M.A. (Aviation Law and Air Transport Management) III Semester

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Scheme of Discussion

- **Part I:** The Linkage between Law and Technology , Industrial Revolutions and Technology and NET and NEST
- **Part II:** Linkage Between Law and Management and Interplay between Law and Management, Global Aviation Developments and Changing Management Patterns
- **Part III:** COVID 19 Impact on Aviation Industry including Airlines, Airports, Changing Business Environment, COVID-19 --Key Challenges for Lawyers and Managers
- **Part IV:** Description of the Course Structure- Masters Programme, Brief Description about the Papers and Modules, 6 Papers on Law and 6 papers on Management

Law and Technology

- Law follows technology or technological developments necessitate the legal regulations. It is true with the aviation technologies.
- In a span of over a century from the invention of aircraft by writer bothers in 1903 to the present, many technological developments occurred . Propeller -driven planes giving way to jets, which have now been surpassed by planes that can fly into space leading to Aerospace Transport
- Ongoing developments in aviation technologies illustrates the observation that "Law lags science; it does not lead it."
- Relationship between law and technology has always been uneasy. Law had been slow and lethargic to respond to new technologies.
- Till recently the law makers handled problems presented by technology with out break down of legal resources. Legal policy makers find it difficult to address.

Law and Technology

- New technologies invented over the last few decades has revolutionized governance, transportation, commerce, communications, delivery, and nearly all aspects of our lives.
- Vast opportunities have opened up in enhancing prosperity and security.
- The protection of critical infrastructure in the face of cyber of attacks; likely joblessness on account of increased automation; change in the nature of workplace due to 3-D printing are some of these.
- Technological development is a continuous process. It is improving all the time.
- Law has to move in- tandem with the technological advances.
- It cannot be helped, it is as it should be, that the law is behind the times. - Oliver Wendell Holmes
- Techno-Driven Laws including Air Law, Space Law, IT Law, IP Law, Cyber Law, Telecom Law, etc.,

Evolution of Technology

- Ancient Technology-- Invention of ramp to aid construction processes; Bronze technology used in Mesopotamia; City planning and sanitation technologies in Indus Valley Civilization; Seafaring technology; Early Seismic detectors by Chinese Civilization; Magnetic compass; Water Lifting Technologies; Wheel Technology; Metallurgical Technology
- Medieval Technology--Mechanical Clocks; Vertical Windmill; Dry Compass; Textile manufacturing; Communication Technology; Paper making Technology; Steam Engine; Railway Transportation
- Modern Technology --Broadband Internet Access; Quantum Computers; Nanotechnology; Biotechnology; Whole genome sequencing; Scramjets and Drones

Three Industrial Revolutions

- The First Industrial Revolution started in Britain around **1760s, was about coal, water and steam,** bringing with it the steam engine and **innovations that enabled the large scale manufacturing of goods and products,** such as textiles. Its impact on civilization was immense.
- The Second Industrial Revolution came about with the **invention of electricity and enabled mass production**, Dating from the late 1860s to early 1900s, it allowed much of the progress of the first industrial revolution to **move beyond cities and achieve scale across countries and continents.**
- The inventions of the semiconductor, personal computer and the internet marked the Third Industrial Revolution starting in the 1950s and 60s. This is also referred to as the **"Digital Revolution**.“ The Third Industrial Revolution was all about computers. Transistors, which eventually allow for the ultimate in scale: **globalization and Global Village**

4th IR or Knowledge Revolution

- Now a Fourth Industrial Revolution is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a **fusion of technologies that is blurring the lines between the physical, digital, and biological spheres**.
- Compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the **transformation of entire systems of production, management, and governance**.
- The Fourth Industrial Revolution covers wide-ranging fields such as Artificial intelligence, The Internet of Things (IoT), robotics, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science, energy savings, computing, etc.

The Pros of the 4th IR

- Fourth Industrial Revolution has the **potential to raise global income levels and improve the quality of life for populations around the world. technology has made possible new products and services that increase the efficiency and pleasure of our personal lives**.
- Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game—any of these can now be done remotely.
- The Fourth Industrial Revolution represents a fundamental change in the way we live, work and relate to one another. **It is a new chapter in human development, enabled by extraordinary technology advances commensurate with those of the first, second and third industrial revolutions.**
- Transportation and communication costs will drop, logistics and global supply chains will become more effective, and the cost of trade will diminish, all of which will open new markets and drive economic growth.

NET and Legal issues

- The emerging technologies of Artificial Intelligence (AI), Automation, Big Data, Block chain, 3D printing, Cyber technology, Cloud Computing, Crypto Currency, Drones, Energy, Genetic, Geo special, Mobile, Machine learning, Nano, Robotic technologies etc. have garnered an incredible amount of attention and changing the living patterns of the human being
- **Major legal issues concerning "New and Emerging Technologies" (NET) :**
- **Traditional:** Technology and its Impact on State Sovereignty, State Jurisdiction, State Responsibility, Privacy, Security,
- **Modern:** Technology Impact on legal issues regulating the use and mis- use of data, evidence, Protection of creative works, and inventions including IP, Mobile, Biometric mobile, Facial recognition technology, biotechnology, genetic testing, nanotechnology, synthetic biology, computer privacy, autonomous robotics etc.,
- These technologies are generating fair amount of litigation, and presented concerns regarding the possibility of intrusive governmental surveillance and needs new approaches to ensure appropriate and timely regulatory responses

Legal Question

- **The existing legal regimes is unable to deal effectively with new and innovative technology are also rising lot of legal Questions**
- Do machines have morality?
- What legal liability regime should we adopt for damages arising from these Technologies?
- Which ethical guideline should we adopt to orient its advancement?
- Is anticipative regulation justified for certain classes of risks in applications of these technologies?
- Should legal systems resort to the precautionary principle to avoid dealing with the risks of a rapidly changing technological trajectory?
- Are technology-based initiatives necessary, or is a product-specific approach more appropriate? Can a line be drawn between legal and ethical guidance in this context?

NET to NEST

- In January 2020, the Ministry of External Affairs (MEA) took the progressive step to establish India's first, New and Emerging Strategic Technologies (NEST) division.
- NEST will act as the nodal division within the ministry for issues pertaining to new and emerging technologies. It will help in collaboration with foreign partners in the field of 5G and artificial intelligence. Its mandate shall include, but not be limited to, evolving India's external technology policy in coordination with domestic stakeholders and in line with India's developmental priorities and national security goals.
- It will also help assess foreign policy and international legal implications of new and emerging technologies and technology-based resources, and recommend appropriate foreign policy choice.
- NEST will negotiate technology governance rules, standards and architecture, suited to India's conditions, in multilateral and plurilateral frameworks.

Understanding Management

- By studying Management, one can gain the skills and **knowledge essential for managing key areas of organizations.**
- It helps to develop an understanding of the role and **interrelationship between strategic management, human resource management and operations management.**
- Further, it also helps in appreciating of the **global challenges facing managers from both an operational and a strategic perspective,** and are sensitive to the need for mainstreaming of business ethics and corporate social responsibility into management policy and practice.
- **Managers often possess an attitude that separates legal issues from the strategic and operational concerns of the business**.
- However, in a global economy where goods, services, and investments move across political borders, subjecting businesses to the growing complexity of regulation and liability in other countries, this conventional approach to legal concerns is no longer realistic.

Business and Management

- The development of **business is heavily influenced by the legal environment, including the global legal environment and technology.**
- Business takes advantage of opportunities afforded by the economic, political, social, and technological environment. Business practices must change to meet the changing environment – including the legal environment.
- If the legal system is too rigid the economy is restricted. It may also be that certain fields of technological endeavor are more restricted by laws than others.
- Imagine doing **business** without any **legal** means **to** protect your best interests, you'll understand why the rule of **law** is important **to business**.
- The rule of **law** gives everyone a framework for **how to** act and operate. It holds people, **businesses** and government accountable for their actions, Origins of Management

Interplay between Law and Management

- The interplay between law and management helps to use law proactively in management situations, learn to use law and legal tools to increase total value created and the share of that value captured by the firm, understand the relationship between law and business, use knowledge of law to avoid difficult dispute situations and learn the role of legal advice in a corporation.
- Law helps learn and think about society morality, public perception, politics and world events. It also helps further to understand the social impact, academic and professional skills.
- The purposes and functions of **business law** include maintaining order, protecting rights and liberties, establishing standards, and resolving disputes when it comes to **businesses** and their interactions with individuals, government agencies, and other **businesses**.

Law and Management

- By studying **Management one can gain the skills and knowledge essential for managing key areas of aviation industry**.
- Management helps in understanding of the **role and interrelationship between strategic management, Financial Management, human resource management and operations management.**
- Having knowledge in management will appreciate the global challenges facing managers from both an operational and a strategic perspective, and are sensitive to the need for mainstreaming of business ethics and corporate social responsibility into management policy and practice
- **In this Programme the students become aviation law experts and gives a rare opportunity for Lawyers to get a rare specialisation in aviation law, while becoming an air transport management expert.**
- Course Participants will have a sound and strong foundation on legal and management patterns of international civil aviation sector
- Also will be well-equipped to handle practical and contemporary aspects and challenges faced in the daily governance of the aviation industry.

Global Aviation Developments and Changing Management Patterns

- With the increasing globalisation of economies, liberalisation of aviation policies, new technological developments in civil aviation, private participation in airlines and airports, liberal and "open skies" bilateral agreements, are the some of the new trends.
- Deregulation and intensified global competition are forcing airlines to become responsive, competitive and efficient by focusing more closely on their customers and operations.
- The technological, infrastructural, institutional, economic and human challenges have prompted those in charge of airlines and aviation-related agencies to effect a shift in their polices and approaches pursued for years.

Global Aviation Developments and Changing Management Patterns

- The **attitude of the government and industry towards the regulation of air transport has undergone a profound change over the past few decades in almost all parts of the world** The worldwide impact of deregulation, privatization and globalization forced all parties to rethink the ground rules by which the airline industry had been regulated since the Chicago Convention 1944.
- Even many countries in Asia and Africa, which once adopted a defensive position against liberalization, have recognized powerful pressures for changes in the regulatory system
- The global economic forces are compelling the governments and airlines All over the world to redefine their respective roles in air transport Management.

COVID-19 Pandemic

- The COVID-19 Pandemic has forced states to Closed borders, quarantine imposed on people, travel bans, paralyzed supply chains, and export and import restrictions
- **The impact of the pandemic COVID-19 poses fundamentals questions :** How will the pandemic influence the international order in the future?. How the pandemic might reshape the world order, including prospects for international cooperation. Can the pandemic will accelerate USA decline and the advent of a more multipolar world ?.
- It can be argued that the COVID-19 situation is unprecedented in scale, and thus the recovery might look different or take longer than it has in the past.
- Predicting the outcome of this situation is a futile attempt at this point in time, but it is reassuring that signs of recovery are emerging from the regions which has dealt with the situation the longest
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Pandemics and outbreaks and Civil Aviation

- Pandemics and outbreaks are not the only challenges aviation has been faced with. The industry has also been **challenged by oil crisis, acts of terrorism and war. Middle Eastern respiratory syndrome (MERS), severe acute respiratory syndrome (SARS), Ebola virus disease, and Zika virus**.
- **11 September 2001**: The terrorist attacks of 9/11 had a devastating effect on air travel. US airspace was closed for a week and international travel was severely affected.
- Available seat kilometres for winter 2001–02 were down by 15 per cent on transatlantic and trans-Pacific routes, with American carriers reducing more capacity than their European counterparts.
- Fuel prices had increased markedly and customer satisfaction had declined. It has also been argued that 9/11 was utilized by companies to push already existing restructuring plans.
- Social dialogue was used to mitigate the consequences for workers. The measures included pay cuts, reduced working time and work-sharing.

Pandemics, outbreaks and Civil Aviation

- **SARS 2002–03**. It is claimed that the Severe Acute Respiratory Syndrome (SARS) epidemic (November 2002–July 2003) caused more damage to air transport than 9/11 and the Iraq war put together. Traffic in April 2003 was down 18.5 per cent year on year. Especially hard hit were airlines in Asia and airports in Hong Kong (China), Singapore and Seoul, where traffic decreased 40–60 per cent.
- **Economic crisis 2008–**09- civil aviation suffered major losses during the economic crisis of 2008–09. In 2008 operating losses for the 150 biggest airlines were US$15 billion and in the United States 13 airlines went bankrupt. The economic crisis resulted in varied outcomes for airline personnel. For example, Lufthansa reduced working hours in its freight operations, British Airways put temporary lay-offs.
- Voluntary redundancies and non-renewal of temporary contracts were reported by surveyed unions. International Federation of Air Traffic Controllers’ Associations (IFATCA) expressed its concern about reports of reductions in training.

Pandemics, outbreaks and Civil Aviation

- **Volcanic ash problems in 2010**
- The eruption of Eyfjallajökull, a volcano in Iceland, in April 2010, caused the largest breakdown in civil aviation since Second World War.
- During the first week 100,000 flights were cancelled and the costs for the global economy during that week were calculated as US$4.7 billion.
- The disruption affected some 10 million passengers.
- In response to the eruption, a volcano watch system was created by the International Civil Aviation Organization (ICAO) and a task force delivered practical tools in June 2012.

Impact of COVID on Aviation

- One of the industries that the coronavirus pandemic is threatening is the airline industry. Flights are almost empty. Flight schedules have been dramatically reduced. The warnings from trade associations are dire.
- **Issues such as Rental payments, force majeure and rent holidays, Leasing issues particularly Wet leases, Airport slots, Passengers' rights to refunds, crisis has affected the litigation process, Third party contractor agreements/Hedging arrangement for jet fuel prices, Financing Arrangements, Restructuring, Import Duties and Trade barriers**
- People who work for airlines don't know what's going to happen, affects not only the public health but also the business world. There is no doubt that the civil aviation sector is the most affected sector by the epidemic and hundreds of airlines have to ground thousands of airplanes due to flight bans.
- ICAO, ACI, IATA, TIACA, WFP and WHO have worked in close cooperation in the development of this single source for aviation-specific guidelines with the objective of ensuring appropriate planning and action at all levels in order to mitigate the effects of a human outbreak.

Impact of COVID on Aviation

- The outbreak of the pandemic Covid-19 has impacted the Aviation Sector adversely which was already suffering from huge losses. The **Aviation Sector in India has been amongst the biggest loss-making sectors in the country**, with Airlines barely managing to break-even. With existing low-availability of credit to maintain day to day operations, the lockdown will have destructive effect on the sector.
- In such a situation, the airlines can seek invocation of Force Majeure clauses to defer payment of taxes, oil charges, and salary to workers amongst other payments, since it is evident that if the current situation exists, most of the airlines would have wiped out their cash reserves.
- In the current scenario, the airlines should invoke the Force Majeure clause forming part of the Civil Aviation agreement executed between the said Airline and the Airports Authority of India.
- With the current prevalent scenario, it is highly likely that the Aviation sector is bound to suffer magnanimous losses in the near future,

Impact of COVID on Aviation

- The spread of COVID-19 has already resulted in an increase in companies experiencing financial distress as they try to mitigate the financial impact of supply chain issues coupled with lower customer demand.
- COVID-19 has affected significantly on certain industries, such as civil aviation, ports & airports, hospitality, tours & travels, and retail to name a few. The disruption in supply change has also impacted the manufacturing industry, unavailability of raw material and a drop in demand. If the current situation continues or worsens, some cases of insolvency may as well be filed.
- The Federation of Indian Chambers of Commerce and Industry (FICCI) has suggested that the government should declare that force majeure applies to all civil aviation contracts to save the domestic civil aviation industry from the COVID-19 induced crisis.
- FICCI also recommended that in order to cut down the cost of fuel, the Oil Marketing Companies may be directed to extend unsecured interest-free credit terms to the aviation sector as the aviation turbine fuel is one of the three major costs for domestic airlines

Impact on Airlines Sector

- According to the International Air Transport Association (IATA), at the beginning of 2020 the airline industry was maintaining a long-term annual growth rate of 5.5%. In the current situation, where governments are drastically reducing travel and airlines are cancelling flights and grounding their fleet, revenue from passengers is being reduced to zero.
- This will result in a **loss of operating cash flow** over the next few months of tens of millions of Dollars/Euros, in addition to the cost of customer refunds. Some airline operators around the world have already requested state support due to the sudden plunge in passenger traffic.
- The next consequence in the chain of events is that many airlines will not be **able to maintain their aircraft leases**, directly affecting aircraft leasing companies, which currently account for more than a third of all operational aircraft. Similarly, operators who have orders for aircraft currently in progress will be quick to negotiate with manufacturers to arrange a cancellation or, at best, an indefinite delay in delivery.

Impact on Airlines Sector

The most visible impact is on the airlines as in most countries the domestic as well as international air traffic has come to a standstill.

Airlines are more fragile than the airport operators at the moment since a considerable percentage of airlines were struggling to survive even before the COVID-19 crisis started showing its impact. So if rescuing these airlines was a tough task before, now it seems next to impossible

Airlines face different challenges in different parts of the world. While the majority of these are looking to reduce the number of flights in certain sectors, one major challenge discussed was the restrictions due to antitrust laws. These laws restrict the airlines from communicating with each other before cancelling flights intelligently.

Airlines around the world are confronting the challenge of a sharp decline in demand, complicated by almost total uncertainty about when the virus will be under control and travel can return to normal.

The collapse in demand has led major airlines worldwide to announce severe cost-cutting measures, request government assistance, and, in the case of certain airlines, ground fleets. Many airlines are seeing more cancellations than bookings.

Impact on Airport Sector

- In the airport sector, we are already seeing empty terminals. Most international flights scheduled for the next few days anywhere in the world are devoted to the repatriation of residents who have been caught off guard by the health crisis while far from home.
- Domestic flights have been reduced to a bare minimum due to the restrictions on movement imposed in dozens of countries. **For airports, this means not only minimizing their activity** in the immediate term, but also closing their commercial areas, halting the activity of airport service companies and reducing their operating income practically to zero.
- In today's unprecedented situation, airlines and airports are at the forefront taking the brunt of this global COVID-19 crisis.
- The ACI estimates that this year the sector will have a loss of approximately US$46 trillion by the end of 2020.

Impact on Airport Sector

- To mitigate these losses, Airports are trying to decrease its expenditure by postponing capital investments and resorting to various cost-containment measures. However, just like the Airlines, Airports are dependent on the government for support till they are stabilised
- Private owned airport owners are also negotiating with the governments for the concessions and finances.
- ACI has reached out to India's civil aviation ministry seeking to bail out the players affected by Covid-19 virus outbreak. The global body took to the notice of the Indian government that Covid-19 outbreak has "drastically impacted the airport business and is posing a serious threat to the financial sustainability of the airport India.
- ACI has also recommended to the Indian government that “alternative relief measures should be explored to support both the airlines and the airport industries as primary generator of economic and social value for the country.”

COVID-19 and Changing Business Environment

- What sorts of guidelines and input should guide product design?
- How desirable are knowledge-sharing agreements?
- Joint development of technology and know-how?
- What are ideal features of international business partners?
- How should management monitor competitive activity?
- How can competitive advantages be created and sustained?
- What degree of attachment is optimal to alternative sourcing and production locations around the world?
- Management has to grapple with these and many other similar questions on an ongoing basis.

IMPACT OF COVID-19 ON DOMESTIC INSTITUTIONS

- No industry has escaped the impact of COVID-19.
- Some have been hit hard, for example; Travel, Tourism, Entertainment Hotel Industries, steel, textiles, etc. Others, such as food and beverages, paper, pharmaceuticals, and industrial machinery and equipment, have fared better.
- An ongoing restructuring was put in motion as a result of the globalization of markets. Downsizing, consolidation, and reconfiguration are common terms used to describe the current state of affairs in all industries.
- The new realities of the global marketplace have prompted business organizations to be constantly in search of enhanced productivity and new sources of competitive advantage. Such efforts to critically examine one's capabilities can be classified into several thrusts

COVID-19 --Key Challenges for Lawyers and Managers

- In the COVID- Phase, perhaps the most important contribution the legal profession can make is to assist managers in the achievement of sustainable competitive advantage.
- As those who guide a business enterprise search for sources of competitive advantage, their efforts can be facilitated greatly by legal professionals. It is best if legal and management professionals can work as a team in avoiding and resolving conflict.
- These professionals bring different perspectives to decision-making-suitable decisions can be achieved with joint decision-making. Each business enterprise will need to formulate creative mechanisms to enable a team approach to decision-making.

COVID-19 --Key Challenges for Lawyers and Managers

- The role that can be fulfilled by legal professionals including guiding the future courses of action for the enterprise.
- What kind of guidance enterprises required? How should the firm be interacting with its external partners (e.g., suppliers, buyers, competitors, and regulators)?
- How should it position itself within its industry? How should it choose its target markets? What new sources of competitive advantage should it pursue?
- How should it configure its global procurement, manufacturing, and marketing operations, and coordinate them? These are areas where legal professionals could provide input to guide Managers of the company .

COVID-19 --Key Challenges for Lawyers and Managers

- Participation in cross-border transactions poses some unique legal concerns for companies. The legal profession will need to pay continued attention to these management issues. These issues are outlined below.
- **Legal Agreements and Conflict Resolution in International Business Transactions** How should sales, distributor licensing contracts be structured? How detailed should they be? What are the mechanisms for satisfactory conflict resolution?
- **Intellectual Property Protection**: This perennial problem is a concern for most technology-intensive firms. International partners continue to have their own interpretations of the rights and obligations associated with technology transfer. Practical mechanisms for ensuring protection are absent.

COVID-19 --Key Challenges for Lawyers and Managers

- **Standards and Product Liability**: Legal systems for product liability exhibit great variations from country to country. Simplification and harmonization of legal processes will be a high priority for international trade lawyers.
- ***Dumping and Anti-dumping*** . The legal profession will continue to be involved in dumping suits initiated by domestic manufacturers. Effectiveness of such appeals will depend upon their ability to generate convincing evidence of deliberate underpricing
- **International Business Ethics** For many years the U.S. business community has argued that the Foreign Corrupt Practices Act (FCPA) creates a competitive disadvantage in international operations.
- **Environmental Impact** Multinational companies will be under tremendous scrutiny for the potentially damaging impact to their host country environments. Creative strategies are needed in this area in order to avoid such problems.

CASL/CADL: Law and Management

- **NALSAR-CADL** has taken an initiative to offer this unique programmes to benefit the students/ working executives to gain the competitive edge in their career profiles.
- **Aviation Law & Air Transport Management is a unique super competency course. To provide best aviation education with global perspective, at affordable cost.**
- Legal and Management aspects of Aviation Industry is so well interconnected that the study of one aspect was incomplete without the study of the other.
- Through this program we aims to **create an industry of aviation managers and lawyers** to cater the growing aviation industry **at National and International .**
- Our course participants would not only have a sound and strong foundation on legal and management patterns of aviation sector but also will be well-equipped to handle **practical and contemporary aspects and challenges faced in the daily governance of the aviation**.
- NALSAR-CADL intend to institutionalizes the academic-industry partnerships in the domains of air transport management and aviation law.

Structure of the M.A Course

- **SEMESTER I:**

  General Principles of Law, International Air Law, General Principles of Management, Airport Management

- **SEMESTER II:**

  Domestic Air Laws in India, Aviation Safety, Security and Liability Laws, Airline Management, Air Space & Air Traffic Management

- **SEMESTER III:**

  Aviation Contracts and Tenders, Aviation Corporate Laws, Air Transport Economics and Statistics, Aviation Marketing

- **SEMESTER IV:**

  Dissertation

Paper I: General Principles of Law

- **Module I** – Discuss the definition, nature, scope, sources and importance of law.
- **Module II** – Indian Constitution and administrative law including nature history and development, silent features of the Indian Constitution. This module briefly covers the important Principles of administrative law.
- **Module III:** Covers Indian Judicial and Legal Systems including Indian Judiciary, Civil and Criminal Court Structure. This module also briefly touches Quasi Judicial Settlement mechanisms and ADR Dispute settlement
- **Module IV** - Fundamental Aspects of Law and its Relevance to Air Law including subjects like law of torts, consumer laws, criminal laws, intellectual property laws, cyber laws etc. and their relationship with International and domestic Air laws.
- **Module V** - Fundamental Aspects of Corporate Laws and its Relevance to Air Laws including relevant areas of corporate laws , contract law, company law, competition law, insurance law, taxation law and their relationship with aviation sector in India.
- **Module VI:** Project Writing and Research Methodology. Importance of Research, 35-40% marks are part of Project and Dissertation

Paper II: International Air Law

- **Module –I** covers Introduction to International Law including Definition, Nature Scope, Sources, Subjects, Relations between IL and Municipal Law.
- **Module-II** Covers Introduction to Int. Air Law including Definition, Sources, Theories and Subjects of Air Law. This module also briefly covers the Development of Air Law before the Chicago Convention including the Paris Convention 1910, Paris Convention 1919 and other Int.Air Law Treaties
- **Module-III** Covers Chicago Conference and Chicago Convention. It briefly touches the historical evolution of Chicago Convention and the outcome of the Chicago Conference including interim agreement, Two freedoms agreement, Five freedoms agreements, Standard Form of Bilateral Air Service Agreement and various annexes to the Chicago Conference.
- **Module-IV** focuses on the Structure and Functioning of the ICAO. Its role in making Int. Air Law including the recent Aviation Treaties.
- **Module-V** covers the recent developments in International Air Law including Deregulation and its impact on Aviation Industry. It also further covers Globalization, Liberalization, Privatization of International Civil Aviation.

Paper III: Domestic Air Laws in India

- **Module I: Domestic implementation of International Air Law in India, EU, UK and USA-** Why and How Domestic Implementation of International Law, Indian Constitution, Indian Judiciary and International Law, Domestic Implementation in EU, UK and USA–
- **Module II: Aircraft Act,1934 and Aircraft Rules, 1937-** Aircraft Act, 1934, Aircraft Rules, 1937 and Various Amendments, Civil Aviation Regulations and Important Cases
- **Module III: Domestic Implementation of Air Safety and Security Regulations in India**--ICAO, India and Air Safety Regulations, DGCA and Air Safety Regulations, Air Safety Regulations and Recent Developments, Aviation Security Regulations in Indian including, Tokyo Convention 1975, Anti-Hijacking Act, 1982, Unlawful Seizure against the Safety of Civil Aviation 1982, Anti-Hijacking Act, 2016
- **Module IV: Aviation Liability in Indi**a- Civil and Criminal Liability in India Carriage by Air Act, 1972, The Carriage by Air (Amendment) Act, 2009, Mangalore crash and Implementation of Montreal Convention of 1999. It also discuss the important cases in carriers liability.
- **Module-V: Civil Aviation and Contemporary Issues in India-** Globalization, Liberalization and privatization (GLP) of aviation sector and Indian Responses , Airport Privatization Legal Issues, The Airports Authority of India Act, 1994 and various amendments, Airport Infrastructure Policy 1997, Joint Airlines Privatization Legal Issues, Mergers and Acquisition: Legal Issues, Competition Issues in Aviation Issues, Leasing and Financing in Airlines , FDI in Aviation Sector.

Paper IV: Aviation Safety, Security and Liability Laws

- The objective of the paper is to highlight the various difficulties in regulating air safety and security and the measures taken by international organisations, particularly the ICAO, in this direction.
- **MODULE I:** Global air safety regulations including the concept of air safety, the role of ICAO, various annexes to the Chicago Convention.
- **MODULE II:** Global air security regulations including concept of security, annex 17 of Chicago Convention, various international conventions on security, Tokyo, Hague and Montreal Convention and recent developments.
- **MODULE III:** Anti hijacking, aviation terrorism and Global Regulations including the role of United Nations, the ICAO and other institutions in protecting Anti-Hijacking activities.
- **MODULE IV:** Aviation Liability and Warsaw System including the Warsaw Convention, The Hague Protocols, Montreal conventions etc.

Paper V: Aviation Contracts and Tenders

- Module I: General Principles of Contracts- Purpose of Contract Law, Nature, Scope, Definition, Intention to create legal relation, Classification of Contracts, Offer, Acceptance, Consideration, Free Consent, Competency to Contract, Unlawful Object, Performance of Contracts, Discharge of Contract, Remedies to Breach of Contract, Liquidated Contracts, Quasi Contracts-Contract of Indemnity;
- Module II: International Contract Law: Norms and Drafting Guidelines, Tenders and Tendering Procedures, International Contractual Negotiations, Principles for Drafting of International Commercial Contracts, Norms for Drafting International Commercial Contracts;
- Module III: Airline Contracts Aviation Insurance Contracts, Airline Lease Agreement, Airline Purchase and Sales Agreement, Contract of Carriage by Air, Aircraft Maintenance, Repair and Overhaul Agreement, Ground Handling Agreement, Code-Sharing and Interline Agreement;
- Module IV: Airport Contracts: Airport Lease Agreement, PPP In Airport Infrastructure, Airport In-Terminal Concession Agreement.

Paper VI: Aviation Corporate Laws

- Module I: Fundamentals of Company Law; Introduction to Company Law, Kinds of Companies, Incorporation and Promotion of Company, Prospectus and Commencement of Business, Shares and Debentures, Management of a Company, Winding Up and CSR
- Module II: Mergers, Acquisitions and Joint Ventures in India, History of Mergers and Acquisitions, Process of Mergers and Acquisitions, Mergers and Acquisitions in Aviation Industry, Alliances and Joint Ventures in Civil Aviation;
- Module III: Competition Law and Civil Aviation in India; Overview of Competition Act 2002, Competition Law and Aviation Sector: Emerging Legal Issues;
- Module IV: Business Opportunities in Aviation Sector: Recent Developments, Choosing Between Bilateralism and Multilateralism: Approaches for Improving Market Access in The Indian Civil Aviation Industry, Aviation Insurance, Fractional Ownership Indian Scenario: A Jurisprudential Analysis, Emerging Regulatory Issues and Challenges, Project Finance in Aviation, Special Economic Zones and Airports, Aircraft Leasing In India: An Overview, Economic Regulatory Authority of India, Financing of Aircraft;
- Module V: Contemporary Challenges in Corporate Aviation Laws; Foreign Investment, Business Regulations, Financial Sector, Labour and Employment Regulations, Intellectual Property, Tax Framework, Real Estate Sector, Civil Aviation and Special Economic Zones

Paper I:Principles of Management

- **Module 1 : Nature of Management and Functions, Skills and Roles of Managers**: Management and it's evolution, Scope, Importance, Qualities of Managers, Managerial & Institution Building skills, difference between Management & Administration, the role of Managers.
- **Module 2 : Coordination, Planning and Forecasting**
- **Module 3 : Management by Objectives; Decision Making process and how creativity helps in better decision making by Management to achieve Objectives**.
- **Module 4 : Managing Human Resources; Training & Development**: HRM and HRD with special reference to Aviation Industry have been discussed. Similarly the need and rationale of training, its scope, designing and benefits are discussed.
- **Module 5 : Importance of Motivation to keep their Morale high for better productivity and take up leadership roles and Communication in managing the conflicts and stress** In the 5th module general topics like Motivation, Morale, productivity, Leadership, Communication, Conflict Management and Stress Management are discussed with cases.
- **Module 6 : How to manage effectively the Organization change and Future of Human Resource Management** In the 6th module Change management, challenges like resistance to change and the future of HR, impact of Technology on HR are discussed.

Paper II: Airport Management

- **Module I- Fundamentals of Airport Management including** Historical Evolution of Airport Management, Airport Governance, Ownership & Control of airports both public and private, Organizational Pattern by ICAO, ACI and Domestic Framework in India
- **Module II - Airport Economics & Financial Management covers** Economies of Air Travel: Supply & Demand, Expenditure and Revenue Structure at Airports, Financial Management at Airport, Price Regulations & Airport Concessions, Airport Concessions and its Impact on Airline Operations
- **Module III - Airport Operations and Service Quality including** Airport Planning & Development, Environmental Impact Assessment, Economic and Financial Feasibility, Service Quality Management, Airport Safety & Security etc.
- **Module IV- Airport-Airline Relationship covers** Structure of Airport-Airline Relationship, Aeronautical Charges and Airline Operations, Non-Aeronautical Charges: Development and Management, Setting Fees and Charges for Non-Aeronautical Activities **and** Slot Allocation
- **Module V- Contemporary Issues in Airport Management including** Privatization of Airports in India, Environmental Concerns in Airport Management, Airport Commercial & Retail Management, Brownfield and Greenfield Airport, . Law for Airports **and** Airport Management in the 21st Century.

Paper III: Airline Management

- **Module 1**: **Introduction to Airline Management** – History and Evolution of Airline Industry - Commercial and Cargo; Growth & Challenges in Airline Industry; Basic functions of Airline Management; Players in Airline Industry; Global Trends in Airline Industry; Multilateral Approaches, Yield management, Airline Product, Travel demand, Airline Cost, Pricing and Revenue Management, Airline organization structure, flight operation, Airline fleet.
- **Module 2: Airline Terminal Management and Human Resource**- Flight Information Counter/Reservation and Ticketing-Check In/Issue of Boarding pass-Customs and Immigration formalities-Co-ordination-Security Clearance-Baggage and -Handling of Unaccompanied minors and Disabled Passengers-Handling of Stretcher Passengers and Human Remains-Handling etc.,
- **Module 3: The Regulatory Framework of Airline Management** - Economic characteristics of the Airline Industry; Types of Alliances between Airlines; Code Sharing; Competition issues in Airline Industry; Role of IATA & ICAO; DGCA -, aircraft leasing and financing, Case study
- **Module 4**: **Global trends in Airline Management** - Public Private Participation in Airline Industry-Joint Ventures; Mergers and Acquisitions; Environmental regulations; Regulatory compliances, Regulatory issues; Airport fees, rates, and charges; Promotion Marketing; marketing strategy; frequent flyer programmes; marketing techniques etc.,
- **Module 5: Airline Industry in India** - Development of Air transportation in India; Major players in Airline Industry; Market potential of Indian Airline Industry; Current challenges in Airline Industry in India; Role of IATA & ICAO, Airline Mergers and various Case studies including Jet-Sahara, Air India- Indian Airlines, Liberal and Open sky bilateral Agreement, Case Study.

Paper IV: Air Space and Air Traffic Management

- **MODULE I:** INTRODUCTION TO AIR SPACE AND AIR TRAFFIC MANAGEMENT Meaning of Air Traffic Services, Controlled Air Space, CNS/ATM, International Emergency Procedure, Aviation Meteorological Services, Legal Framework for Air Space and Air Traffic Management:Liability of States and ATS Providers, Satellite Imagery and Space Law Applications.
- **MODULE II:** AIR SPACE AND AIR TRAFFIC MANAGEMENT: Available and Emerging Technology, Human Factors in Air Traffic Management, CNS/ATM Technology Improvements, National Flow Management, Separation Assurance and Technical Performance, Dense Terminal Airspace, Capacity etc..
- **Module III:** COMMUNICATIONS, NAVIGATION, SURVEILLANCE/ AIR TRAFFIC MANAGEMENT An Overview ICAO's Planning Structure for the CNS/ATM System, Global Planning Methodology , Communication Systems, Navigation Systems, Surveillance Systems, Meteorology, Aeronautical Information Services.
- **MODULE IV:** ICAO AND AIR SPACE AND AIR TRAFFIC MANAGEMENT: ICAO Institutional and Regulatory Framework, Civil and Military Inter-operability, Air Space Organization and Management, ATM Security and ATM in crisis etc,.
- **MODULE V:** AIR SPACE AND AIR TRAFFIC MANAGEMENT IN INDIA: IMCA, DGCA, AAI and other entities, Role of Air Traffic Controllers in India: Meaning, Role, Responsibilities and Categories, The Future of Air Space and Air Traffic Management in India: Satellite Based Navigation System, Flexible Use Of India's Airspace , A National High Level Airspace Policy Board, Growth Challenges.

Paper V: Air Transport Economics and Statistics

- Air Transport Economics is a core area in the aviation business. It gives broad understanding of the economic aspects of aviation industry. It also gives a broad understanding of the statistics which are part of the aviation sector.
- Module I: Fundamentals of Economics:Meaning, Nature, Micro, Macro-Economic Analysis, Economics and Law of Demand, Economics and Law of Supply, Market Equilibrium;
- Module II: Fundamentals of Air Transport Economics: Evolving Air Transport Industry, Economic Impact of Air Transport, International Economics and Aviation;
- Module III: Core Priciples Market Demand and Supply for Airline Services, Cost and Production Analysis in Air Transport Industry, Air Transport Market Structure and Monopolistic Markets, Aviation Forecasting and Regression Analysis;
- Module IV: Airport-Airline Economics and Infrastructure, Expenditure and Revenue Structure at Airports, Financial Air Transport Infrastructure: Supply and Demand, Open Skies and Global Alliances, Economies of Aviation Safety and Security
- Module V: WTO, GATS and Air Transport Management

Paper VI: Aviation Marketing

- Module 1 The Meaning and Role of Marketing: What is marketing? The Role of Marketing with Respect to the Business Environment, Customer and a Company.
- Module 2 Airline Products and Services covers Defining the Airline Product, Product Hardware, The 'Soft' Side of Airline Products, Managing the Product Life Cycle, Overview of the Product Life Cycle, Product Design etc.,
- Module 3: Airline Business-Marketing Environment and **Strategies**. The Theoretical Basis –*(Political, Economic, Social, Technological and Environmental.)* PESTE Analysis. Porter's "Five Forces" and their Application to the Airline Industry
- Module 4: Promoting Airline Products and Services: The Role of Promotions, Promotional Objectives , The Promotional Mix, Social Media and Interactive Marketing, The Internet as an Advertising Medium, The Impact of Social Media Applications on Marketing & Marketing Communications
- Module 5: Distributing Airline Products & Services covers Defining Distribution Channels, Electronic Ticketing and its Impacts, Classification of Distribution Channels, Direct and Indirect Channels, Direct and Indirect Channels, GDS and Choosing a Distribution Strategy.

Dissertation

- The spectacular fast developments in aircraft technology in the beginning of the 20th century, made law-making necessary in this new field of transportation.
- The course extensively tries to encompass numerous aspects of Aviation Law and Management. Given the nature of the course, there are numerous contemporary aspects of the aviation law and management that cannot be discussed in detail.
- The main objective of the dissertation component is to assess the research and writing skills of the students as well as to provide a platform for **creative legal scholarship** and can be refined and submitted for publication in scholarly journals or even serve as the basis for full-length dissertations in doctoral programmes.
- The students are free to select their Dissertation Topic voluntarily but it should be relevant to their field of course.
- **The written Dissertation will carry a total of 150 marks** which will be followed by a **Viva-voce examination carrying 50 marks**. Dissertation shall be evaluated by one examiner and if a student secures a minimum of 50% marks in the written report, he/she may be called for viva-voce examination. In total, a student should secure a minimum of 50% marks in the Dissertation including the written report and viva-voce examination.

Thank You