AERO SPACE SOCIETY OF INDIA

(Accredited Centre of Aerospace, Aeronautics, Maintenance and Allied Core Engineering)

REGULATIONS, CURRICULUM AND SYLLABUS 2019-2020

M.B.A.
(AVIATION MANAGEMENT)

ACADEMIC REGULATIONS (M.TECH./ M.B.A. / M.C.A.) (Full - Time / Part - Time) (Effective 2019-20)

1. Vision, Mission and Objectives

1.1 The Vision of the Institute is "To make every man a success and no man a failure".

In order to progress towards the vision, the Institute has identified itself with a mission to provide every individual with a conducive environment suitable to achieve his / her career goals, with a strong emphasis on personality development, and to offer quality education in all spheres of engineering, technology, applied sciences and management, without compromising on the quality and code of ethics.

1.2 Further, the institute always strives

- To train our students with the latest and the best in the rapidly changing fields of Engineering, Technology, Management, Science & Humanities.
- To develop the students with a global outlook possessing, state of the art skills, capable of taking up challenging responsibilities in the respective fields.
- To mould our students as citizens with moral, ethical and social values so as to fulfill their obligations to the nation and the society.
- To promote research in the field of science, Humanities, Engineering, Technology and allied branches.

1.3 Our aims and objectives are focused on

- Providing world class education in engineering, technology, applied science and management.
- Keeping pace with the ever changing technological scenario to help our students to gain proper direction to emerge as competent professionals fully aware of their commitment to the society and nation.
- To inculcate a flair for research, development and entrepreneurship.

2. Admission

2.1 The admission policy and procedure shall be decided from time to time by the Board of Management (BOM) of the Institute, following guidelines issued by Ministry of Human Resource Development (MHRD), Government of India. The number of seats in each branch of the (M.TECH / M.B.A. / M.C.A.) programme will be decided by BOM as per the directives from Ministry of Human Resource Development (MHRD), Government of India and taking into account the market demands. Some seats for Non Resident Indians and a few seats for foreign nationals shall be made available.

2.2 The selected candidates will be admitted to the (M.TECH / M.B.A. / M.C.A.) programme after he/she fulfills all the admission requirements set by the Institute and after payment of the prescribed fees.

2.3 Candidates for admission to the first semester of the Master's Degree Programme shall be required to have passed an appropriate Degree Examination recognized by Hindustan University.

2.4 In all matters relating to admission to the (M.TECH / M.B.A. / M.C.A.). Programme, the decision of the Institute and its interpretation given by the Chancellor of the Institute shall be final.

2.5 If at any time after admission, it is found that a candidate has not fulfilled any of the requirements stipulated by the Institute, the Institute may revoke the admission of the candidate with information to the Academic Council.

3. Structure of the programme

3.1 The programme of instruction will have the following structure

i) Core courses of Engineering / Technology / Management.

ii) Elective courses for specialization in areas of student's choice

3.2 The minimum durations of the programmes are as given below:

Program	No. of Semesters
M.Tech.(Full-Time)	4
M.Tech.(Part -Time)	6
M.B.A. (Full - Time)	4
M.B.A. (Part - Time)	6
M.C.A.(Full - Time)	6
M.C.A.(Part -Time)	8

Every (M.TECH / M.B.A. / M.C.A.) programme will have a curriculum and syllabi for the courses approved by the Academic Council.

3.3 Each course is normally assigned certain number of credits. The following norms will generally be followed in assigning credits for courses.

λ One credit for each lecture hour per week per semester

λ One credit for each tutorial hour per week per semester

λ One credit for each laboratory practical of three hours per week per semester.

λ One credit for 4 weeks of industrial training and

λ One credit for 2 hours of project per week per semester.

3.4 For the award of degree, a student has to earn certain minimum total number of credits specified in the curriculum of the relevant branch of study. The curriculum of the different programs shall be so designed that the minimum prescribed credits required for the award of the degree shall be within the limits specified below.

Program	Minimum prescribed credit range
M.Tech. (Full time / Part time)	75 - 85
M.B.A. (Full time / Part time)	85 - 95
M.C.A (Full time / Part time)	115 - 125

3.5 The medium of instruction, examination and the language of the project reports will be English.

4. Faculty Advisor

4.1 To help the students in planning their courses of study and for getting general advice on the academic programme, the concerned Department will assign a certain number of students to a Faculty member who will be called their Faculty Advisor.

5. Class Committee

5.1 A Class Committee consisting of the following will be constituted by the Head of the Department for each class:

(i) A Chairman, who is not teaching the class.

(ii) All subject teachers of the class.

(iii) Two students nominated by the department in consultation with the class.

The Class Committee will meet as often as necessary, but not less than three times during a semester.

The functions of the Class Committee will include:

(i) Addressing problems experienced by students in the classroom and the laboratories.

(ii) Analyzing the performance of the students of the class after each test and finding ways and means of addressing problems, if any.

(iii) During the meetings, the student members shall express the opinions and suggestions of the class students to improve the teaching / learning process.

6. Grading

6.1 A grading system as below will be adhered to.

Range of Marks	Letter Grade	Grade points
95-100	S	10
85-94	A	09
75- 84	B	08
65-74	C	07
55-64	D	06
50-54	E	05
< 50	U	00
	I (Incomplete)	--

6.2 GPA & CGPA

GPA is the ratio of the sum of the product of the number of credits C_i of course "i " and the grade points P_i earned for that course taken over all courses "i" registered by the student to the sum of Ci for all "i ". That is,

$$= \frac{\Sigma}{\Sigma}$$

CGPA will be calculated in a similar manner, at any semester, considering all the courses enrolled from first semester onwards.

6.3 For the students with letter grade I in certain subjects, the same will not be included in the computation of GPA and CGPA until after those grades are converted to the regular grades.

6.4 Raw marks will be moderated by a moderation board appointed by the Vice-Chancellor of the University. The final marks will be graded using an absolute grading system. The Constitution and composition of the moderation board will be dealt with separately.

7. Registration and Enrollment

7.1 Except for the first semester, registration and enrollment will be done in the beginning of the semester as per the schedule announced by the University.

7.2 A student will be eligible for enrollment only if he/she satisfies regulation 10 (maximum duration of the programme) and will be permitted to enroll if (i) he/ she has cleared all dues in the Institute, Hostel & Library up to the end of the

previous semester and (ii) he/she is not debarred from enrollment by a disciplinary action of the University.

7.3 Students are required to submit registration form duly filled in.

8. Registration requirement

8.1 **(i)** A Full time student shall not register for less than 16 credits or more than 26 credits in any given semester.

8.1 **(ii)** A part time student shall not register for less than 10 credits or more than 20 credits in any given semester.

8.2 If a student finds his/her load heavy in any semester, or for any other valid reason, he/she may withdraw from the courses within three weeks of the commencement of the semester with the written approval of his/her Faculty Advisor and HOD. However the student should ensure that the total number of credits registered for in any semester should enable him/her to earn the minimum number of credits per semester for the completed semesters.

9. Minimum requirement to continue the programme

9.1 For those students who have not earned the minimum required credit prescribed for that particular semester examination, a warning letter to the concerned student and also to his parents regarding the shortage of his credit will be sent by the HOD after the announcement of the results of the university examinations.

10. Maximum duration of the programme

The minimum and maximum period for the completion of various programs are given below.

Program	Min. No. of Semesters	Max. No. of Semesters
M.Tech (Full - time)	4	8
M.Tech (Part - time)	6	10
M.B.A. (Full Time)	4	8
M.B.A. (Part Time)	6	10
M.C.A. (Full - Time)	6	12
M.C.A (Part -Time)	8	14

11. Temporary discontinuation

11.1 A student may be permitted by the Director(academic) to discontinue temporarily from the programme for a semester or a longer period for reasons of ill health or other valid reasons. Normally a student will be permitted to discontinue from the programme only for a maximum duration of two semesters.

12. Discipline

12.1 Every student is required to observe discipline and decorum both inside and outside the campus and not to indulge in any activity which will tend to bring down the prestige of the University.

12.2 Any act of indiscipline of a student reported to the Director (Academic) will be referred to a Discipline Committee so constituted. The Committee will enquire into the charges and decide on suitable punishment if the charges are substantiated. The committee will also authorize the Director(Academic) to recommend to the Vice-Chancellor the implementation of the decision. The student concerned may appeal to the Vice-Chancellor whose decision will be final. The Director (Academic) will report the action taken at the next meeting of the Council.

12.3 Ragging and harassment of women are strictly prohibited in the University campus and hostels.

13. Attendance

13.1 A student whose attendance is less than 75% is not eligible to appear for the end semester examination for that semester. The details of all students who have attendance less than 75% will be announced by the teacher in the class. These details will be sent to the concerned HODs and Director (Academic).

13.2 Those who have less than 75% attendance will be considered for condonation of shortage of attendance. However a condonation of 10% in attendance will be given on medical reasons. Application for condonation recommended by the Faculty Advisor, concerned faculty member and the HOD is to be submitted to the Director (Academic) who, depending on the merits of the case, may permit the student to appear for the end semester examination. A student will be eligible for this concession at most in two semesters during the entire degree programme. Application for medical leave, supported by medical certificate with endorsement by a Registered Medical Officer, should reach the HOD within seven days after returning from leave or, on or before the last instructional day of the semester, whichever is earlier.

13.3 As an incentive to those students who are involved in extra curricular activities such as representing the University in Sports and Games, Cultural Festivals, and Technical Festivals, NCC/ NSS events, a relaxation of up to 10% attendance will be given subject to the condition that these students take prior approval from the officer-in-charge. All such applications should be recommended by the concerned HOD and forwarded to Director (Academic) within seven instructional days after the programme/activity.

14. Assessment Procedure

14.1 The Academic Council will decide from time to time the system of tests and examinations in each subject in each semester.

14.2 For each theory course, the assessment will be done on a continuous basis as follows:

Test / Exam	Weightage	Duration of Test Exam
First Periodical Test*	10%	2 Periods
Second Periodical Test*	10%	2 Periods
Model exam	20%	3 hours
Seminar/ Assignments/Quiz	20%	
End - semester examination	50%	3 Hours

*** Best out of the two tests will be considered.**

14.3 For practical courses, the assessment will be done by the subject teachers as below:

(i) Weekly assignment/Observation note book / lab records - weightage 60%.

(ii) End semester examination of 3 hours duration including viva - weightage 40%

15. Make up Examination/model examination

15.1 Students who miss the end-semester examinations / model examination for valid reasons are eligible for make-up examination /model examination. Those

who miss the end-semester examination / model examination should apply to the Head of the Department concerned within five days after he / she missed examination, giving reasons for absence.

15.2 Permission to appear for make-up examination / model exam will be given under exceptional circumstances such as admission to a hospital due to illness. Students should produce a medical certificate issued by a Registered Medical Practitioner certifying that he/she was admitted to hospital during the period of examination / model exam and the same should be duly endorsed by parent / guardian and also by a medical officer of the University within 5 days.

16. Project evaluation

16.1 For Project work, the assessment will be done on a continuous basis as follows:

Review / Examination	Weightage
First Review	10%
Second Review	20%
Third Review	20%
End semester Examination	50%

For end semester exam, the student will submit a Project Report in a format specified by the Director (Academic). The first three reviews will be conducted by a Committee constituted by the Head of the Department. The end - semester examination will be conducted by a Committee constituted by the Controller of Examinations. This will include an external expert.

17. Declaration of results

17.1 A candidate who secures not less than 50% of total marks prescribed for a course with a minimum of 50% of the marks prescribed for the end semester examination shall be declared to have passed the course and earned the specified credits for the course.

17.2 After the valuation of the answer scripts, the tabulated results are to be scrutinized by the Result Passing Boards of PG programmes constituted by the Vice-Chancellor. The recommendations of the Result Passing Boards will be placed before the Standing Sub Committee of the Academic Council constituted by the Chancellor for scrutiny. The minutes of the Standing Sub Committee along with the results are to be placed before the Vice-Chancellor for approval. After getting the approval of the Vice-Chancellor, the results will be published by the Controller of Examination/ Registrar.

17.3 If a candidate fails to secure a pass in a course due to not satisfying the minimum requirement in the end semester examination, he/she shall register and re-appear for the end semester examination during the following semester. However, the sessional marks secured by the candidate will be retained for all such attempts.

17.4 If a candidate fails to secure a pass in a course due to insufficient sessional marks though meeting the minimum requirements of the end semester examination, wishes to improve on his/ her sessional marks, he/she will have to register for the particular course and

attend the course with permission of the HOD concerned and the Registrar. The sessional and external marks obtained by the candidate in this case will replace the earlier result.

17.5 A candidate can apply for the revaluation of his/her end semester examination answer paper in a theory course within 2 weeks from the declaration of the results, on payment of a prescribed fee through proper application to the Registrar/Controller of Examinations through the Head of the Department. The Registrar/ Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department. Revaluation is not permitted for practical courses and for project work.

17.6 The weightage for internal marks in finalizing results and grades shall be waived off after completion of 5 semesters.

18. Grade Card

18.1 After results are declared, grade sheet will be issued to each student, which will contain the following details:

(i) Program and branch for which the student has enrolled.

(ii) Semester of registration.

(iii) List of courses registered during the semester and the grade scored.

(iv) Semester Grade Point Average (GPA)

(v) Cumulative Grade Point Average (CGPA).

19. Class / Division

19.1 Classification is based on CGPA and is as follows:

CGPA ε 8.0 : **First Class with distinction**

6.5 δ CGPA < 8.0 : **First Class**

5.0 δ CGPA < 6.5 : **Second Class.**

19.2 (i) Further, the award of 'First class with distinction' is subject to the candidate becoming eligible for the award of the degree having passed the examination in all the courses in his/her first appearance within the minimum duration of the programme.

(ii) The award of 'First Class' is further subject to the candidate becoming eligible to the award of the degree having passed the examination in all the courses within the below mentioned duration of the programme.

Program	No. of Semesters
M.Tech.(Full-Time)	5
M.Tech.(Part -Time)	7
M.B.A. (Full - Time)	5
M.B.A. (Part - Time)	7
M.C.A.(Full - Time)	7
M.C.A.(Part -Time)	9

(iii) The period of authorized discontinuation of the programme (vide clause 11.1) will not be counted for the purpose of the above classification.

20. Transfer of credits

20.1 Within the broad framework of these regulations, the Academic Council, based on the recommendation of the transfer of credits committee so constituted by the Chancellor may permit students to earn part of the credit requirement in other approved institutions of repute and status in the country or abroad.

21. Eligibility for the award of (M.TECH / M.B.A. / M.C.A.) Degree

21.1 A student will be declared to be eligible for the award of the (M.TECH / M.B.A. / M.C.A.). Degree if he/she has

i) registered and successfully credited all the core courses,

ii) successfully acquired the credits in the different categories as specified in the curriculum corresponding to the discipline (branch) of his/her study within the stipulated time,

iii) has no dues to all sections of the Institute including Hostels, and

iv) has no disciplinary action pending against him/her.

The award of the degree must be recommended by the Academic Council and approved by the Board of Management of the University.

22. Power to modify

22.1 Notwithstanding all that has been stated above, the Academic Council has the right to modify any of the above regulations from time to time subject to approval by the Board of Management.

FULL - TIME MBA (AVIATION MANAGEMENT)
CURRICULUM & SYLLABUS

SEMESTER - I

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
Theory							
1	PAT101	Airline and Airport Management	3	0	0	3	3
2	PBA101	Data Analysis for Business Decisions*	3	1	0	4	4
3	PBA102	Economic Analysis for Business Decisions*	3	0	0	3	3
4	PBA104	Organizational Behaviour *	3	0	0	3	3
5	PBA106	Accounting for Management *	3	1	0	4	4
6	PAT102	Airline Marketing Management	3	0	0	3	3
7	PBA204	Human Resources Management	3	0	0	3	3
Practical							
8	PBA208	Business Application Software *	0	0	3	1	3
		Total				**24**	**26**

SEMESTER - II

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
Theory							
1	PAT201	Airline Operation and Scheduling **	3	1	0	4	4
2	PAT202	Airline Finance	3	1	0	4	4
3	PAT203	Aviation Law	3	0	0	3	3
4	PAT204	Aviation Safety Management and Accident Investigations **	3	0	0	3	3
5	PBA206	Strategic Management *	3	0	0	3	3
6	PBA103	Total Quality Management *	3	0	0	3	3
7	PBA207	Research Methods in Business *	3	0	0	3	3
8	PBA105	Communication Skills and Business Correspondence *	3	0	0	3	3
Practical							
9	PBA209	Personality Development/ Seminar/ GD/ Case Study	0	0	2	1	2
		TOTAL				**27**	**28**

THEORY-ELECTIVE (OFFERED TO OTHER PG STUDENTS OF UNIVERSITY)

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
Theory							
1	PAT203	Aviation Law	3	0	0	3	3
2	PBA207	Research Methods In Business	3	0	0	3	3

SUMMER SEMESTER (6 WEEKS)
PBA303 SUMMER PROJECT

Project report of the Summer Project is to be submitted by the students within 30 days from the commencement of the 3rd semester. Evaluation report should be sent to the Controller of Examinations by the HOD through the Principal, before the last working day of the 3rd semester.

SEMESTER III

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
Theory							
1	PBA301	Airline Operation and Scheduling **	3	1	0	4	4
2	PBA302	Airline Finance	3	1	0	4	4
3	PAT703	Aviation Law	3	0	0	3	3
4	PAT704	Aviation Safety Management and Accident Investigations **	3	0	0	3	3
5		Electives III	3	0	0	3	3
6		Electives IV	3	0	0	3	3
7		Electives V	3	0	0	3	3
8		Electives VI	3	0	0	3	3
Practical							
9	PBA303	Summer Project Work	-	-	4	2	4
10	PBA304	Seminar II (Emerging Trends in Management - Case Study Analysis and Seminar)	0	0	2	1	2
		Total				**27**	**30**

***** ELECTIVES OFFERED TO OTHER PG STUDENTS OF UNIVERSITY**

LIST OF ELECTIVES

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
Theory							
1	PAT701	Aircraft Maintenance Management **	3	0	0	3	3
2	PAT702	Aircraft Rules and Regulation C.A.R I and II	3	0	0	3	3
3	PAT703	Airline Economics	3	0	0	3	3
4	PAT704	Airline Advertising and Sales Promotion	3	0	0	3	3
5	PAT708	Customer Relationship Management *	3	0	0	3	3
6	PAT716	Insurance and Risk Management *	3	0	0	3	3
7	PAT723	Cross Cultural Management *	3	0	0	3	3
8	PAT705	Supply Chain Management	3	0	0	3	3
9	PAT706	E - Business	3	0	0	3	3

***Common for MBA (General Management) and MBA (Aviation Management)**

** **Common for MBA (Aviation Management) and M. E (Aircraft Maintenance)**

SEMESTER IV

Sl. No.	Course Code	Course Title	L	T	P	C	TCH
1	PBA401	Project Work	-	-	24	12	24
		TOTAL				**12**	**24**

M.B.A. AVIATION MANAGEMENT

SEMESTER - I
PAT101 AIRLINE AND AIRPORT MANAGEMENT

Credits 3

Goal

1. To familiarize the students with the overview of Airline and Airport management and its institutional Framework.
2. To provide the knowledge of Airport planning, management and operations that is required to begin an Airport management career.

Objectives

1. To Provide the knowledge on the History of Aviation ,Major Players in Airline Industry, Current Trends and Challenges
2. To impart knowledge on Airport Planning ,Airport Operation and various Authorities involved in Airport Management
3. To provide knowledge on the Meteorological Services, Environmental Regulation and Airport fees, Rates and Charges.
4. To provide knowledge on Safety Regulation, Economic Regulation and Aviation Security.
5. To provide knowledge about the Air Traffic Control, Air Space and Navigational Aid.

Outcomes

1. It enables the students to understand the Aviation's History, its major players and it current trends and challenges
2. It enables the students to do the Planning of an Airport and to perform operations involved in the Airport.
3. It enables the students to know and interpret the Meteorological data's and to calculate the Airport fees, Rates and Charges.
4. It enables the students to understand and adhere to the various Regulations involved Aviation Industry.
5. It enables the students to understand about the Navigational and ATC control process.

PAT101 AIRLINE AND AIRPORT MANAGEMENT

L	T	P	C
3	0	0	3

Objective

To provide the knowledge of airport planning, management and operations that is required to begin an airport management career.

UNIT I INTRODUCTION **9**

History of aviation - organisation, global, social & ethical environment - history of aviation in india - major players in the airline industry - swot analysis of the different airline companies in india - market potential of airline industry in india - new airport development plans - current challenges in the airline industry - competition in the airline industry - domestic and international from an indian perspective

UNIT II AIRPORT INFRASTRUCTURE AND MANAGEMENT **8**

Airport planning - terminal planning design and operation - airport operations - airport functions - organisation structure in an airline - airport authority of india - comparison of global and indian airport management - role of aai -airline privatisation - full privatisation - gradual privatisation - partial privatisation

UNIT III AIR TRANSPORT SERVICES **12**

Various airport services - international air transport services - indian scenario - an overview of airports in delhi, mumbai, hyderabad and bangalore - the role of private operators - airport development fees, rates, tariffs

UNIT IV INSTITUTIONAL FRAMEWORK **8**

Role of dgca - slot allocation - methodology followed by atc and dgca -management of bilaterals - economic regulations

UNIT V CONTROLLING **8**

Role of air traffic control - airspace and navigational aids - control process - case studies in airline industry - mumbai delhi airport privatisation - navi mumbai airport tendering process - 6 cases in the airline industry

TOTAL : 45

TEXT BOOKS

1. Graham.a. Managing airports: an international perspective - butterworth - heinemann, oxford 2001.
2. Wells.a. Airport planning and management, 4th edition Mcgraw- Hill, london 2000.

REFERENCES

1. Doganis. R. The airport business routledge, london 1992
2. Alexender t. Wells, seth young, principles of airport management, mcgraw hill 2003
3. P s senguttavan fundementals of air transport management , excel books 2007
4. Richard de neufille, airport systems: planning, design and management, mcgraw-hill london 2007.
5.. Manual of aerodrome licensing of aai airports - aai website - freely downloadable - issue may 2010.

PBA101 DATAANALYSIS FOR BUSINESS DECISIONS

Credits: 4

GOAL

The main goal is to facilitate the students to have thorough knowledge in various Statistical techniques and to apply the concepts in managerial decision making.

OBJECTIVES

1. The objective is to understand some basic terminology in probability, solve problems involving calculation of simple, joint and conditional probabilities
2. The basic objective is to understand the sampling distributions of sample mean and proportion and also various sampling techniques which are based on statistical principles.
3. The objective is to understand the concepts of hypothesis and the procedure involved in testing them. The objective is also to study the various tests of significance like, F test, t test, Chi-square test
4. The basic objective is to highlight the importance of non-parametric tests when the validity of assumptions in tests of significance is doubtful.
5. The objective is to understand the relevance and applications of relationship between two variables and to forecast one variable with the help of the other variable. The objective is also to recognize and define different components of Time Series and to understand the importance as well as the different methods of forecasting.

OUTCOMES

1. Students can facilitate Theorems and Laws of probabilities in business and managerial situations.
2. Students will be able to determine appropriate sample size to estimate population mean or proportion for a given level of accuracy and with prescribed level of confidence.
3. Students can analyse the two aspects of statistical inference, viz. "Estimation" and "Testing of Hypothesis". Students will have a thorough knowledge on various test and will have a clarity on which test to be applied in different situations
4. Students can easily differentiate between parametric and non-parametric tests and will be able to design, conduct and evaluate some selected non-parametric tests.
5. Students will be able to measure the correlation between two variables and use the regression coefficients sensibly to make forecasts. Also they can acquaint with various quantitative forecasting methods that are used in a business environment.

PBA101 DATAANALYSIS FOR BUSINESS DECISIONS

L	T	P	C
3	1	0	4

OBJECTIVE:

1. To provide an insight into statistical reasoning with an emphasis on concepts and applications relevant to business decision making.

UNIT I DISCRETE PROBABILITY **12**

Basic definitions and rules for probability, conditional probability independence of events, Baye's theorem, and random variables, Mathematical Expectation.

UNIT II SAMPLING DISTRIBUTION **12**

Introduction to sampling distributions, sampling distribution of mean and proportion, application of central limit theorem, sampling techniques.

UNIT III TESTING OF HYPOTHESIS **12**

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations, Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes and goodness of fit.

UNIT IV NON-PARAMETRIC METHODS **12**

Sign test for paired data. Rank sum test: Mann - Whitney U test and kruskal Wallis test. One sample run test, rank correlation.

UNIT V CORRELATION, REGRESSION AND TIME SERIES ANALYSIS **12**

Correlation analysis - Simple Applications, estimation of regression line.Time series analysis: Variations in time series, trend analysis, cyclical variations, seasonal variations.

TOTAL : 60

TEXT BOOKS:

1. Levin R.I. and Rubin D.S., "Statistics for management", 7th edition, Prentice Hall of India Pvt. Ltd., New Delhi, 2001.
2. Aczel A.D. and Sounderpandian J., "Complete Business Statistics", 5th edition, Tata McGraw -Hill Publishing Company Ltd., New Delhi, 2004.
3. Anderson D.R., Sweeney D.J. and Williams T.A., "Statistics for business and economics", 8th edition, Thomson (South - Western) Asia Pte. Ltd., Singapore, 2002.

REFERENCES:

1. Levine D.M., Krehbiel T.C. and Berenson M.L., "Business Statistics: A First Course", Pearson Education Asia, 2nd edition, New Delhi, 2002.
2. Hooda R.P., Statistics for Business and Economics", 2nd edition, Macmillan India Ltd., 2001.

3. Morse L.B., "Statistics for Business and Economics", HarperCollins college Publishers, New York, 1993.

4. Bowerman B.L., Connel R.T.O' and Hand M.L., "Business Statistics in Pratice", 2nd edition, McGraw- Hill / Irwin, 2001.

PBA102 ECONOMIC ANALYSIS FOR BUSINESS DECISIONS

Credits: 3

GOAL

To equip students with in-depth knowledge about economic ideas and their applications in business decisions.

OBJECTIVES

1. The aim of the module is to provide an understanding of Economic theory in order to enable students to critically analyze the empirical situation of the economy.
2. The focus is on laying down the macroeconomic foundation so that students will find it traceable to locate, understand and apply the Economic principles.
3. Various economic issues pertaining to domestic and international will be discussed at large.
4. The students will be able to take strategic business decisions, and appreciate the growing importance of the global connectivity.
5. This is a course to be held over 45 sessions. These sessions will broadly cover
   - Macro Economics
   - Global Business Environment

OUTCOMES

1. It enables to demonstrate a critical understanding and evaluation of macroeconomic variables and theories with empirical evidence;
2. To evaluate various alternative economic policies taken at domestic and international level.
3. Students could make sound business decisions with reference to and its impact on economy as a whole.
4. To understand the Govt. policies with reference to the implications of externalities due to global Connectivity.

PBA102 ECONOMIC FOUNDATIONS OF BUSINESS ENVIRONMENT

L	T	P	C
3	0	0	3

OBJECTIVES:

The subject focuses on economic ideas and their applications in business decisions and to explain the behaviour of the economy and the Government's involvement in managing the economy.

UNIT I NATURE AND SCOPE OF MACRO ECONOMIC ISSUES 10

Macro economic variables - national income, investment, savings, employment, inflation, balance of payment, exchange rate, etc. - circular flow of income - national income concepts - measurement of national income - role of economic planning - Indian economic planning.

UNIT II ANALYSIS OF NATIONAL INCOME 15

Determination of national income - Keynesian perspective - multiplier - accelerator - business cycle - the role of fiscal policy - Indian fiscal policy and experiences.

UNIT III ANALYSIS OF MONEY MARKET 10

Demand and supply of money - money market equilibrium - the role of money - monetary policy - Indian perspectives.

UNIT IV INTEGRATION OF COMMODITY AND MONEY MARKET 10

Analysis of inflation and unemployment - the role of economic policies - Indian experiences.

UNIT V ANALYSIS OF EXTERNAL SECTOR 15

International trade - trade multiplier - linkage model - the role of trade policy - analysis of performance of Indian economy in external sector.

TOTAL : 60

TEXT BOOKS:

1. Ahuja H.L., Economic Environment of Business, Macroeconomic analysis, S.Chand & Company Ltd., New Delhi, 2005.
2. Gupta, G.S. Macroeconomics, Theory and Applications, Tata McGraw-Hill publishing company Ltd., New Delhi, 2001.

REFERENCES:

1. Samuelson, Paul A., and Nordhaus, W.D., Economics, Tata McGraw-Hill publishing company Ltd., New Delhi 2004.
2. Ruddar Datt and K.P.M.Sundharam, Indian Economy, S.Chand & Company Ltd., New Delhi, 2003.
3. Government of India (Ministry of Finance), Economic Survey (Latest issue), New Delhi.

PBA104 ORGANIZATIONAL BEHAVIOR

L	T	P	C
3	0	0	3

GOAL

Objective is to build better relationships by achieving human objectives, organizational objectives, and social objectives by understanding how people, individuals, and groups act in organizations.

OBJECTIVES

1. To understand what organizations are? Explain what organizational behavior is and how it has evolved, discover what disciplines contributed to knowledge in OB
2. To understand the concept, process and importance of individual behavior in organizations. Influence of perception, to discover the work related Attitudes: job satisfaction, job commitment, and organizational citizenship to understand significance of motivation, to understand how personality contributes to differences in individual behavior.
3. To understand the meaning and importance of groups and teams in organizations. To understand the meaning of organizational leadership.
4. To understand the concept of organizational politics. Discuss how managers deal with power and politics in organizations.
5. Dynamics of organizational behaviours. To understand the different choices of structure of an organization. To understand the significance of organizational culture.
6. Understand the concept of organizational climate. To explore the factors influencing organizational effectiveness.

OUTCOMES

1. It enables the students to understand the organizations, what organizational behavior is and what are the disciplines contributed to organizational behavior
2. It enables the students to analyse the individuals in organizations in terms of their perception, attitude, motivation and personality. Also would have explored their contribution in achieving individual and organizational effectiveness.
3. It enables the students to understand the groups in organizations, in terms of thresholds of interpersonal relationships, groups and teams in organizations.
4. It enables the students to explore effectiveness of organizational leadership roles. Power and politics in organizations and how managers deal with politics.
5. It enables the students to understand how organizations shape behavior through organizational structure, organizational culture,organizational climate.
6. Achieve organizational effectiveness through managing and leading human behavior at work.

PBA104 ORGANIZATIONAL BEHAVIOUR

L	T	P	C
3	0	0	3

OBJECTIVE:

Organizational Behavior (OB) is the study and application of knowledge about how people, individuals, and groups act in organizations. Its purpose is to build better relationships by achieving human objectives, organizational objectives, and social objectives.

UNIT I FOCUS AND PURPOSE **9**

Definition, need and importance of organizational behaviour - nature and scope - frame work - organizational behaviour models.

UNIT II INDIVIDUAL BEHAVIOUR **9**

Personality - types - factors influencing personality - theories learning - types of learners - the learning process - learning theories - organizational behaviour modification. Attitudes - characteristics -components - formation - measurement. Perceptions - importance - factors influencing perception - interpersonal perception. Motivation - importance - types -Theories- effects on work behavior.

UNIT III GROUPBEHAVIOUR **9**

Organization structure - formation - groups in organizations - influence - group dynamics - emergence of informal leaders and working norms - group decision making techniques - interpersonal relations - communication - Control - Process - types- Barriers- effective communication.

UNIT IV LEADERSHIP AND POWER **9**

Meaning - importance - leadership styles - theories - leaders Vs managers sources of power - power centers - power and politics.

UNIT V DYNAMICS OF ORGANIZATIONAL BEHAVIOURS **9**

Organizational climate - factors affecting organizational climate - importance. Job satisfaction - determinants - measurements - influence on behavior. Organizational change - importance - stability Vs change - proactive Vs reaction change - the change process - resistance to change - managing change. Organizational development - characteristics - objectives - team building. Organizational effectiveness - perspective - effectiveness Vs efficiency - approaches - the time dimension - achieving organizational effectiveness.

TOTAL : 45

TEXT BOOKS:

1. Stephen P.Robins, Organisational Behavior, Prentice Hall of India, 9th edition, 2001.
2. Hellriegel, Slocum and Woodman, Organisational Behavior, South-Western, Thomson Learning, 9th edition, 2001.

REFERENCES:

1. Schermerhorn, hunt and Osborn, Organisational behavior, John Wiley, 7th edition, 2001.

2. Jit S.Chand, Organisational Behavior, Vikas publishing House Pvt. Ltd. 2nd edition, 2001.

3. Fred Luthans, Organisational Behavior, McGraw Hill Book Co., 1998.

4. New Strom & Davis, Organisational behaviour, McGraw Hill, 2001.

5. Jaffa Harris and Sandra Hartman, Organisational Behavior, Jaico, 2002.

PBA106 ACCOUNTING FOR MANAGEMENT

Credits:4

GOAL

To introduce prospective managers of new ventures to prepare and analyze financial statements. The course emphasizes on techniques of cash flows, and impact of accounting principles.

OBJECTIVES

1. To introduce the accounting principles and concepts and about inflation and human resource accounting
2. To know the final accounts concepts to prepare the statements and interpret the same and to know about depreciation accounting and its type
3. To know the need and importance of ratio & cash flow analysis
4. To familiarize the students with cost concepts, process and standard costing techniques and its importance for Business decisions
5. To understand the cost volume profit analysis for making business decisions.

OUTCOMES

1. The students should be able to apply the principles and concepts to record financial transactions and to determine the current purchasing power and the current cost based on the conversion factor and converted value
2. To be able to prepare Profit & Loss account and Balance sheet and Depreciation statement under different methods
3. The students should be able to apply the ratios and interpret the financial status of a firm(s) and prepare cash flow statement and make interpretation on the same
4. The students should be able to prepare cost sheet, process cost account and to do variance analysis
5. To be able to apply the cost volume profit analysis technique for business decisions.

PBA106 ACCOUNTING FOR MANAGEMENT

L	T	P	C
3	1	0	4

OBJECTIVES:

To introduce prospective managers of new ventures to prepare and analyze financial statements. The course emphasis on techniques of cash flows, and impact of accounting principles. Coverage of management control systems including: planning, budgeting, reporting, analysis, and performance evaluation.

UNIT I FINANCIAL ACCOUNTING **9**

Introduction to financial, cost and management accounting, generally accepted accounting principles, conventions and concepts.-- Introduction to inflation accounting introduction to human resources accounting.

UNIT II ACCOUNTING MECHANICS **15**

The profit and loss account and related concepts - The balance sheet and related concepts- Preparation of Final accounts- Depreciation accounting- Straight line method - Written down value method - Annuity method

UNIT III ANALYSIS OF FINANCIAL STATEMENTS **12**

Financial Ratio Analysis - Cash flow and Funds flow statement analysis

UNIT IV COST ACCOUNTING **12**

Cost Accounting Systems: Classification of Cost - Cost sheet - Process costing - Standard costing.

UNIT V MANAGEMENT ACCOUNTING: **12**

Marginal Costing : Cost Volume Profit Analysis - Relevant Cost for decision making, Special order decision, Production constraint decisions, Make or buy decisions, Joint product decision.

TOTAL : 60

TEXT BOOKS:

1. M.Y.Khan & P.K.Jain - Management Accounting, Tata McGraw Hill publishing company Ltd., 2004.
2. M.A.Sahaf - Management Accounting (Principles & Pratice): Vikas Publishing House Pvt. Ltd., New Delhi, 2004.

REFERENCES:

1. R.S.N.Pillai & Bagavathi - Managemnt Accounting S.Chand & Co. Ltd., New Delhi, (2002)
2. R.Narayanaswamy - Financial Accounting - A managerial perspective Prentice Hall India Pvt., Ltd., New Delhi.
3. Bhattacharya S.K.John Dearden Accounting for Managemnt text and cases - Vikas publishing house, New Delhi, 2000.
4. Charles T.Hornegren - Introduction to management accounting Prentice Hall, New Delhi, 2001.

PAT102 AIRLINE MARKETING MANAGEMENT

Credit : 3

GOAL

To familiarize the students with the understanding of the principles of Marketing and the ways in which these principles can be applied in today's airline industry, the air transport market and its environment.

OBJECTIVES

1. To provide knowledge on the various Principles of Marketing and its application to the Airline Industry.
2. To impart knowledge on the different marketing segments in Air Transport Services and its Analysis.
3. To provide knowledge on the various products and its life cycle in Aviation Industry.
4. To provide knowledge on the tools and techniques for performing a Market Research and its application.
5. To provide knowledge on the impact of Information Technology on Marketing Decision and Importance of Online Marketing.

OUTCOMES

1. It enables the students to gain knowledge about the Principles of Marketing and to apply it in real time situation in a Aviation Industry.
2. It enables the students to understand about the various segments of Air Transport Services thereby to make decision for to make analysis of the Market.
3. It enables the students to formulate strategies for marketing Airline related products.
4. It enables the students to implement various marketing tools and techniques while doing the marketing research of the product in the market.
5. It enables the student to use IT on the marketing decisions and Online marketing.

PAT102 AIRLINE MARKETING MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES:

To enable the students understand the principles of Marketing and the ways in which these principles can be applied in today's airline industry, the air transport market and its environment.

UNIT I INTRODUCTION **9**

Marketing conceptual frame work - marketing environment - customer oriented organization - marketing interface wit other functional areas marketing in a globalised environment Marketing Mix - Stages in the Application of Marketing Principles to Airline Management.

UNIT II MARKET OF AIR TRANSPORT SERVICES **9**

Customer - Definition - Apparent and True Needs - Industrial Buying Behaviour - Customer in the Business Air Travel Market - Customer in Leisure Air Travel Market - Customer in the Air Freight Market - Market Segmentation in Air Passenger & Air Freight Market - Marketing Environment - Theortical Basis of PESTE Analysis - Building Customer Satisfaction.

UNIT III PRODUCT ANALYSIS IN AIRLINE MARKETING **10**

Product - definition - Product Life Cycle - Product Life Cycles in Aviation Industry - Managing Product Portfolio - Balancing Risk and Oppurtunity - Fleet & Schedules related Product Features - Customer Service Related Product Features - Pricing Decisions - Building Blocks in the Airline Pricing Policy - Uniform and Differential Pricing - Distribution Channel Strategies - Travel Agency Distribution System - Global Distribution System - promotion methods. Advertisement and personal selling, public relations.

UNIT IV MARKETING RESEARCH **9**

Types, process - tools and techniques - application of marketing research - product launching, demand estimation, advertising, brand preferences, customer satisfaction, retail stores image, customer perception, distribution, customer relationship, competitor analysis and related aspects - preparation of marketing research report - sample case studies.

UNIT V INFORMATION TECHNOLOGY IMPACT ON MARKETING DECISIONS **8**

Online marketing - web based marketing programmes - emerging now trends and challenges to marketers.

TOTAL : 45

TEXT BOOK:

1. Stephen Shaw " Airline Marketing and Management " Ashgate Sixth Edition.

REFERENCES:

1. Phlip Kortler: Marketing management (Millenium edidtion), prentice hall of India P (ltd), New Delhi 2001.
2. Micheal R.Czinkota & Masaaki Kotabe, Marketing management, Vikas Thomson learning 2000.
3. Douglas, J.Darymple marketing management John Wiley & Sons, 2000
4. NAG, marketing successfully A professional perceptive, macmilan 2001.
5. Boyd Walker, Marketing Management, McGraw Hill, 2002
6. Aakar Day, Kumar, Essential of Marketing Research
7. Keith Flether, Marketing Management and Information Technology Prentice Hall, 1998.

PBA204 HUMAN RESOURCE MANAGEMENT

Credits: 3

GOAL

To familiarize the learners with various functions of Human Resource Management and emphasize on the integration of Human Values with the Organization.

OBJECTIVES

1. To familiarize the principle & evolutionary concepts related to Human Resource, and the role played by computer application in Human Resource Management.
2. To understand the concept of best fit employee.
3. To gain an understanding of training & executive development.
4. To acquire knowledge about the sustainable employee interest.
5. To understand the nuances of performance evaluation & control precess.

OUTCOMES

1. On successful completion of this unit the learner will empathize the purposes and qualities of the Human Resource.The learner can depict the extent to which HR meets the objectives of organization & appreciate the significance of human factors in the organization.
2. On successful completion of this unit the learner will assess how HR attempt to allocate resources effectively by chalking out the HRP. The learner can discern sources of recruitment, selection procedure, and induction & socialization benefits
3. On successful completion of this unit the learner will judge how on the job & off the job training programs shape the behavior of an employee. The learner can illustrate the way training program moulds the employees for their self & professional career development by using range of examples.
4. On successful completion of this unit the learner will analyze compensation plan & negotiation process. The learner can acquaint the role of motivation in maintaining the protégé relationships.
5. On successful completion of this unit the learner will empathize performance evaluation criteria and its implications like promotions, transfers and so on. The learner can appreciate redressal system for resolving the grievances in the control process.

PBA204 HUMAN RESOUCE MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVE :

To familiarize the students with various functions of Human Resources Management and emphasize on the integration Human Values with the organization.

UNIT IPERCEPTIVE IN HUMAN RESOURCE MANAGEMENT 5

Evolution of human resource management - the importance of the human factor - objectives of human resource management - role of human resource manager - human resource policies - computer applications in human resource management.

UNIT II THE CONCEPT OF BEST FIT EMPLOYEE 8

Importance of human resource planning - forecasting human resource requirement - internal and external sources. Selection process screening - tests - validation - interview - medical examination - recruitment introduction - importance - practices - socialization benefits.

UNIT III TRAINING AND EXECUTIVE DEVELOPMENT 10

Types of training methods purpose benefits resistance. Executive development programmes - common practices - benefits - self development - knowledge management.

UNIT IV SUSTAINING EMPLOYEE INTEREST 12

Compensation plan - reward - motivation - theories of motivation - career management - development mentor - protégé relationships.

UNIT V PERFORMANCE EVALUATION AND CONTROL PROCESS 10

Method of performance evaluation - feedback - industry practices. Promotion, demotion, transfer and separation - implication of job change. The control process - importance - methods - requirement of effective control systems grievances - causes - implications - redressal methods.

TOTAL : 45

TEXT BOOKS:

1. Decenzo and Robbins, Human Resource Management, Wilsey, 6th edition, 2001.
2. Biswajeet Pattanayak, Human Resource Management, Prentice Hall of India, 2001.

REFERENCES:

1. Human Resource Management, Eugence Mckenna and Nic Beach, Pearson Education Limited, 2002.
2. Dessler Human Resource Management, Pearson Education Limited, 2002
3. Mamoria C.B. and Mamoria S.Personnel Management, Himalaya Publishing Company, 1997
4. Wayne Cascio, Managing Human Resource, McGraw Hill, 1998.
5. Ivancevich, Human Resource Management, McGraw Hill 2002.

PBA208 BUSINESS APPLICATION SOFTWARE

Credit : 3

GOAL

Goals should provide a framework for determining the more specific educational objectives of a program, and should be consistent with the mission of the program and the institution.

OBJECTIVES

1. To learn MS office, Database programming techniques.
2. To learn and develop objectives are concerned with more complex learning outcomes.
3. To learn and perform at the conclusion of a unit of instruction such as a word, excel, powepoint, access and database.
4. To learn and design of concrete components of structure and foundation and the integration of them into overall design structures.
5. To determine the acceptable level of performance.

OUTCOMES

The student should be able to:

1. Understand how to allocate and use word, excel, power point and database.
2. Understand the use of emerging technology and research when necessary.
3. Understand, design and present a concrete structure for the database.

PBA208 BUSINESS APPLIATION SOFTWARE

L	T	P	C
3	1	0	4

OBJECTIVES

Familiarizing the students with basic computer concepts and emerging Computer Technology, so as to enable them to use computer resources efficiently for making effective decision.

UNIT I BUSINESS APPLICATION SOFTWARE 20

MS office - MS Excel, MS Power Point, MS Word, MS Access, MS Front Page, MS Project, Accounting packages Statistical Packages, Operations Research Package, Packages in functional areas of management.

UNIT II DATABASE MANAGEMENT PACKAGES 20

Sqlserver or oracle or ingress; front-end tool - Visual basic or Developer 2000.

UNIT III INHOUSE DEVELOPMENT OF A PACKAGE 20

TOTAL : 60

SEMESTER II

PAT201 AIRLINE OPERATION AND SCHEDULING

Credits: 4

GOAL

To explore a variety of models and optimization techniques for the solution of airline schedule planning and operations problems.

OBJECTIVES

1. To provide knowledge about the various Transport and Assignment Problem.
2. To provide knowledge about the Critical Path Method (CPM), Program Evaluation Review Technique (PERT) and the cost consideration in CPM and PERT.
3. To provide knowledge about the operational Recovery of the Airline.
4. To provide knowledge on the Robust Crew scheduling and Aircraft Routing.

OUTCOMES

1. It enables the students to implement these models in Aviation Industry for scheduling the Aircraft and to determine the shortest distance for various routes.
2. It enables the students to implement these techniques for minimizing the cost factor involved in the Scheduling of the Aircraft for various routes and sectors.
3. It enables the student to formulate plans and procedure for constructing the Airline Operational Recovery Program.
4. It enables the student to perform Robust Crew Scheduling and Aircraft Routing for the Airline.

PAT201 AIRLINE OPERATION AND SCHEDULING

L	T	P	C
3	1	0	4

OBJECTIVES

Explores a variety of models and optimization techniques for the solution of airline schedule planning and operations problems.

UNIT I TRANSPORTATION AND ASSIGNMENT MODELS **15**

Definition - Transportation Model - basic feasible solution - unbalanced and degeneracy models-optimal solution - MODI method. Assignment problem - Hungarian method - restriction - unbalanced - traveling salesman problem - transshipment model.

UNIT II SCHEDULING **15**

Critical Path Method (CPM) - Networks computation - floats- Program Evaluation Technique (PERT) - Cost consideration in PERT and CPM.

UNIT III NETWORK MODELS **10**

Scope and definition of network models - Minimal spanning tree algorithm - Krushkal - Prim's Algorithms - Maximal Flow model - Ford and Fulkerson Algorithm - Shortest Route - Dijkstra's and Floyd's algorithm.

UNIT IV OPERATIONS RECOVERY **10**

Overview of Operation Control Centre - Aircraft Passenger Delays - Flight Postponement and Cancellation Model-Airline Operation Recovery - Challenges- - Role of Simulation.

UNIT V ROBUST SCHEDULING **10**

Robust Crew Scheduling - Robust Aircraft Routing - Degradable Schedule Design.

TOTAL : 60

TEXT BOOKS

1. Barnhart, C., F. Lu, and R. Shenoi. "Integrated Airline Scheduling". In Operations Research in the Air Industry.
2. Panneer Selvam O : "Operations Research " PH Publications

REFERENCES

1. Barnhart, C., and K. Talluri. "Airline Operations Research."
2. Chebalov, S., and D. Klabjan. "Robust Airline Crew Scheduling: Move-up Crews."

PAT202 AIRLINE FINANCE

Credits: 4

GOAL

To provide understanding of airline financial statements and to address specific airline industry aspects such as treatment of frequent flyer programmes , aircraft leases and evaluation of airline performance by financial ratios.

OBJECTIVES

The course should enable the students:

1. To Introduce various basic financial concepts
2. To Learn about various Financial Performance Analysis
3. To Learn about various sources of Finance for Operations
4. To Learn about Financial Planning
5. To Learn about the Risk Management and Leasing Concepts

OUTCOMES

The student should be able :

1. To compute Time Value, Future Value, Annuity Value of Money concepts

2. To analyse a Financial Statement by way of Ratio Analysis Students able to understand Airline specific Ratios

3. To understand various sources of Internal and External sources of funds

4. To understand various financial planning aspects such as Budgets & Control in Airlines and Working Capital Management

5. To devise Hedging Strategies and understand Leasing concepts

PAT202 AIR LINE FINANCE

L	T	P	C
3	1	0	4

OBJECTIVE

To provide understanding of airline financial statements and to address specific airline industry aspects such as treatement of frequent flyer programmes , aircraft leases and evaluation of airline performance by financial ratios.

UNIT I FOUNDATIONS OF FINANCE 15

Financial management - An overview, time value of money. Capital Budgeting: Principles and techniques, Nature of capital budgeting, Identifying relevant cash flows, Evaluation Techniques, Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index, Comparison of DCF techniques, Project selection under capital rationing, Inflation and capital budgeting.

UNIT II AIRLINE FINANCIAL PERFORMANCE 15

World Airline Financial results - Factor affecting Financial results - Airline Financial Statements - Airline Financial Ratios - Inter Airline Comparison of Financial Ratios - Valuation of Tangible Assets - Valuation of Intangible assets- valuation of Airline as a whole - Rating Agencies.

UNIT III SOURCES OF FINANCE 10

Sources of internal finance - sources of external finance - Institution evolved in Aircraft Finance - Equity Finance - Foreign Ownership Limits - Share trading and Share Market Listings - Intial Public Offerings - Airline Privatisation - Full Privatisation - Gradual Privatisation - Partial Privatisation.

UNIT IV AIRLINE FINANCIAL PLANNING 10

Budget Preparation and Control - Working capital Management - Principles of working capital: Concepts need; Determinants, issues and estimation of working capital, Accounts Receivables Management and factoring - Financial Planning.

UNIT V RISK MANAGEMENT & LEASING 10

Exchange rate volatility - Airline trading exposure to currency movements- Airline Foreign exchange risk management - Fuel price exposure - Aircraft leasing - Finance Lease - Operating Lease - Japanese Operating Lease - Wet Lease - Sale and Leaseback - Aircraft Securitizations.

TOTAL : 60

TEXT BOOK

1. Peter. S. Morrell , " AIRLINE FINANCE " , Third Edition Ash Gate.

REFERENCE:

1. I.M.Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 8th edition, 1999\
2. M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill Publishing company Ltd., 4th edition, 2004.

PAT203 AVIATION LAW

Credits: 3

GOAL

The course is designed to provide the students a knowledge of the law as applied to aviation industry, to enable one to recognise and avoid legal pitfalls, and to recognise when it is prudent to consult legal counsel.

OBJECTIVES

1. History and development of air law in india
2. International air transportation
3. Aviation liability

OUTCOMES

1. Students will know the broad outlook of the total evolution of Aviation Law, with a brief about each convention, the prevailing scope and limits within which the entire legal system in aviation industry revolves around. The gradual development with instances and examples over a period. What are the various forums which contributed to the formation of the law in aviation industry. The formation of the ordinance in aviation industry with specific reference to the carriers' rules for ultimate enactment of Acts of parliament with focus on development over period of time up to the present level of regulations in force.
2. The deliberations at Chicago convention, agreement signed by member countries at Bermuda, the intricacies leading to the formation of airline companies, basic rules for air navigation, the international air transport association, the applicability and references to General Agreement of Trade and Tariff of the world into air laws, various measures adopted for ensuring environment protection and bilateral agreements in this regard between states as well as the overseas bodies are imbibed to students through these units.
3. This course offers an in-depth analysis of legal concepts related to the aviation industry including aircraft operations, airports, fixed based operators (FBOs), contracts, insurance and liability, regulatory statutes, and case law.

PAT203 AVIATION LAW

L	T	P	C
3	0	0	3

OBJECTIVES

This course offers an in-depth analysis of legal concepts related to the aviation industry, including aircraft operations, airports, fixed based operators (FBOs), contracts, insurance and liability, regulatory statutes, and case law. The historical development of aviation law is included.

UNIT I HISTORY AND DEVELOPMENT OF AIR LAW IN INDIA 8

Introduction - Paris Convention on Air Navigation 1919 - First Indian Air Board - Birth of Indian Air Companies - Indian Aircraf Act 1934 - Aircraft Rules 1937 - Civil Aviation pre and post Second world war - Nationalisation of Air Services - International Airports Authority in India - History of Aviation - Survey of Current Air law in India.

UNIT II INTERNATIONAL AIR TRANSPORTATION 12

Air regime prior to the Chicago convention - Chicago conference - Convention on the international Civil Aviation - Rules for Air Navigation - Liberalisation of International Air transportation - Bermuda Agreement - Multilateralism for Liberalisation - Application of GATT Principles to International Air Transportation - Environmental Protection Measures - India and Bilateral Services Agreement.

UNIT III AVIATION LIABILITY 12

Liability of the Carrier under the Indian Carriage by Air Act 1972 - Warsaw Convention 1929 - International Carriage - Hague Protocol 1955 - Montreal Interim Agreement 1966 - Guatemala City Protocol 1971-Montreal Protocol 1975 - Consumer Protection Act and Air carriage Claims.

UNIT IV AIRLINES OWNERSHIP 8

Introduction - Privatisation - Policy issues - Current Situation - Changing Trends of Liberalization and Ownership in Air Services - AirSPace Management in India.

UNIT V AVIATION IN INDIA 5

Past - present - Future Overview - Airlaw and Aviation Policy in India - Air Routes and Aerodromes in India - Aviation Security - Development of Civil Aviation and Airlaw and Policy in India - Devleopment in Aviation in India and Future Outlook for National Airlines

TOTAL : 45

TEXT BOOK

1. S. Bhatt, V.S. Mani & V. Balakista Reddy, "Air Law and Policy in India"

GOAL

To familiarize the students with an understanding of Safety Management System, flight safety, Human factor and other key safety issues involved the aviation industry.

OBJECTIVES

1. To provide knowledge on the Aviation Safety Programs, Risk Management and Prevention Methodologies.
2. To impart knowledge on the need for Human factor and how it is affecting the Aviation Industry.
3. To provide information about the Aviation Safety programmes, Awards and Accident and Incident investigation.
4. To provide the information about the planning and preparation of Maintenance activities for the aircrafts, Tools control, Bogus Parts Identification and Maintaining Technical Records for the purpose of Documentation.
5. To acquire knowledge about the Airport Certification Manual, Airport and Helipad Inspection Program.

OUTCOMES

1. It enables the students to build and implement Aviation Safety Management Programs in Aviation related organization.
2. It enables the students to understand the importance of Human factor and thereby build Human factor training for their organization to reduce accidents and incidents occurring because of Human factor.
3. It enables the students to formulate and implement Aviation Safety Programs and to prepare Accident and Incident reports.
4. It enables the students to plan and schedule maintenance activities for the aircrafts, Tools Control, Bogus parts Identification and Maintaining Technical Records and to conduct Maintenance Safety Program and Inspection.
5. It enables the students to understand and maintain the Airport Certification Manual and to conduct Airport and Helipad Inspection Program

PAT204 AVIATION SAFETY MANAGEMENT AND ACCIDENT INVESTIGATIONS

L	TP		C
3	0	0	3

OBJECTIVES

To help the students an understanding of flight safety and other key safety issues in the aviation industry.

UNIT I INTRODUCTION **12**

Aviation safety - Meaning - Need - Economic of Aviation Safety - Safety Vs Mission - Randomness of Damage and Injury - Zero Accident Rate - Accident causes - Multiple Vs Single Cause - Aircraft Accident - Aircraft Mischap - Aircraft Incident - Building Aviation Safety Program - Prevention Methodology - Risk Management.

UNIT II HUMAN FACTORS IN AVIATION SAFETY **8**

Theory of Risk - Changing the Behaviour of the risk takers - Attitudes - Discipline - Punishment - Protection of Safety - Motivating Safe Behaviour - Human factors difficulties - Training invlovling human factors - Human Performance Concerns - Human Performance Factors.

UNIT III AVIATION SAFETY PROGRAM ELEMENTS **10**

Internal Reporting Systems - Information Distribution systems - Aviation Safety Committees - Aviation Safety Inspection Programs - Aviation safety program Evaluation - Flight Operation Safety Inspection - Safety Inspection report Format - Aviation Safety Education and Training - Aviation Safety Awards Programs - Accident Preparation and Investigation.

UNIT IV AIRCRAFT MAINTENANCE SAFETY **8**

Aircraft Discrepancies - Delayed and Deferred Descrepancies - Training - Configuration Control - Maintenance Engine Runs and Taxiing - Maintenance Test Flights - maintenance Analysis - Tool Control - Hazarodous Waste Disposal - Bogus parts - Technical Data - maintenance Inspections - Flight Line Practices - Maintenance Safety Programs - Maintenance Safety Inspections.

UNIT V AIRPORTS AND HELIPORTS **7**

Airport Certification Manual - Airport Emergency Plan - Airports/Heliports criteria - Airfield Criteria - Airspace Criteria - Foreign Object Control - Bird Hazards - Snow and Ice Removal - Fuel Handling - Vehicle Control - Airport and Heliport Safety Inspections.

TOTAL : 45

TEXT BOOK

1. Aviation Safety Programs - A Management Handbook - Richard H. Wood

PBA206 STRATEGIC MANAGEMENT

Credit : 3

GOAL

To understand the importance and process of Strategic Management. Be able to analyse a company's strategy in terms of its external and internal environment, offer Functional and Business level strategies, and be able to evaluate the effectiveness of strategies by doing strategy audit.

OBJECTIVES

1. To understand the conceptual framework of Strategic Management and the process of strategy formulation.
2. The students should learn the concept of external and internal analysis and identify the company's competitive position. Must also become aware of corporate governance and CSR issues.
3. The students must get an understanding of functional strategies and business level strategies.
4. The students should learn different organizational structures and methods to evaluate the effectiveness of strategies.
5. The students should learn the impact of technology and innovation on strategic formulation. Be aware of issues pertaining to non profit organization.

OUTCOMES

1. Student should be able to define Strategic management and be able to discuss the process of strategic management in companies.
2. Student should be able apply the Porter's five forces model and critically examine an industry and company to ascertain its competitive position vis-à-vis others in the industry.
3. Student should be able to discuss various functional strategies and Business level strategies to make the company gain competitive advantage
4. Student must be able to describe different organization structures. Must be able to evaluate effectiveness of strategy by using Balance score card.
5. Student should be able discuss issues pertaining to Technology, Innovation, and Non-profit organizations.

PBA206 STRATEGIC MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand the strategic management process in an organization
- To formulate strategy for an organization
- To be able to carry out strategy audit in an organization

UNIT I STRATEGYAND PROCESS **8**

Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process - A formal Strategic Planning Process - Corporate Governance and Social responsibility.

UNIT II COMPETITIVE ADVANTAGE **8**

External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution-Globalisation and Industry Structure - National Context and Competitive advantage Resources-Capabilities and competencies-core competencies-Low cost and differentiation Generic Building Blocks of Competitive Advantage- Distinctive Competencies-Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage.

UNIT III STRATEGIES **8**

Building competitive advantage through functional level strategies- Business level strategy- Strategy in the Global Environment-Corporate Strategy-Vertical Integration-Diversification and Strategic Alliances-Building and Restructuring the corporation-Choice of Strategies-Balance Score Card.

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION **8**

Designing organisational structure-Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change-Politics-Power and Conflict-Techniques of strategic evaluation & control.

UNIT V OTHER STRATEGIC ISSUES **8**

Managing Technology and Innovation- Entrepreneurial Ventures and Small Business Strategic issues for Non Profit organisations.

CASES IN STRATEGIC MAMAGEMENT **5**

TOTAL : 45

TEXT BOOKS

1. Charles W.L. Hill & Gareth R. Jones - 'Strategic Management Theory, An Integrated approach' - Houghton Miflin Company, Princeton New Jersey, All India Publisher and Distributors, Chennai, 1998.
2. Thomas L. Wheelen, J. David Hunger - 'Strategic Management' Addison Wesley Longman Singapore Pvt., Ltd., 6th Edition, 2000.

REFERENCES

1. Arnoldo C.Hax, Nicholas S. Majluf - 'The Strategy Concept and Process' - A Pragmatic Approach - Pearson Education Publishing Company, Second Edition, 2005.
2. Azhar Kazmi - 'Business Policy & Strategic Management' Tata McGraw Hill Publishing Company Ltd., New Delhi - Second Edition, 1998.
3. Harvard Business Review - 'Business Policy' - part I & II Harvard Business School.
4. Saloner, Shepard, Podolny - 'Strategic Management' - John Wiley 2001.
5. Lawerence G. Hrebiniak, 'Making strategy work', Person publishing company, 2005.
6. Gupta, Gollakota & Srinivasan - 'Business Policy and Strategic Management - Concepts and Application' Prentice Hall of India, 2005.

PBA103 TOTAL QUALITY MANAGEMENT

Credits: 3

GOAL

1. To introduce the students to the basic concepts of total quality management and how the focus of TQM has become so important for all companies in recent times
2. To familiarize the students to the philosophy and role of TQM in revitalizing the organization
3. To enable them to acquire requisite diagnostic skills and understand the use of the tools of the TQM.

OBJECTIVES

1. To introduce Quality Concepts, TQM Framework and Customer Satisfaction.
2. To introduce the principles and philosophies of Quality Management
3. To emphasize the significance of Statistical Process Control and introduce the various methods of measuring process capability
4. To provide overview on the various tools and techniques of Quality Management
5. To introduce Quality Management Systems, steps involved in TQM Implementation and understand the role of Information Technology in Quality.

OUTCOMES

1. The incumbent understands the various dimensions of Quality, Principles of TQM , Customer Perception to Quality and strategies adopted for Customer retention
2. The incumbent understands the contributions made by various Quality Gurus & gets familiar with the various approaches proposed by them for Quality Management
3. The incumbent understands the quantitative method of measuring Quality and is familiar with methods of measuring process capability
4. The incumbent becomes aware of the various Quality Management tools

5. The incumbent understands the significance of maintaining a system for managing quality, and is familiar with the various factors that lead to the successful Implementation of TQM in an organization.

PBA103 TOTAL QUALITY MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES:

- To introduce the students to the basic concepts of total quality management and how the focus of TQM has become so important for all companies in recent times.
- To Familiarize the students to the Philosophy and Role of TQM in Revitalizing the Organisation.
- To Enable them to Acquire Requisite Diagnostic Skills and understand the Use of the tools of TQM.

UNIT I INTRODUCTION TO QUALITY MANAGEMENT 9

Definitions - TOM framework, benefits, awareness and obstacles. Quality - vision, mission and policy statements. Customer Focus - customer perception of quality, Translating needs into requirements, customer retention. Dimensions of product and service quality. Cost of quality.

UNIT II PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT 9

Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Taguchi, Shingeo and Walter Shewhart. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

UNIT III STATISTICAL PROCESS CONTROL AND PROCESS CAPABILITY 9

Meaning and significance of statistical process control (SPC) - construction of control charts for variables and attributed. Process capability - meaning, significance and measurement - Six sigma concepts of process capability. Reliability concepts - definitions, reliability in series and parallel, product life characteristics curve. Total producti9ve maintenance (TMP) - relevance to TQM, Terotecchnology. Business process re-engineering (BPR) - principles, applications, reengineering process, benefits and limitations.

UNIT IV TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT 9

Quality functions development (QFD) - Benefits, Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) - requirements of reliability, failure rate, FMEA stages, design, process and documentation. Taguchi techniques - introduction, loss function, parameter and tolerance design, signal to noise ratio. Seven old (statistical) tools. Seven new management tools. Bench marking and POKA YOKE.

UNIT V QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION 9

Introduction to IS/ISO 9004:2000 - quality management systems - guidelines for performance improvements. Quality Audits. TQM culture, Leadership - quality council, employee involvement,

motivation, empowerment, recognition and reward. Information technology - computers and quality functions, internet and electronic communications. Information quality issues.

TOTAL : 45

TEXT BOOKS:

1. Dale H.Besterfield et al, Total Quality Management, Thrid edition, Perarson Education (First Indian Reprints 2004)
2. Shridhara Bhat K, Total Quality Management - Text and Cases, First Edition 2002, Himalaya Publishing House.

REFERENCES:

1. William J.Kolarii, Creating quality, Mcgraw Hill, 1995
2. Poornima M.Charantimath., Total quality management, Pearson Education, First Indian Reprint 2003.
3. Rose J.E. Total Quality Management, Kogan Page India Pvt Ltd, 1993.
4. Indian standard - quality management systems - Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.

PBA207 RESEARCH METHODS IN BUSINESS.

Credit : 4

GOAL

The Students will be able to acquire research skills and apply those scientific research techniques which will lead to a good Management decisions.

OBJECTIVES

- To classify business research as exploratory research, descriptive research or causal research and to identify and briefly discuss the various decision alternatives available to the researcher during each stage of the research process. The objective is also to formulate a solid research hypothesis.
- The objective is to study the internal and external validity with experimental research design and to understand the measurement scale in research studies.
- The objective is to learn various methods of data Collection and to prepare a proper Questionnaire design. Also to understand how to choose an appropriate sample design and the nature and logic of hypothesis testing.
- The objective is to study the various Multivariate Statistical Techniques, like Factor Analysis, Cluster Analysis, Discriminant analysis, Multiple regression and correlation, canonical correlation and application of SPSS Package.
- The objective is to know the contents, types, lengths and technical specifications of research reports and to understand the importance of the research follow-up.

OUTCOMES

- The students will be able to understand the importance of business research as management decision-making tool and plan a proper Research design of all the stages in the Research Process. Students will also be able to understand the terms, concept, proposition, variable and Hypothesis.
- Students will be able to discuss how to control extraneous variables in experimental
- Situations and can take critical decisions involved in selecting an appropriate measurement scale by rating, ranking and sorting and other preference scales in the research.
- Students will be able to explain the differences between Primary data and Secondary data and they will be able to plan and design a questionnaire layout.
- Students can analyse the factors that influence the selection of an appropriate test of statistical significance.
- Students will be able to know how Principal component analysis extracts uncorrelated factors from an initial set of variables and how (exploratory) factor analysis reduces the number of variables to discover underlying constructs. Also they will be able to interpret the statistical results of multiple regression and Cluster Analysis.
- Students will be able to understand and explain how the research report is the crucial means for communicating the whole research project and how it is useful to study further research with recommendations/suggestions.

PBA207 RESEARCH METHODS IN BUSINESS

L	T	P	C
3	0	0	3

OBJECTIVE

To impart the students with necessary quantitative skills to conduct high quality independent research related to Business administration.

UNIT I INTRODUCTION TO RESEARCH **8**

The hallmarks of scientific research - the building blocks of science in research - the research process for applied and basic research - the need for theoretical frame work - hypothesis development - hypothesis testing with quantitative data. The research design. The purpose of the study: Exploratory, Descriptive, Hypothesis testing (Analytical and Predictive) - cross sectional and longitudinal studies.

UNIT II EXPERIMENTAL DESIGN **7**

The laboratory and the field experiment - internal and external validity - factors affecting internal validity. Measurement of variables - scales and measurement of variables - development scales - rating scale and concept in scales being developed. Stability measures.

UNIT III DATA COLLECTION METHOD **10**

Interviewing, questionnaires etc. Secondary sources of data collection. Guidelines for questionnaire design - electronic questionnaire design and surveys. Special data source: Focus groups, Static and