Aviation: Retrospection in the Indian economy. Airline economics.
Paper - II	Aircraft Maintenance-II	Aircraft cleaning and corrosion control. Fluid lines and fittings. Inspection fundamentals. Hand tools and measuring devices.
Paper - III	Civil Aviation Organization-II	Promotion, Promotion criteria Move over Retirement from service and admissibility of terminal benefits Leave preparatory to retirement Re- employment after the age superannuation Employment in international organizations Probation, Termination, Confirmation, Resignation Effect of abolition of post Certification Posting/transfer Competent authority to order transfer Officiating arrangement Current charges Deputation to other organization with country Creation of posts of officers on special duty and making appointment thereto Deputation of CCA employees to international organization/foreign/government Lein General principles of seniority Seniority of employees recruited directly Preparation of seniority list Seniority of employees appointed by promotion Explanation Seniority of promotion Vis-is-Vis direct recruits Seniority of person whose training is prerequisite to appointment Seniority of transferees Seniority of amalgamation of cadres/posts Seniority of employee vis-à-vis employee of other cadres Seniority of contract employees
Paper - IV	Airline mergers and acquisitions- II	Airline Industry: Case studies of potential mergers and acquisition driven by financial and competitive pressure. Appendix- 1: scope and methodology. Appendix- 2: Delta and northwest merger. Appendix- 3: Number and size of dominated markets by airline in the top 5000 markets, 2006. Appendix- 4: GAO contact and staff acknowledgements. Airline merger integration. Mergers between major airlines: the anti competitive and anti consumer effects of the creation of a private cartel.

Paper - V	Future of Aviation Industry- II	<p>2010-2020 global aerospace forecast model</p> <p>Civil aerospace sector forecast</p> <p>Military aerospace sector forecast</p> <p>Military spending scenarios.</p> <p>Global Civil & Military forecast comparison:</p> <p>Net Present value of aerospace revenue growth:</p> <p>Civil aerospace sector.</p> <p>Military aerospace sector.</p> <p>Policy Scenarios:</p> <p>R & R investment remains a critical issue in driving innovation and ensure Canada's overall competitiveness:</p> <p>R&D investment- Methodology.</p> <p>R&D investment- Result.</p> <p>Canada has the potential to double aerospace employment by 2020.</p> <p>Aerospace manufacture overview.</p> <p>Product segmentation.</p> <p>Geographic segmentation.</p> <p>Industry cost structure.</p> <p>Manufacturing, repair and overhaul overview.</p> <p>Product segmentation.</p> <p>Geographic segmentation.</p> <p>Industry cost structure.</p> <p>Training & simulation overview.</p> <p>Space overview.</p> <p>Product Segmentation.</p> <p>Civil forecasting model.</p> <p>Military forecasting model.</p>
Paper - VI	Dissertation	