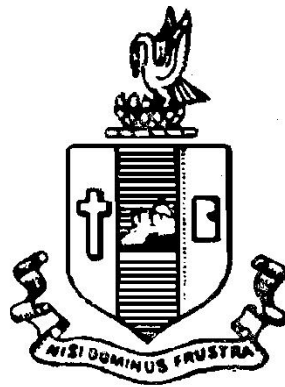


# **BACHELOR OF BUSINESS ADMINISTRATION in AVIATION AND GROUND HANDLING (BBA)**

**BISHOP HEBER COLLEGE (Autonomous)**

Affiliated to Bharathidasan University  
Nationally Reaccredited with 'A' Grade by NAAC with a CGPA of 3.58 out of 4  
Recognized by UGC as "College of Excellence"  
Tiruchirappalli- 620017  
South India



***SYLLABUS***

***2022 - 2023***

***(Admitted Students)***

# **PG & RESEARCH DEPARTMENT OF MANAGEMENT STUDIES**

## **VISION**

World class business school with satellite campuses across the globe and to cater to all who strive to become management professionals.

## **MISSION**

- Provide quality management education to students who aspire to become future managers and entrepreneurs.
- Bring total transformation in their personality to perform effectively and efficiently in corporate world.

## **Programme Outcomes (POs) - BBA**

On completion of this course, the graduate will be able to

### **KNOWLEGE**

**PO1:** Demonstrate comprehensive knowledge and understanding of one or more functions in management that form a part of an Bachelor of Business Administration programme.

**PO2:** Identify the broad overview of the airline industry and creates awareness of the underlying marketing, financial, operational, and other factors influencing airline management.

**PO3:** Critically evaluate practices, policies and theories by following scientific approach to knowledge development in field of Aviation and ground handling.

### **SKILL**

**PO4:** Exhibit communication skills apart from leadership and organizational skills which are important in the aviation industry.

**PO5:** Work independently and to identify appropriate resources required for a project, manage a project effectively till its completion.

**PO6:** Make use of ICT in a variety of learning situations, demonstrate ability to access, evaluate and use appropriate software in aviation industry.

### **ATTITUDE**

**PO7:** Exhibit knowledge and skills that are necessary for participating in lifelong learning activities.

**PO8:** Demonstrate their knowledge by applying it to real world situations encountered during flight training in a safe and effective manner.

### **ETHICAL & SOCIAL VALUES**

**PO9:** Embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work.

## **Programme Specific Outcomes (PSOs) - BBA**

On Completion of this course, the graduate will be able to

**PSO1:**Take up a career of learning to fly new aircraft and operate new equipment and have positive study habits to maintain high levels of professional knowledge.

**PSO2:**Pursue higher education programme like MBA in Aviation Management.

**PSO3:** Take-up the roles of aviation planner, senior staff analyst for airlines, operations analyst for airlines, financial analyst for airlines, cabin crew and purchasing management.

**PSO4:**Make decisions and actions that impact their passengers, people on the ground, airport security and public perception of the aviation industry.

## **SYLLABUS**

*For Students admitted from 2022-2023 Batch Onwards*

<b>BACHELOR OF BUSINESS ADMINISTRATION (BBA)</b>								
<b>SEMESTER I</b>								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
I	Language I	Tamil I	U18TM1L1	6	3	25	75	100
II	English I	English Communication Skills-I	U21EGPL1	6	3	40	60	100
III	Core I	Principles of Management	U20AG101	6	5	25	75	100
	Allied I	Radio Communication	U21AG1Y1	5	4	25	75	100
	Allied II	Familiarization of Airport and Aircraft	U20AG1Y2	5	4	25	75	100
IV	Val.Edu	Value Education (RI / MI)	U15VL1:1/ U15VL1:2	2	2	25	75	100
<b>CREDITS</b>					<b>21</b>			
<b>SEMESTER II</b>								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
I	Language II	Tamil II	U18TM2L2	6	3	25	75	100
II	English II	English Communication Skills-II	U21EGNL2	6	3	40	60	100
III	Core II	Business Economics	U20AG202	6	5	25	75	100
	Allied III	Business Mathematics & Statistics	U21AG2Y3	5	4	25	75	100
	Allied IV	Introduction to Cabin Crew Profession	U20AG2Y4	5	4	25	75	100
IV	Env.Stu	Environmental studies	U16EST21	2	2	25	75	100
<b>CREDITS</b>					<b>21</b>			

SEMESTER III								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
I	Language III	Tamil III	U18TM3L3	6	3	25	75	100
II	English III	Business Communication in English	U17EGCL3	6	3	40	60	100
III	Core III	Management Accounting-I	U20AG303	5	4	25	75	100
	Elective I	Sales and Distribution Management/ Total Quality Management	U22AG3:A/ U22AG3:B	5	5	25	75	100
	Allied V	Air Regulation	U20AG3Y5	4	3	25	75	100
IV	SBEC I	Computer Application in Business-I (Theory and Practical)	U20AGPS1	2	2	40	60	100
	NMEC I	Fundamentals of Management	U20AG3E1	2	2	25	75	100
<b>CREDITS</b>					<b>22</b>			
SEMESTER IV								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
I	Language IV	Tamil IV	U18TM4L4	5	3	25	75	100
II	English IV	English Through Literature	U21EGNL4	5	3	40	60	100
III	Core IV	Business Law and Aviation Flight Safety Law	U21AG404	5	5	25	75	100
	Elective II	Training and Development/ Services Marketing	U22AG4:A/ U22AG4:B	5	5	25	75	100
	Allied VI	Aviation Security	U20AG4Y6	4	3	25	75	100
IV	SBEC II	Airport Ground Handling Management	U21AGPS2	2	2	40	60	100
	NMEC II	Fundamentals of Marketing	U20AG3E2	2	2	25	75	100
	Soft Skills	Life Skills	U16LFS41	2	1	-	-	100
V	Ext.Act	NSS, NCC, Leo Club, Rotract, etc	U16ETA41	-	1	-	-	
<b>CREDITS</b>					<b>25</b>			

SEMESTER V								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
III	Core V	Human Resource Management	U20AG505	6	5	25	75	100
	Core VI	Planning And Crew Scheduling	U21AG506	6	5	25	75	100
	Core VII	General Navigation	U20AG507	6	5	25	75	100
	Core VIII	Dangerous goods regulations	U20AG508	5	5	25	75	100
	Elective III	Investment Management/ Project Management/ Retail Management	U22AG5:A/ U22AG5:B/ U22AG5:C	5	5	25	75	100
IV	SBEC III	Interview Skills	U20AG5S3	2	2	25	75	100
					<b>CREDITS</b>	<b>27</b>		
SEMESTER VI								
Part	Course	Course Title	Course Code	Hours/ Week	Credits	Marks		
						CIA	ESE	Total
III	Core IX	Strategic Management	U20AG609	6	5	25	75	100
	Core X	Research Methodology & Introduction to Statistical Packages(Theory and Practical)	U20AGP10	5	5	40	60	100
	Core XI	Passenger Facilitation	U21AG611	6	5	25	75	100
	Core XII	Ramp Service Management	U21AG612					
IV	Internship	Internship	U20AG6F1	-	6	-	-	100
V	Gen.Stu	Gender Studies	U16GST61	-	1	-	-	100
					<b>CREDITS</b>	<b>24</b>		
<b>Total Credits</b>						<b>140</b>		

**\*OtherLanguages:**

	Hindi	Sanskrit	French		Hindi	Sanskrit	French
Semester I	U18HD1L1	U17SK1L1	U18FR1L1	Semester III	U18HD3L3	U17SK3L3	U18FR3L3
Semester II	U18HD2L2	U17SK2L2	U18FR2L2	Semester IV	U18HD4L4	U17SK4L4	U18FR4L4

Part 1	4
Part II	4
Core Theory	12
Allied	6
Elective	3
NMEC	2
SBEC	3
Env.Studies	1
Extension Activities	1
Value Education	1
Soft Skills	1
Gender Studies	1
Core Project	1

**NMEC offered by the Department:**

- 1) Fundamentals of Management-U20MS3E1
- 2) Fundamentals of Marketing-U20MS4E2



**PROGRAMME ARTICULATION MATRIX - BBA - AVIATION & GROUND  
HANDLING**

S. No	COURSE NAME	COURSE CODE	CORRELATION WITH PROGRAMME OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES													
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PS O1	PS O2	PS O3	PS O4	
1.	Principles of Management	U20AG101	H	M	H	M	M	M	M	M	M	L	M	L	H	M
2.	Radio Communication	U19MS1Y1	H	M	H	H	M	M	M	L	M	M	M	M	M	L
3.	Introduction To aircraft & Aircraft Familiarisation	U20AG1Y2	M	M	H	H	H	L	H	M	M	L	M	H	M	
4.	Business Economics	U20AG202	H	H	M	M	M	M	H	H	M	H	H	M	M	
5.	Business Mathematics & Statistics	U20AG2Y3	H	H	H	H	M	M	H	H	M	H	H	H	M	
6.	Introduction to Cabin Crew Profession	U20AG2Y4	M	M	H	H	H	L	H	M	M	L	M	H	H	
7.	Management Accounting-I	U20AG303	H	L	M	H	M	M	L	H	H	H	H	H	L	
8.	Sales and Distribution Management	U22AG3:A	M	M	M	M	M	M	M	M	M	M	M	H	H	
9.	Advertising and Sales promotion	U22AG3:B	H	H	H	H	M	L	H	M	L	M	M	M	L	
10	Total Quality Management	U22AG3:C	M	M	H	H	H	H	M	M	M	L	M	H	M	
11	Air Regulation	U20AG3Y5	M	M	H	H	H	L	M	M	M	L	M	H	H	
12	Computer Application	U20AGPS1	H	H	H	M	H	H	M	M	M	H	L	H	M	

	<b>in Business- I(Theory and Practical)</b>														
<b>13</b>	<b>Fundamental s of Management</b>	<b>U20AG3E1</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>
<b>14</b>	<b>Business La w and Aviation Flight Safety Law</b>	<b>U21AG404</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>M</b>
<b>15</b>	<b>Training and Development</b>	<b>U22AG4:A</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>L</b>
<b>16</b>	<b>Services Marketing</b>	<b>U22AG4:B</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>L</b>	<b>H</b>	<b>L</b>	<b>L</b>	<b>M</b>	<b>M</b>	<b>M</b>
<b>17</b>	<b>Aviation Sec urity</b>	<b>U20AG4Y6</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>
<b>18</b>	<b>Practical</b>	<b>U20AGPS2</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>
<b>19</b>	<b>Fundamental s of Marketing (NMEC)</b>	<b>U20AG3E2</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>L</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>L</b>
<b>20</b>	<b>Human Reso urce Manage ment</b>	<b>U20AG505</b>	<b>H</b>	<b>L</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>L</b>
<b>21</b>	<b>Planning An d Crew Scheduling</b>	<b>U21AG506</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>
<b>22</b>	<b>General Navi gation</b>	<b>U20AG507</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>H</b>	<b>H</b>
<b>23</b>	<b>Dangerous g oods regulati ons</b>	<b>U20AG508</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>H</b>	<b>H</b>
<b>24</b>	<b>Investment Management</b>	<b>U22AG5:A</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>L</b>	<b>H</b>	<b>M</b>	<b>H</b>	<b>L</b>
<b>25</b>	<b>Project Management</b>	<b>U22AG5:B</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>

26	Retail Management	U22AG5:C	M	M	H	H	H	L	H	M	M	L	M	H	H
27	Interview Skills	U20AG5S3	M	M	H	M	H	H	M	H	M	M	M	H	M
28	Strategic Management	U20AG609	M	M	H	M	L	M	L	M	L	L	L	M	H
29	Research Methodology & Introduction to Statistical Packages (Theory and Practical)	U20AGP10	H	M	H	H	H	M	L	H	L	L	L	M	H
30	Passenger Facilitation	U21AG611	M	M	H	H	H	L	M	M	M	L	M	H	H
31	Ramp Service Management	U21AG612	M	M	H	H	H	L	M	M	L	M	M	M	H

### SEMESTER – I

<b>S.NO</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Language I	U18TM1L1
2.	English Communication Skills-I	U21EGPL1
3.	Principles of Management	U20AG101
4.	Radio Communication	U21AG1Y1
5.	Familiarization of Airport and Aircraft	U20AG1Y2
6.	Value Education (RI / MI)	U15VL1:1/ U15VL1:2

## Core I: PRINCIPLES OF MANAGEMENT

**SEMESTER: I**

**CODE: U20AG101**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 6**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Comprehend the principles, theories of Management.	K2	I
2	Accomplish the given tasks effectively and to handle situations which may arise in management	K3	II
3	Identify the various functional activities prevailing in the organizations	K3	III
4	Discuss and communicate the management evolution and how it will affect future managers	K2	IV
5	Practice the process of management's four functions: planning, organizing, leading, and controlling	K3	V
6	Evaluate leadership styles to anticipate the consequences of each leadership style	K2	IV

### 2A. SYLLABUS

#### UNIT-I INTRODUCTION

**15 Hours**

Introduction - The development of management thoughts - Functions of a Manager.

#### UNIT-II PLANNING

**15 Hours**

Planning - Meaning and definition of Planning - Nature and purpose of Planning - Objectives of Planning - Types of Planning - Operational and strategic planning - Steps in planning – Limitations – Authority - Delegation (Definition) - Centralization and Decentralization.

#### UNIT-III ORGANIZATION AND STAFFING

**15 Hours**

Organisation - Organization theory - Organization structure - Staffing - Definitions – Objectives - Merits and Demerits.

#### UNIT IV-DIRECTING

**15 Hours**

Directing - Concept of Direction - Role theory and role analysis - Hawthorne studies - Contributions of Taylor, Henry Fayol, Elton Mayo, Gilbreth Maslow, Peter Drucker, Mintzberg - Morale and motivation - Co-ordination

**UNIT V-CONTROL**

**15 Hours**

Controlling – Function – Steps – Budgeting - Reviewing.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Management of Technology and Innovation	<a href="http://maryannfeldman.web.unc.edu/files/2011/11/Contribution-of-Public-Entities_2008.pdf">http://maryannfeldman.web.unc.edu/files/2011/11/Contribution-of-Public-Entities_2008.pdf</a>
2	Vroom’s Expectancy Theory	<a href="https://www.yourcoach.be/en/employee-motivation-theories/vroom-expectancy-motivation-theory.php">https://www.yourcoach.be/en/employee-motivation-theories/vroom-expectancy-motivation-theory.php</a>
3	Career Development in Management	<a href="https://www.businessmanagementideas.com/human-resource-management-2/career-development/what-is-career-development/20203">https://www.businessmanagementideas.com/human-resource-management-2/career-development/what-is-career-development/20203</a>
4	Likert’s Management System	<a href="https://www.businessballs.com/organisational-culture/likerts-management-systems/">https://www.businessballs.com/organisational-culture/likerts-management-systems/</a>

**2C. TEXT BOOKS:**

1. L M Prasad, Principles of Management, 9<sup>th</sup> Edition, Sultan Chand & Sons, 2015.
2. T. Ramasamy, Principles of Management, Himalaya Publishing House, 2016

**2D. REFERENCE BOOKS:**

1. Shrelekar, Principles of Management, 1<sup>st</sup> Edition, Himalaya Publishing house, 2017
2. Dinkar Pagare, Business Management, 5<sup>th</sup> edition, Sultan chand & Sons, 2013
3. Tripathi and Reddy Principles of Management, 5<sup>th</sup> Edition, McGraw Hill, 2012
4. Koontz and O Donnel (TMH), Essentials of Management, 5<sup>th</sup> Edition, Tata McGraw Hill, 1990
5. Dr. S C Saxena, Modern Business Organization, Sahitiya Bhawan Publications, 2000

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
I	INTRODUCTION		

1.1.0	Introduction	Define Management	<b>K1</b>
1.1.1	The development of management thoughts	List the development of management thoughts	<b>K2</b>
1.1.2	Functions of a Manager.	Demonstrate the applicability of the dimensions	<b>K2</b>
<b>II</b>	<b>PLANNING</b>		
2.1.0	Planning	Illustrate the meaning of planning	<b>K1</b>
2.1.1	Meaning and definition of Planning	Recall the definition of planning	<b>K2</b>
2.1.2	Nature and purpose of Planning	Demonstrate the nature and purpose of planning with examples	<b>K2</b>
2.1.3	Objectives of Planning	List the objectives of planning	<b>K2</b>
2.1.4	Types of Planning	Classify the different types of planning	<b>K2</b>
2.1.5	Operational and strategic planning	Illustrate the usage of operational and strategic planning	<b>K2</b>
2.1.6	Steps in planning	Outline the steps in planning	<b>K2</b>
2.1.7	Limitations	Relate the limitations with objectives of planning	<b>K2</b>
2.2.0	Authority	Explain the meaning of authority	<b>K2</b>
2.2.1	Delegation (Definition)	Explain the meaning of delegation	<b>K2</b>
2.2.2	Centralization and Decentralization	Define Centralization and Decentralization	<b>K2</b>
<b>III</b>	<b>ORGANIZATION AND STAFFING</b>		
3.1.0	Organization	Explain about Organization.	<b>K1</b>
3.1.1	Organization theory	Demonstrate the organization theory	<b>K2</b>
3.1.2	Organization structure	Explain the importance organization structure	<b>K2</b>
3.2.0	Staffing	Explain the meaning of staffing	<b>K2</b>

3.2.1	Definitions	Recall the definition of staffing	<b>K2</b>
3.2.2	Objectives	Explain the objectives of staffing	<b>K2</b>
3.2.3	Merits and Demerits	List the merits and demerits	<b>K2</b>
<b>IV</b>	<b>DIRECTING</b>		
4.1.0	Directing	Explain the importance of Directing	<b>K1</b>
4.1.1	Concept of Direction	Recall the nature of direction	<b>K1</b>
4.1.2	Role theory and role analysis	Define role theory	<b>K1</b>
4.1.3	Hawthorne studies	Show Hawthorne experiments	<b>K2</b>
4.1.4	Contributions of Taylor, Henry Fayol, Elton Mayo, Gilbreth Maslow, Peter Drucker, Mintzberg	Illustrate the functions of manager	<b>K2</b>
4.1.5	Morale and motivation	Define morale and motivation	<b>K2</b>
4.1.6	Co-ordination	Define Coordination	<b>K1</b>
<b>V</b>	<b>CONTROL</b>		
5.1.0	Controlling	Define Controlling	<b>K1</b>
5.1.1	Function	Illustrate the function and uses of controlling	<b>K2</b>
5.1.2	Steps	List the steps in controlling	<b>K2</b>
5.1.3	Budgeting	Compare budgetary control and non-budgetary control	<b>K2</b>
5.1.4	Reviewing	Illustrate the importance of reviewing	<b>K2</b>



#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	M	M	H	H	M	M	M	H	M	L	M	M
CO2	H	M	H	H	M	M	M	H	M	L	-	H	M
CO3	M	M	H	M	M	L	M	H	-	M	M	H	M
CO4	H	M	M	M	L	M	L	H	L	-	L	H	M
CO5	H	-	H	M	L	M	-	M	L	M	-	H	M
CO6	-	M	H	H	-	M	L	L	M	-	H	M	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<b>1. Continuous Assessment Test I,II</b>
<b>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b>
<b>3. End Semester Examination</b>
<b>Indirect</b>
<b>1. Course-end survey</b>

**Name of the Course Co-ordinator: Dr. S. M. Soundria**

## **Allied II: RADIO COMMUNICATION**

**SEMESTER: I**

**CODE: U21AG1Y1**

**CREDITS: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On Completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Categorize the hierarchy of radio communication regularity authority	K4	I
2	Recall the basic term related to radio communication	K1	II
3	Explain the phrases used in aeronautical communication	K2	III
4	Identify the difference between height, altitude, elevation and flight level	K3	IV
5	Construct proper air – ground communication	K6	V
6	Explain the different Q codes	K2	IV

### **2A. SYLLABUS**

#### **UNIT I REGULATIONS**

**12 Hours**

Duties of International Telecommunication Union (ITU), International Civil Aviation Organization (ICAO), Airport Authority of India (AAI), Wireless Planning and Coordination Wing (WPC), ICAO Annexure, Spelling of Alphabets and Transmission of numerical, Aircraft Identification, Location Indicators, Flight Information Regions (FIR), Identification of Ground Services.

#### **UNIT II RADIO PROPAGATION**

**12 Hours**

- (a) Relationship between wavelength, frequency and speed of light
- (b) Frequency bands and ranges
- (c) Ionosphere layers during day and night
- (d) Mode of Propagation MF, HF and VHF & above
- (e) Operation of Geostationary Satellites
- (f) Operation of Polar orbiting Satellites

- (g) Skip Distance
- (h) Choice of Frequencies during Day & Night

**UNIT III PHRASEOLOGY**

**12 Hours**

Phraseology used in Aeronautical Communication Services, Abbreviations used in Aeronautical Communication Services.

- (a) Distress
- (b) Distress Relay
- (c) Direction Finding
- (d) Flight Safety
- (e) Metrological
- (f) Flight regulatory

**UNIT IV ‘Q’ CODES**

**12 Hours**

‘Q’ Codes used in Aeronautical Communication Services, Basic Understanding of atmospheric pressure, QNH, QFE, QFF, QNE, Understanding difference between Height, Elevation, Altitude and Flight Level

**UNIT V COMMUNICATION**

**12 Hours**

Introduction to radio call format, Radio strength check call, Startup clearance and pushback clearance call, Taxi clearance call, ATC clearance call.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Radio propagation principles	<a href="https://en.wikipedia.org/wiki/Radio_propagation">https://en.wikipedia.org/wiki/Radio_propagation</a>
2	Air ground communication principles	<a href="https://www.skybrary.aero/index.php/Air-Ground_Communication">https://www.skybrary.aero/index.php/Air-Ground_Communication</a>
3	Common aviation communication errors	<a href="http://aviationknowledge.wikidot.com/aviation:aviation-communication-errors">http://aviationknowledge.wikidot.com/aviation:aviation-communication-errors</a>

**2C. REFERENCE BOOKS**

1. Radio telephony, K.D. Tuli
2. Radio telephony manual by R.K. Bali
3. Air Regulation by R.K Bali

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>REGULATIONS</b>		
1.1	Duties of International tele communication union	Outline the duties of ITU	<b>K2</b>
1.2	International civil aviation organization	Summarize the function of ICAO	<b>K2</b>
1.3	Airport Authority of India	Explain the duties of AAI	<b>K2</b>
1.4	Wireless planning and coordination wing	Explain the responsibility of WPC	<b>K2</b>
1.5	Spelling of alphabets and transmission of numerals	Construct proper RT communication using aviation phonetics & transmission of numbers	<b>K3</b>
1.6	Aircraft Identification	Interpret the necessity of aircraft Identification	<b>K5</b>
1.7	Location Indicator	Dissect the code and find out it's position	<b>K4</b>
1.8	Flight information region	Elaborate the facilities available with a FIR	<b>K6</b>
1.9	Identification of ground services	Identify the purpose of ground equipment using its call sign	<b>K3</b>
<b>II</b>	<b>RADIO PROPAGATION</b>		
2.1.0	Relationship between wavelength, frequency and speed of light	Identify the relationship between wavelength, frequency, and speed of light	<b>K3</b>
2.1.1	Frequency band and ranges	List the frequency band and its ranges	<b>K4</b>
2.1.2	Ionosphere during day & night	Explain the changes in Ionosphere during day & night	<b>K5</b>
2.1.3	Mode of propagation	Choose the correct mode of propagation	<b>K3</b>
2.1.4	Operation of geo stationary satellite and polar orbiting satellite	Explain the working principle of geo stationary and polar orbiting satellite	<b>K2</b>
2.1.5	Skip distance	Recall the explanation of skip distance	<b>K1</b>
2.1.6	Choice of frequency	Choose the appropriate frequency to be	<b>K3</b>

	during day & night	used during day and night	
<b>III</b>	<b>PHRASEOLOGY</b>		
3.1.0	Distress	Construct a distress communication	<b>K3</b>
3.1.1	Distress relay	Explain the procedure for distress relay	<b>K2</b>
3.1.2	Direction finding	Illustrate the working principle of direction finding	<b>K2</b>
3.1.3	Flight safety	Define flight safety	<b>K1</b>
3.1.4	Meteorological services	Summarize meteorological services	<b>K2</b>
3.1.5	Flight regularity	Define the rules & regulation during flight	<b>K1</b>
<b>IV</b>	<b>'Q' Codes</b>		
4.1.0	Q codes used in aeronautical communication services	List the different Q codes used in aviation	<b>K4</b>
4.1.1	Basic understanding of atmospheric pressure	Recall atmospheric pressure	<b>K1</b>
4.1.2	QNH, QFE, QFF, QNE	Elaborate 4 Q codes	<b>K6</b>
4.1.3	Understanding the difference between height, elevation, altitude, flight level	Identify the difference between height, elevation, altitude & flight level	<b>K3</b>
<b>V</b>	<b>COMMUNICATION</b>		
5.1.0	Introduction to Radio call format	Construct basic radio communication	<b>K6</b>
5.1.1	Radio strength check call	Construct radio strength check call	<b>K6</b>
5.1.2	Start up clearance & pushback clearance call	Construct startup clearance & pushback clearance call	<b>K6</b>
5.1.3	Taxi clearance call	Construct taxi clearance call	<b>K6</b>
5.1.4	ATC clearance call	Construct ATC clearance call	<b>K6</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	M	M	M	M	M	H	-	-	-	M	M	L
CO2	H	M	H	H	M	M	H	M	-	M	-	M	-
CO3	H	M	-	H	M	M	M	-	-	M	H	M	-
CO4	M	H	H	H	M	M	L	L	-	L	M	-	L
CO5	H	H	M	H	H	M	M	M	M	M	M	M	M
CO6	H	M	H	H	H	H	M	H	M	M	H	M	L

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<b>1. Continuous Assessment Test I, II</b>
<b>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b>
<b>3. End Semester Examination</b>
<b>Indirect</b>
<b>1. Course-end survey</b>

**Name of the Course Co-ordinator: Captain Loganathan**

## FAMILIARIZATION OF AIRPORT AND AIRCRAFT

**SEMESTER: I**

**CODE: U20AG1Y2**

**CREDITS: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 5**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Distinguish the different structure of aircraft according to its construction	K4	I
2	Compare the Aerofoil structure and explain the working principle of carburettor	K2	II
3	Interpret the working principle of landing gear and its associated system	K2	III
4	Explain piston engine and its related system	K4	IV
5	Identify the various parts within a Jet engine	K3	V
6	Define various terms related with piston engine	K1	IV

### 2A. SYLLABUS

#### UNIT I - AIRCRAFT MODELS

**12 Hours**

Monocoque and Semi- Monocoque design

#### UNIT II - AIRFRAME & SYSTEMS

**12 Hours**

Types of Fuselage - Various Wing Structures - Control Surfaces - Airframe carburetor - fuel system - Gil System - Cooling System

#### UNIT III - LANDING GEAR, WHEEL BRAKES

**12 Hours**

Main Landing Gears and different types of Shock Strut - Brake System.

#### UNIT IV - AIRCRAFT ENGINE (PISTON)

**12 Hours**

Piston engine components - Crankcase, Crankshaft, Camshaft, Bearings, Connecting Rod, Piston, Piston Rings, Four-Stroke engine cycle, Engine Handling, Normally aspirated, Turbo charging, Supercharging.

## UNIT V - AIRCRAFT ENGINE (JET)

**12 Hours**

Propeller, Parts of Propeller, Types of Compressors - Axial, Centrifugal; Types of Combustion Chambers, gas turbine engine.

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	How fuel injector replaces conventional carburettor	<a href="https://www.howacarworks.com/basics/how-a-fuel-injection-system-works">https://www.howacarworks.com/basics/how-a-fuel-injection-system-works</a>
2	Different types of jet engine	<a href="https://www.thoughtco.com/different-types-of-jet-engines-1992017">https://www.thoughtco.com/different-types-of-jet-engines-1992017</a>
3	Types of flaps	<a href="https://en.wikipedia.org/wiki/Flap_(aeronautics)">https://en.wikipedia.org/wiki/Flap_(aeronautics)</a>

### 2C. REFERENCE BOOKS:

1. Airframe and Power plant Mechanics Airframe Handbook (AC65 – 15A) by Shroff Publishers
2. Airframe and Power plant Mechanics Airframe Handbook (AC65 – 9A) by Shroff Publishers
3. Aeroplane Technical by Trevor Thom

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>AIRCRAFT MODELS</b>		
1.1	Monocoque&semimonocoque design	Compare different aircraft structure	<b>K4</b>
<b>II</b>	<b>AIRFRAME &amp; SYSTEMS</b>		
2.1.0	Types of fuselage	Shoe different models of aircraft fuselage	<b>K1</b>
2.1.1	Various wing structure	Identify the wing structure for a particular purpose	<b>K3</b>
2.1.2	Control surfaces	Explain how aircraft is manoeuvred	<b>K2</b>
2.1.3	carburettor	Illustrate the working principle of	<b>K2</b>



		carburettor	
2.1.4	Fuel system	Explain the working of fuel system	<b>K2</b>
2.1.5	Fin system	Explain the cooling system using fin	<b>K2</b>
2.1.6	Cooling system	Determine the type of cooling system according to the purpose of flight	<b>K5</b>
<b>III</b>	<b>LANDING GEAR, WHEEL BRAKES</b>		
3.1.0	Main landing gear & different types of shock struts	Explain the working of landing gear & shock struts	<b>K2</b>
3.1.1	Brake System	Combine different braking action together	<b>K6</b>
<b>IV</b>	<b>AIRCRAFT ENGINE (PISTON)</b>		
4.1.0	Piston engine components	Identify various components in piston engine	<b>K3</b>
4.1.1	Crank case	Explain the purpose of crank case	<b>K2</b>
4.1.2	Crank shaft	Illustrate the purpose of crank shaft	<b>K2</b>
4.1.3	Camshaft	Interpret the relationship between camshaft and valve timings	<b>K2</b>
4.1.4	Bearing	Distinguish the difference between small end bearing and big end bearing	<b>K4</b>
4.1.5	Connecting rod	Explain the purpose of connecting rod	<b>K2</b>
4.1.6	Piston	Illustrate the working principle of piston	<b>K2</b>
4.1.7	Piston rings	Distinguish the purpose of various piston rings	<b>K4</b>
4.1.8	Four stroke engine cycle	Explain the 4 cycles of four stroke engine	<b>K2</b>
4.1.9	Engine handling	Demonstrate the importance of proper engine handling	<b>K2</b>
4.1.10	Normally Aspirated	Explain Normally Aspirated engine	<b>K2</b>
4.1.11	Turbocharger	Explain Compression of charge using Exhaust gas	<b>K2</b>
4.1.12	Supercharging	Explain Compression of charge using Engine power	<b>K2</b>
<b>V</b>	<b>AIRCRAFT ENGINE (JET)</b>		
5.1.0	Propeller	Explain the principle of propeller	<b>K2</b>
5.1.1	Parts of propeller	Identify the different parts of	<b>K3</b>

		propeller	
5.1.2	Types of compressor	Identify the different types of compressor	<b>K3</b>
5.1.3	Axial, centrifugal	Discuss the pros and cons Both compressor	<b>K6</b>
5.1.4	Types of combustion chamber	Identify the different types of combustion chamber	<b>K3</b>
5.1.5	Gas turbine engine	Explain the gas turbine engine	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

Name of the Course Co-ordinator: Captain Aarthi Kumari

## SEMESTER II

<b>S.No</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Language II	U18TM2L2
2.	English Communication Skills-II	U21EGPL2
3.	Business Economics	U20AG202
4.	Business Mathematics & Statistics	U21AG2Y3
5.	Introduction to Cabin Crew Profession	U20AG2Y4
6.	Environmental studies	U16EST21

## CORE II: BUSINESS ECONOMICS

**SEMESTER-II**

**CODE: U20AG202**

**CREDITS: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 6**

### 1. COURSE OUTCOMES:

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Recollect the Concept of Demand, Supply analysis, consumer surplus, National income and functions of money, concepts of micro economics and to Relate the demand and supply conditions, able to understand the various micro economic principles to make effective economic decisions under conditions of risk and uncertainty	K1	I
2	Distinguish the types of market to predict the real-world business problems with a systematic theoretical framework	K4	III
3	Understand the roles of managers in firms to design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products.	K2	II
4	Understand & evaluate the different market structure and their different equilibrium for industry as well as for consumers for the survival in the industry by the application of various pricing strategic.	K2, K5	III
5	Understand the Monetary and Fiscal Policy and able to Apply the Utility of Economics in Business Management & various techniques to forecast demand for better utilization of resources	K2	V
6	Analyze the macroeconomic concepts & their relation to micro economic concept & how they affect the business & economy	K4	IV

## 2A. SYLLABUS

### UNIT-I INTRODUCTION

12 Hours

Introduction about demand analysis-Utility of Economics in Business management and industrial administration- Analysis of demand and supply, Law of Diminishing marginal utility- Concept of Consumer Surplus, Elasticity of demand- Indifference curve analysis. Returns to scale importance of increasing returns in industrial activity - Concepts of cost – concepts of elasticity of supply – forces governing the supply of production, land, Labor, capital and enterprise.

### UNIT-II THEORIES OF DEMAND AND SUPPLY

12 Hours

Pricing function - Theory of firm – The problem of price fixation – the role of supply and demand- Concept of normal profit – sales maximization principle.

### UNIT – III MARKET STRUCTURE

12 Hours

Types of market structure - Monopoly, Monopolistic competition, Imperfect competition, Oligopoly - Economics of Bulk purchase - Pricing strategies.

### UNIT – IV INCOME

12 Hours

National Income -National Income – Circular flow of income-Measurement and difficulties in the measurement.

### UNIT – V MONEY SUPPLY

12 Hours

Usage of Money- Functions of money – theories of money supply- Role of commercial banks – RBI – methods of credit control - Monetary and fiscal policy.

## 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Agricultural Economics	<a href="https://www.britannica.com/topic/agricultural-economics">https://www.britannica.com/topic/agricultural-economics</a>
2	Labour Economics	<a href="https://www.britannica.com/topic/labour-economics">https://www.britannica.com/topic/labour-economics</a>
3	Natural Resource Economics	<a href="https://courses.lumenlearning.com/boundless-economics/chapter/introduction-to-natural-resource-economics/">https://courses.lumenlearning.com/boundless-economics/chapter/introduction-to-natural-resource-economics/</a>

## 2C. TEXT BOOK:

1. Varshney and Maheshwari, 2009, Managerial Economics, 6<sup>th</sup> Edition, Sultan Chand and Sons

## 2D. REFERENCE BOOKS:

1. M L Seth, Iswhwar Dhingra, P L Metha, 2008 Micro Economics, 7<sup>th</sup> Revised Edition, Sultan Chand and Sons.

2. G S Gupta, 2014, Macro Economics, 4<sup>th</sup> Edition, Tata McGraw Hill.

3. Dominik Salvatore, 2012, Managerial Economics, 7<sup>th</sup> Edition, Oxford publishers.

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
<b>1.1.0</b>	Introduction about demand analysis	Recall about demand analysis and Micro Economics.	<b>K1</b>
<b>1.1.1</b>	Utility of Economics in Business management and industrial administration	Illustrate the importance of economics in business and industrial administration.	<b>K2</b>
<b>1.1.2</b>	Analysis of demand and supply	Explain the demand and supply analysis	<b>K2</b>
<b>1.1.3</b>	Law of Diminishing marginal utility	Explain the Law of Diminishing marginal utility	<b>K2</b>
<b>1.1.4</b>	Concept of Consumer Surplus	Demonstrate the concept of consumer surplus	<b>K2</b>
<b>1.1.5</b>	Elasticity of demand	Illustrate Elasticity of demand	<b>K2</b>
<b>1.1.6</b>	Indifference curve analysis, Returns to scale importance of increasing returns in industrial activity	Demonstrate Indifference curve analysis, returns to scale and increasing returns in industrial activity.	<b>K2</b>
<b>1.1.7</b>	Concepts of cost, concepts of elasticity of supply – forces governing the supply of production, land, Labour, capital and enterprise.	Demonstrate cost, concepts of elasticity of supply – forces governing the supply of production, land, Labour, capital and enterprise.	<b>K2</b>
<b>II</b>	<b>THEORIES OF DEMAND AND SUPPLY</b>		

2.1.0	Pricing function	Illustrate pricing function	<b>K2</b>
2.1.1	Theory of firm – The problem of price fixation – the role of supply and demand	Explain the theory of firm and the problem in price fixation and role of supply and demand.	<b>K2</b>
2.1.2	Concept of normal profit – sales maximization principle	Demonstrate the concept of normal profit and explain sales maximization principle.	<b>K2</b>
<b>III</b>	<b>MARKET STRUCTURE</b>		
3.1.0	Types of market structure	Illustrate Types of market structure.	<b>K2</b>
3.1.1	Monopoly, Monopolistic competition, Imperfect competition, Oligopoly	Analyse the various market structure to make decisions.	<b>K4</b>
3.1.2	Economics of Bulk purchase	Illustrate Economics of Bulk purchase	<b>K2</b>
3.1.3	Pricing strategies.	Select appropriate Pricing strategies.	<b>K4</b>
<b>IV</b>	<b>NATIONAL INCOME</b>		
4.1.0	National Income – Circular flow of income	Demonstrate the Macro Economics, National Income and circular flow of income.	<b>K2</b>
4.1.1	Measurement and difficulties in the measurement.	Examine the difficulties in measuring national Income.	<b>K4</b>
<b>V</b>	<b>MONEY SUPPLY</b>		
5.1.0	Usage of Money	Explain the usage of money for various business activities.	<b>K2</b>
5.1.1	Functions of money – theories of money supply	Demonstrate the Functions of money – theories of money supply.	<b>K2</b>
5.1.2	Role of commercial banks – RBI – methods of credit control.	Explain the role of commercial banks and methods of credit control.	<b>K2</b>
5.1.3	Monetary and fiscal policy.	Illustrate about monetary and fiscal policy.	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	H	M	L	M	H	H	M	M	H	H	H	M
CO2	H	H	M	M	L	M	H	M	M	H	H	M	M
CO3	H	H	M	M	L	M	H	M	M	M	H	H	M
CO4	H	H	H	M	M	M	H	H	M	H	H	M	M
CO5	H	M	H	H	H	M	L	H	M	M	H	H	M
CO6	H	H	M	M	H	H	H	M	M	H	H	M	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"><li>1. Continuous Assessment Test I, II</li><li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li><li>3. End Semester Examination</li></ol>
<b>Indirect</b>
<ol style="list-style-type: none"><li>1. Course-end survey</li></ol>

Name of the Course Co-ordinator: Mr. John Vimal



## **Allied III: BUSINESS MATHEMATICS & STATISTICS**

**SEMESTER-II**

**CODE: U21AG2Y3**

**CREDITS: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Discuss the meaning of business mathematics and understand its application in solving business problems	K1	I
2	Identify the types of data and classify the measures of central tendency	K2	II
3	Outline the various measures of dispersion	K1	III
4	Construct the uses of measures of dispersion in business	K4	III
5	Interpret the measures of skewness and kurtosis	K3	IV
6	Distinguish between correlation and regression	K4	V

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION TO BUSINESS MATHS**

**12 Hours**

Arithmetic and Geometric series, Application to Business problems, Matrix algebra, addition, Subtraction and Multiplication

#### **UNIT-II INTRODUCTION TO STATISTICS & MEASURES OF CENTRAL TENDENCY**

**12 Hours**

Introduction to Statistics, Nature and scope of statistics, Uses of Statistics in Business, Statistical Data-primary and secondary, Classification of data, Frequency distribution, Histogram, Frequency polygon, Frequency curve, Graphs and Diagrams, Bar diagrams, Pie Diagrams, Measures of central tendency, Mean, Median, Mode, Geometric mean, Harmonic mean, Uses of averages in Business

#### **UNIT-III MEASURES OF DISPERSION**

**12 Hours**

Measures of dispersion, Range, Quartile Deviation, Mean Deviation, Standard Deviation, Co-efficient of variation, Uses in Business

**UNIT-IV SKEWNESS AND KURTOSIS (Only Theory)****12 Hours**

Skewness, Meaning, Bowley's coefficient of skewness, Pearson's coefficient of skewness, Kurtosis, Definition, Meaning, Types

**UNIT-V CORRELATION AND REGRESSION****12 Hours**

Simple Correlation, Karl Pearson, Spearman's Rank Correlation, Concurrent deviation, Regression lines, Trend lines, Method of least squares

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Logarithms	<a href="https://www.britannica.com/science/logarithm">https://www.britannica.com/science/logarithm</a>
2	Permutation and Combination	<a href="https://www.britannica.com/science/permutation">https://www.britannica.com/science/permutation</a>
3	Probability	<a href="https://mathworld.wolfram.com/Probability.html">https://mathworld.wolfram.com/Probability.html</a>

**2C. TEXT BOOKS:**

1. P. Navaneethan, 2015, Business Statistics, 6<sup>th</sup> Edition, Jai Publishing house.
2. P. R. Vital, 2012, Business Mathematics, Margham Publishing.
3. P. Ramaraj & S.ManjuBharathi, 2018, Business Maths & Statistics

**2D. REFERENCES BOOKS:**

1. R.S.N. Pillai and Bagavathi, 2009, Statistics: Theory and Practice, 7<sup>th</sup> Revised Edition, S. Chand and Sons.
2. S.P Gupta, 2012, Fundamental of Mathematical Statistics, 1<sup>st</sup> Edition, Sultan Chand Publications.
3. Levin, Rubin, 1998, Statistics for Management, 7<sup>th</sup> Edition, Pearson Publication.

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>UNIT-I INTRODUCTION TO BUSINESS MATHS</b>			
1.1	Arithmetic and Geometric series	Define Arithmetic, Geometric Series and analyse its Application to Business problems	<b>K1</b>
1.2	Application to Business problems	Compute problems relating to the concepts	<b>K1</b>

1.3	Matrix algebra - Addition, Subtraction, Multiplication	Identify the various matrix operations.	<b>K2</b>
<b>UNIT-II INTRODUCTION TO STATISTICS &amp; MEASURES OF CENTRAL TENDENCY</b>			
2.1	Introduction to Statistics	Demonstrate the concept of statistics and list out its importance	<b>K2</b>
2.1.1	Nature and scope of statistics	Identify the scope of statistics	<b>K2</b>
2.1.2	Uses of Statistics in Business	Define Statistical data	<b>K1</b>
2.1.3	Statistical Data- primary and secondary, Classification of data	Classify the types of data and identify the methods to collect them	<b>K1</b>
2.1.5	Frequency distribution, Histogram	Explain the method of drawing a histogram	<b>K3</b>
2.1.6	Frequency polygon Frequency curve	Demonstrate the method of drawing a frequency polygon and frequency curve	<b>K2</b>
2.2	Graphs and Diagrams Bar diagrams Pie Diagrams	Show the types of Graphs and Diagrams using problems	<b>K4</b>
2.3	Measures of central tendency Mean, Median, Mode	List out their advantages and disadvantages of measures of central tendency	<b>K2</b>
2.3.1	Geometric mean Harmonic mean	Explain the concepts of Geometric mean and Harmonic mean	<b>K2</b>
2.4	Uses of averages in Business	Make use of averages in business	<b>K3</b>
<b>UNIT-III MEASURES OF DISPERSION</b>			
3.1	Measures of dispersion	Define measures of dispersion	<b>K1</b>
3.1.1	Range	Explain the merits and demerits of Range	<b>K2</b>

3.1.2	Quartile Deviation	Demonstrate the computation of quartile deviation in individual, discrete and continuous series	<b>K2</b>
3.1.3	Mean Deviation	Compute mean deviation using individual, discrete and continuous series	<b>K3</b>
3.1.4	Standard Deviation	Compute standard deviation using individual, discrete and continuous series	<b>K3</b>
3.1.5	Co-efficient of variation, Uses in Business	Explain the meaning of Co-efficient of variation.	<b>K2</b>
<b>UNIT-IV SKEWNESS AND KURTOSIS (Only Theory)</b>			
<b>4.1</b>	Skewness -Meaning	Classify the measures of skewness	<b>K2</b>
<b>4.1.1.</b>	Bowley's coefficient of skewness	Explain Bowley's coefficient of skewness.	<b>K2</b>
<b>4.1.2</b>	Pearson's coefficient of skewness	Define Pearson's coefficient of skewness.	<b>K1</b>
<b>4.2</b>	Kurtosis - Definition, Meaning, Types	Identify the types of kurtosis	<b>K3</b>
<b>UNIT-V CORRELATION AND REGRESSION</b>			
<b>5.1</b>	Simple Correlation	Define correlation	<b>K1</b>
<b>5.1.1</b>	Karl Pearson	Explain the Karl Pearson co-efficient of correlation	<b>K2</b>
<b>5.1.2</b>	Spearman's Rank Correlation	Examine method of calculating Spearman's Rank Correlation	<b>K4</b>
<b>5.1.3</b>	Concurrent deviation	Identify the concurrent deviation	<b>K3</b>
<b>5.2</b>	Regression lines	Illustrate the methods of regression	<b>K2</b>
<b>5.2.1</b>	Trend lines	Make use of trend lines	<b>K3</b>
<b>5.2.1</b>	Method of least squares	Apply the method of least squares	<b>K3</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	H	H	H	M	L	H	M	L	H	M	M	H
CO2	H	H	H	H	M	M	M	H	L	H	H	M	M
CO3	H	M	L	H	M	M	H	H	M	H	H	H	M
CO4	H	H	M	H	M	M	H	M	L	M	M	H	H
CO5	H	H	M	H	H	M	H	H	M	H	H	M	H
CO6	H	H	H	H	H	M	M	M	M	M	H	H	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<b>1. Continuous Assessment Test I,II</b>
<b>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b>
<b>3. End Semester Examination</b>
<b>Indirect</b>
<b>1. Course-end survey</b>

Name of the Course Co-ordinator: Mr. P. Ramaraj

## INTRODUCTION TO CABIN CREW PROFESSION

**SEMESTER-II**

**COURSE CODE: U20AG2Y4**

**CREDITS: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 5**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Explain the history and basic qualification to be a cabin crew	K2	I
2	Prioritize the necessary things for a cabin crew	K5	II
3	Choose the correct lifestyle to be healthy	K6	III
4	Categorize the roles and responsibility of a cabin crew	K4	IV
5	Outline the international rules and regulation related to aviation	K2	V
6	Apply the grooming technique	K3	II

### 2A. SYLLABUS

#### UNIT I – CABIN CREW PROFESSION

**12 Hours**

History and origin of cabin crew profession – Qualifications and training required – Key skills for cabin crew – Benefits and Challenges of working as cabin crew.

#### UNIT II – CABIN CREW LIFE STYLE

**12 Hours**

Cabin crew make-up, Jewellery and Hygiene – Uniforms and Presentation – Personal presentation when working as cabin crew – Living style – The work and Life balance.

**UNIT III – HOW TO STAY HEALTHY****12 Hours**

Tips for Diet – Tips to keep fabulous hair styles in check – Tips to choose to right skin care product – Best ways to tackle cabin crew tiredness.

**UNIT IV – ROLE AND RESPONSIBILITIES AS CABIN CREW****12 Hours**

Overview – Responsibilities – Cabin crew responsibilities in the galley – pre-flight safety demonstration – Role of Cabin crew in various emergency situations – Role of Cabin crew in emergencies and case study of actual air disasters.

**UNIT V – RULES AND REGULATIONS****12 Hours**

Aircraft rules 1937 – Duties of Pilot-in-command - Aircraft rules 38(B), 1937 – Carriage of cabin crew flight time and flight duty time limitation, CAR SECTION 7- Prohibition of intoxication while duty onboard , Aircraft Rule 24.

**2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
<b>1</b>	Cabin crew emergency communication inflight	<a href="https://www.skybrary.aero/index.php/Cabin_Crew-Flight_Crew_Emergency_Communication">https://www.skybrary.aero/index.php/Cabin_Crew-Flight_Crew_Emergency_Communication</a>
<b>2</b>	Grooming tips for cabin crew	<a href="https://www.skybrary.aero/index.php/Cabin_Crew-Flight_Crew_Emergency_Communication">https://www.skybrary.aero/index.php/Cabin_Crew-Flight_Crew_Emergency_Communication</a>
<b>3</b>	Cabin crew job description	<a href="https://www.prospects.ac.uk/job-profiles/air-cabin-crew">https://www.prospects.ac.uk/job-profiles/air-cabin-crew</a>

**2C. REFERENCE BOOKS:**

R.K.Bali – Navigation

Ground Studies for Pilots - Navigation

Oxford – General Navigation

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>CABIN CREW PROFESSION</b>		
1.1	History and origin of cabin crew profession	Outline the history of cabin crew	<b>K2</b>
1.2	Qualification and training required	Summarize the required qualification to be a cabin crew	<b>K2</b>
1.3	Key skills for cabin crew	Prioritize the skills required for cabin crew	<b>K5</b>
1.4	Benefits and challenges of working as cabin crew	Examine the challenges and benefits to be a cabin crew	<b>K5</b>
<b>II</b>	<b>CABIN CREW LIFE STYLE</b>		
2.1.0	Cabin crew make up, jewellery & hygiene	Select the type of grooming to be carried	<b>K5</b>
2.1.1	Uniform and presentation	Plan the way of presentation	<b>K3</b>
2.1.2	Personal presentation when working as cabin crew	Develop the personal presentation	<b>K6</b>
2.1.3	Living style	Improve the living style	<b>K6</b>
2.1.4	The work & life balance	Organize life and work properly	<b>K3</b>
<b>III</b>	<b>HOW TO STAY HEALTHY</b>		
3.1.0	Tips for diet	Make use of healthy diet	<b>K3</b>
3.1.1	Tips to keep fabulous hair style in check	Choose a hair style which suits them	<b>K3</b>
3.1.2	Tips to choose right skin care product	Choose a product wisely	<b>K3</b>
3.1.3	Best way to tackle cabin crew tiredness	Solve the problem of fatigue	<b>K3</b>
<b>IV</b>	<b>ROLE AND RESPONSIBILITIES AS CABIN CREW</b>		
4.1.0	Overview	Outline the responsibility of cabin crew	<b>K2</b>
4.1.1	Responsibility	Summarizes the responsibility of cabin crew	<b>K2</b>
4.1.2	Cabin crew responsibility in the	Organize the work around galley	<b>K3</b>



	galley		
4.1.3	Roles of cabin crew in various emergency situation	Discuss the emergency procedure	<b>K6</b>
4.1.4	Roles of cabin crew in emergency & case study of actual air disaster	Examine the reason for abnormal situation	<b>K4</b>
<b>V</b>	<b>RULES AND REGULATIONS</b>		
5.1.0	Aircraft rule 1937	Outline the rules imposed in aircraft act 1937	<b>K2</b>
5.1.1	Duties of PIC	Explain the roles of PIC	<b>K2</b>
5.1.2	Aircraft rule 38(B), 1937	Outline the aircraft rule imposed in aircraft rule 38(B) 1937	<b>K2</b>
5.1.3	Flight time, Flight duty time limitations	Plan his/her flight time / Flight duty time	<b>K3</b>
5.1.4	Prohibition of alcohol while on duty	Decide things which are prohibited during flight	<b>K5</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
1. Continuous Assessment Test I,II 2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation 3. End Semester Examination
<b>Indirect</b>
1. Course-end survey

Name of the Course Co-ordinator: Captain Priya

### SEMESTER III

<b>S.No</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Language III	U18TM3L3
2.	English for competitive examination	U17EGCL3
3.	Management Accounting-I	U20AG303
	Sales and Distribution Management (Elective-I)	U22AG3:A
	Total Quality Management (Elective-I)	U22AG3:B
5.	Air Regulations	U20AG3Y5
6.	Computer Application in Business-I (Theory and Practical)	U20AGPS1
7.	Fundamentals of Management	U20AG3E1

## CORE-III: MANAGEMENT ACCOUNTING –I

**SEMESTER-III**

**CREDITS: 4**

**HOURS/WEEK: 5**

**CODE: U20AG303**

**TOTAL HOURS: 60**

### 1. COURSE OUTCOMES :

On completion of this course, the student will be able to

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Understand the elements, uses, and limitations of financial statements.	K1	I
2	Illustrate the importance of final accounts and the purpose they serve.	K2	II
3	Make use of final account statement to determine the profit & loss of the firm.	K3	II
4	Explain about the meaning, objectives and scope of management accounting.	K2	III
5	Apply tools and techniques of Ratio analysis used to plan, control and make decision.	K3	IV
6	Utilize the fund flow statement to identify cash inflow and outflow in a firm.	K3	V

### 2A. SYLLABUS

#### **UNIT-I-INTRODUCTION TO FINANCIAL ACCOUNTING**

**12 hours**

Accounting - Definition of account – Nature - Objects and utility of accounting in industrial and business enterprise, Books of accounts - Accounting concepts - Theory of double entry system - Book keeping - Journal – Ledgers - Subsidiary books - Trial balance

#### **UNIT-II FINAL ACCOUNTS**

**12 hours**

Statements of accounts - Trading account - Profit and loss account - Balance sheet (with simple adjustments)

#### **UNIT-III INTRODUCTION TO MANAGEMENT ACCOUNTING**

**12 hours**

Management accounting - Meaning – Objectives - Scope of management accounting and financial accounting - Difference between Management and cost accounting - Uses and limitation of management accounting

#### **UNIT-IV RATIO ANALYSIS**

**12 hours**

Analysis and interpretation of financial statement through accounting ratios - Liquidity Ratio - Solvency Ratio - Profitability Ratio - Significance of various ratios and their computation - Uses and limitations of ratios.

#### **UNIT-V FUND FLOW ANALYSIS**

**12 hours**

Fund flow analysis - Concept of funds - Sources and uses of funds - Concepts of flow - Fund flow statements - Management use of fund analysis - Construction of fund flow statements (Simple Problems)

### **2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
1	Cash Flow Statement	<a href="https://nptel.ac.in/content/storage2/courses/110101004/downloads/Lecture%20Notes/module6/lec1.pdf">https://nptel.ac.in/content/storage2/courses/110101004/downloads/Lecture%20Notes/module6/lec1.pdf</a>
2	Budgeting	<a href="https://nptel.ac.in/courses/110/101/110101004/">https://nptel.ac.in/courses/110/101/110101004/</a>
3	Decision Making Using Financial Statement	<a href="https://nptel.ac.in/courses/110/106/110106135/">https://nptel.ac.in/courses/110/106/110106135/</a>

### **2C. TEXT BOOKS:**

1.R.S.N. Pillai & Bagavathi, 2012, Management Accounting, Third edition, S. Chand Publishers

3. Dr. R. Ramachandran & Dr. R. Srinivasan, 2012, Management Accounting, Reprint, Sriram Publication

### **2D. REFERENCE BOOKS:**

1. Jain S.P & Narang K.L, 2014, Principles of Accountancy, Kalyani Publishers

2. R.L. Gupta & V.K. Gupta, 2014, Financial Accounting, Eighth edition, Sultan Chand and Sons

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENT	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>UNIT I INTRODUCTION TO FINANCIAL ACCOUNTING</b>			
1.1.0	Accounting	Recall various concepts of accounting	K1
1.1.1	Definition of accounting	Define Accounting	K1
1.1.2	Nature of accounting	Recall the nature of accounting	K1
1.1.3	Objectives and utility of accounting in industrial and business enterprise	Explain the objectives and utility of accounting in industrial and business enterprise	K2
1.2.0	Books of Accounts	Recall the books of accounts	K1
1.2.1	Accounting concepts	Explain the various Accounting concepts	K2
1.2.2	Theory of double entry	Recall the theory of double entry	K1
1.2.3	Book keeping	Explain the importance of book-keeping	K2
1.2.4	Journal	Apply golden rules to frame the Journal	K3
1.2.5	Ledger	Construct Ledger for different accounts	K3
1.2.6	Subsidiary books	Make use of different type of subsidiary books	K3
1.2.7	Trial balance	Utilize Trial Balance to check arithmetical accuracy	K3
<b>UNIT-II FINAL ACCOUNTS</b>			
2.1.0	Statement of Accounts	Illustrate the importance of statement of accounts	K2
2.1.1	Trading account	Make use of Trading account and with adjustment to determine to gross profit/loss of the firm.	K3

2.1.2	Profit and loss account	Make use of P&L account and with adjustment to determine to net profit/loss of the firm.	K3
2.1.3	Balance sheet (with simple adjustments)	Make use of balance sheet and with adjustment to determine to financial position of the firm.	K3
<b>UNIT-III INTRODUCTION TO MANAGEMENT ACCOUNTING</b>			
3.1.0	Management Accounting	Explain the importance of management accounting	K2
3.1.1	Meaning	Explain the meaning of Management Accounting	K2
3.1.2	Objectives	Summarize the objectives of Management Accounting	K2
3.1.3	Scope of management accounting	Explain the Scope of management accounting	K2
3.1.4	Difference between management accounting and financial accounting	Compare management accounting and financial accounting	K2
3.1.5	Difference between management accounting and cost accounting	Compare management accounting and cost accounting	K2
3.1.6	Uses and limitation of management accounting	Explain the uses and limitation of Management accounting	K2
<b>UNIT-IV RATIO ANALYSIS</b>			
4.1.0	Analysis and interpretation of financial statement thought accounting ratios	Illustrate the Analysis and interpretation of financial statement thought accounting ratios	K2
4.1.1	Liquidity Ratio	Analyze the liquidity position of the firm by using Liquidity ratio	K4
4.1.2	Solvency	Analyze the firm's ability to pay its debt obligations by using Solvency ratio	K4

4.1.3	Profitability	Analyze the firm's ability to generate income by using Profitability ratio	K4
4.1.4	Significance of various ratios and their computation	Explain the significance of various ratios and their computation	K2
4.1.5	Uses and limitations of ratios	Explain the Uses and limitations of ratios	K2
<b>UNIT-V FUND FLOW ANALYSIS</b>			
5.1.0	Fund flow analysis	Explain the fund flow analysis	K2
5.1.1	Concept of funds	Summarize the concepts of funds	K2
5.1.2	Sources and uses of funds	Illustrate the sources and uses of funds	K2
5.1.3	Concepts of flow	Explain the concepts of flow	K2
5.1.4	Fund flow statements	Analyze the sources and applications of fund.	K4



#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	-	L	H	-	-	-	H	L	M	M	M	L
CO2	H	-	M	H	M	-	-	H	M	M	H	H	L
CO3	H	M	H	H	M	M	L	H	H	H	H	H	H
CO4	L	L	M	M	-	-	L	H	M	M	M	M	L
CO5	H	H	H	H	M	M	M	H	H	H	H	H	H
CO6	H	M	H	H	M	M	M	H	H	H	H	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

Name of the Course Co-ordinator: Ms. Manju Bharathi

## **ELECTIVE I: SALES AND DISTRIBUTION MANAGEMENT**

**SEMESTER-III**

**CODE: U22AG3:A**

**CREDIT: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On Completion of this course, the student will be able,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Illustrate about the evolution of sales concept	K2	I
2	Classify the working structure of Sales management	K2	I
3	Outline the different types of Sales force	K2	II
4	Apply the concepts learnt to Sales management using basics concepts of marketing	K3	III
5	Explain how the Legal aspect of sales has changed recently	K2	IV
6	Identify about selection of warehouse location	K3	V

### **2A. SYLLABUS**

#### **UNIT-I SALES MANAGEMENT**

**15 Hours**

Sales Management, Organization of sales management, Recruitment of sales force, Training of sale quota.

#### **UNIT-II MANAGING THE SALES FORCE**

**15 Hours**

Managing the Sales force, Performance Evaluation of Sales Force, Compensation of sales force

#### **UNIT-III DISTRIBUTION MANAGEMENT**

**15 Hours**

Distribution Management - Members of Distribution Channels, Stockiest, Wholesaler, Retailer, Dealer, Appointment of dealers and other members, Role of channel members in promoting sales.

**UNIT-IV LEGAL ASPECTS**

**15 Hours**

Legal aspects in sales management, GST, Pricing structure

**UNIT-V WAREHOUSING**

**15 Hours**

Warehousing, Locations and Functions

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Supply side analysis	<a href="https://www.thebalance.com/supply-side-economics-does-it-work-3305786">https://www.thebalance.com/supply-side-economics-does-it-work-3305786</a>
2	Channel structure and intensity	<a href="https://courses.lumenlearning.com/boundless-marketing/chapter/channel-strategy-decisions/">https://courses.lumenlearning.com/boundless-marketing/chapter/channel-strategy-decisions/</a>
3	Distribution channel strategy	<a href="https://yourbusiness.azcentral.com/distribution-channel-strategies-9101.html">https://yourbusiness.azcentral.com/distribution-channel-strategies-9101.html</a>

**2C. TEXT BOOK:**

1. Field Sales Management – S Ramachandran (Publisher & Edition)

**2D. REFERENCE BOOKS:**

1. Sales Management – Richard Still, W D Cundiff – Prentice Hall
2. Field Sales Manager – New Gardner
3. Physical Distribution Management – Bower Sox, Smykay, Lalond.
4. Physical Distribution Management – RL Wanworth Ed.
5. Logistics of Distribution Systems – Mossman and Norton

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
<b>1.1.0</b>	Sales Management	Define Sales Management	<b>K1</b>

<b>1.1.1</b>	Organization of sales management	Illustrate the organisation of sales management	<b>K2</b>
<b>1.1.2</b>	Recruitment of sales force	Explain the recruitment of sales force	<b>K2</b>
<b>1.1.3</b>	Training of sales force	Explain about the training of sales force	<b>K2</b>
<b>1.1.4</b>	Sales Quota	Define sales quota	<b>K1</b>
<b>II</b>	<b>MANAGING THE SALES FORCE</b>		
2.1.0	Managing the Sales force	Explain about managing the sales force	<b>K2</b>
2.1.1	Performance Evaluation of Sales Force	Explain about the evaluation of sales force performance	<b>K2</b>
2.1.2	Compensation of sales force	Explain about the compensation of sales force.	<b>K2</b>
<b>III</b>	<b>DISTRIBUTION MANAGEMENT</b>		
3.1.0	Distribution management	Explain about the distribution management.	<b>K3</b>
3.1.1	Retailer	Explain the importance and role of Retailers in sales management	<b>K4</b>
3.1.2	Dealer	Explain the importance and role of Dealers in sales management	<b>K4</b>
3.1.3	Appointment of dealers and other members	Demonstrate the appointment of dealers	<b>K2</b>
3.1.4	Role of channel members in promoting sales	Explain the role of channel members in sales	<b>K4</b>

		management	
<b>IV</b>	<b>LEGAL ASPECTS IN SALES MANAGEMENT</b>		
4.1.0	Legal aspects in sales management	Explain about the legal aspects I sales	<b>K2</b>
4.1.1	GST	Illustrate the recent changes in sales after GST	<b>K4</b>
4.1.2	Pricing structure	Demonstrate the members to be involved in setting the price	<b>K2</b>
<b>V</b>	<b>WAREHOUSING</b>		
5.1.0	Warehousing	Explain the process involved in Warehousing	<b>K2</b>
5.1.1	Locations and Functions	Demonstrate the principles involved selecting location for warehouse	<b>K2</b>
5.1.2	Types of warehousing	Explain the different types of warehouse	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	M	M	M	L	M	M	L	L	L	M	L	M
CO2	M	H	H	M	M	M	M	H	M	M	L	M	H
CO3	M	M	M	H	M	L	M	M	M	M	M	M	H
CO4	M	L	M	L	M	M	L	M	H	M	M	H	H
CO5	M	M	M	M	H	M	L	M	M	M	M	H	M
CO6	M	H	M	M	H	M	M	L	M	M	M	H	L

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

Name of the Course Co-ordinator: Mr. Jimmy Carter

## **Elective I: TOTAL QUALITY MANAGEMENT**

**SEMESTER: III**

**CODE: U22AG3:B**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES:**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Identify the importance of Quality Management in an organization	K3	I
2	Demonstrate the importance of Vision, Mission and Quality Policy Statements of the organizations to improve and maintain quality	K2	II
3	Make use of the old and new seven quality improvement tools to improve and maintain quality in an organization	K3	III
4	Apply the concept of Kaizen, 5S, quality circles and benchmarking in the quality improvement process of organizations	K3	IV
5	Illustrate the use of Just in Time methodology in manufacturing companies	K2	IV
6	Analyse the prevailing conditions and provide solutions to enhance the organizations' quality standards	K5	V

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION**

**15 Hours**

Definition of TQM, Evolution of TQM, Principles of TQM, Dimensions of Quality, Various definition of Quality

#### **UNIT-II QUALITY PHILOSOPHIES**

**15 Hours**

Quality Philosophies - Deming, Juran, Models of TQM, Leadership vision, Mission and Quality Policy Statements.

**UNIT-III QUALITY TOOLS**

**15 Hours**

Quality Improvement Tools, The Seven Statistical Tools, The New Seven Tools.

**UNIT-IV QUALITY PROCESS**

**15 Hours**

Kaizen, 5S Process, Quality Circles, SPC, TPM, JIT, Bench Marking.

**UNIT-V QUALITY MANAGEMENT SYSTEMS**

**15 Hours**

Quality Management Systems, Requirements and principles of QMS, ISO 9000 Series,

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Six Sigma	<a href="https://asq.org/quality-resources/six-sigma#:~:text=Six%20Sigma%20is%20a%20method,quality%20of%20products%20or%20services.">https://asq.org/quality-resources/six-sigma#:~:text=Six%20Sigma%20is%20a%20method,quality%20of%20products%20or%20services.</a>
2	Quality Management in Software industry	<a href="https://www.tutorialspoint.com/software_quality_management/software_quality_management_introduction.htm">https://www.tutorialspoint.com/software_quality_management/software_quality_management_introduction.htm</a>
3	Cost reduction through Quality approach	<a href="https://www.metricstream.com/insights/costofPoorQuality_home.htm">https://www.metricstream.com/insights/costofPoorQuality_home.htm</a>

**2C. TEXT BOOKS:**

1. Poornima M. Charantimath, 2003, Total Quality Management, Third Edition, Pearson Education.
2. Suganthi L, Anand A. Samuel, 2004, Total Quality Management, New title edition, Prentice Hall India Learning Private Limited.

**2D. REFERENCE BOOK:**

1. Dale H. Besterfield, 2015, Total Quality Management, Fourth edition, Pearson Education India.



### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
1.1.0	Definition of TQM	Define Total Quality Management	<b>K1</b>
1.1.1	Evolution of TQM	Illustrate the importance given to quality over the time	<b>K2</b>
1.1.2	Principles of TQM	Explain the principles of quality	<b>K2</b>
1.1.3	Dimensions of Quality	Demonstrate the applicability of the dimensions	<b>K2</b>
1.1.4	Various definition of Quality	Define quality from various aspects	<b>K1</b>
<b>II</b>	<b>QUALITY PHILOSOPHIES</b>		
2.1.0	Quality Philosophies	Illustrate the applications of quality philosophies in organizations	<b>K2</b>
2.1.1	Deming	Explain the use of these principles in companies	<b>K2</b>
2.1.2	Juran	Demonstrate the use of Juran philosophies in companies	<b>K2</b>
2.1.3	Models of TQM	Make use of these model to improve quality in organizations	<b>K3</b>
2.2.0	Leadership vision	Develop a vision statement for an organization	<b>K3</b>
2.3.0	Mission and Quality Policy Statements	Analyse the mission and quality policy statements for various organizations	<b>K4</b>
<b>III</b>	<b>QUALITY TOOLS</b>		
3.1.0	Quality Improvement Tools	Make use of the quality improvement tools and formulate techniques to improve quality.	<b>K3</b>
3.1.1	The Seven Statistical Tools	Analyse the quality related issues using old seven statistical tools	<b>K4</b>
3.1.2	The New Seven Tools.	Appraise the usage of new seven tools in solving the real time quality problems	<b>K4</b>
<b>IV</b>	<b>QUALITY PROCESS</b>		
4.1.0	Kaizen	Demonstrate the techniques of Kaizen	<b>K2</b>

4.1.1	5S Process	Examine the changes in service quality after implementation of 5S	<b>K4</b>
4.1.2	Quality Circles	Demonstrate the members to be involved in quality circles	<b>K2</b>
4.1.3	SPC – Statistical Process Control	Illustrate the process involved in statistical process control	<b>K2</b>
4.1.4	TPM – Total Productive Maintenance	Explain the purpose of TPM in organizations	<b>K2</b>
4.1.5	JIT – Just in Time	Identify the benefits of JIT to the suppliers	<b>K3</b>
4.1.5	Benchmarking.	Apply benchmarking as a tool for achieving competitive advantage	<b>K3</b>
<b>V</b>	<b>QUALITY MANAGEMENT SYSTEMS</b>		
5.1.0	Quality Management Systems	Explain the process involved in QMS	<b>K2</b>
5.1.1	Requirements and principles of QMS	Demonstrate the principles involved in QMS	<b>K2</b>
5.1.2	ISO9000 Series	Explain the ISO 9000 series and its requirements	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

Name of the Course Co-ordinator: Dr. Glenny Jocelyn

## AIR REGULATION

**SEMESTER-III**

**COURSE CODE: U20AG3Y5**

**CREDITS: 3**

**TOTAL HOURS: 45**

**HOURS/WEEK: 4**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Outline international aviation bodies	K2	I
2	Make use of aviation documents and manuals	K3	II
3	Distinguish different air traffic control units	K4	III
4	Illustrate how air traffic is managed	K2	IV
5	Explain aviation meteorological phenomenon	K2	V
6	Summarize meteorological reports and forecast	K2	IV

### 2A. SYLLABUS

#### UNIT I - AIR LAW

**9 Hours**

General – International Bodies – ICAO – FAA- EASA – IATA – DGCA – CAA – CHICAGO Convention and establishment of ICAO – WARSAW Convention – Freedom of the Air

#### UNIT II – IMPORTANT DOCUMENTS

**9 Hours**

ICAO Annexes – Controlling States Roles, Regulations, Sovereignty, Power of Authority – European Union EASA – Operations and Standard – EU- OPSI- 1045 – OPERATIONS MANNUAL PARTS A, B, C, D.

**UNIT III – AIR TRAFFIC CONTROL****9 Hours**

ATC Services (ATC, AIS/ARO, Segments and MODULEs, CLR, GRD, TWR, APP/DEP, ACC), Airspaces (airways, special use of airspace, airspace classification, flight rules) – ICAO – ATS flight plan – NOTAMS – Euro Control

**UNIT IV - AIR TRAFFIC MANAGEMENT****9 Hours**

Air Traffic Management -ATC slots – Capacity Management – Airports – RVSM – Oceanic Control.

**UNIT V- AVIATION WEATHER****9 Hours**

Introduction to Aviation weather – Air masses – Frontal Weather – Pressure – Temperature – Density – International Standard Atmosphere (ISA) – Clouds – Wind – Precipitations – Weather hazards (thunder storms, turbulence, icing, low visibility, wind shear/microburst) – Aviation weather reports and forecast – Textual weather reports and forecasts (METAR, SPECI TAF, SIGMENT, AIRMET, PIREP) – Weather charts (SWC, Wind Aloft, Volcanic Ash) – Official weather sources – Online services – MET Stations.

**2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
<b>1</b>	ICAO Annex	<a href="https://www.skybrary.aero/index.php/ICAO_Annexes_and_Doc_Series">https://www.skybrary.aero/index.php/ICAO_Annexes_and_Doc_Series</a>
<b>2</b>	Airspace classifications in India	<a href="https://www.skybrary.aero/index.php/Classification_of_Airspace">https://www.skybrary.aero/index.php/Classification_of_Airspace</a>
<b>3</b>	Documents to be carried on board by Indian registered aircraft	<a href="https://www.scribd.com/document/75173906/Document-to-Be-Carried-on-Board-by-Indian-Registered-Aircraft">https://www.scribd.com/document/75173906/Document-to-Be-Carried-on-Board-by-Indian-Registered-Aircraft</a>

**2C. REFERENCE BOOKS:**

R.K.Bali – Navigation

Ground Studies for Pilots - Navigation

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>AIR LAW</b>		
1.1	General	Outline of Air regulation	<b>K2</b>
1.2	International aviation bodies	Function of international aviation bodies	<b>K4</b>
1.3	Chicago convention & establishment of ICAO	Explain Chicago convention & ICAO	<b>K2</b>
1.4	WARSAW convention	Explain WARSAW convention	<b>K2</b>
1.5	Freedom of Air	List the freedom of Air	<b>K4</b>
<b>II</b>	<b>IMPORTANT DOCUMENTS</b>		
2.1.0	ICAO Annex	Summarize the annex of ICAO	<b>K2</b>
2.1.1	Controlling state rules, regulations, sovereignty, power of Authority	Identify the power given to the contracting states of ICAO	<b>K3</b>
2.1.2	European union EASA	Outline the roles and responsibility of EASA	<b>K2</b>
2.1.3	Operations & standards	Distinguish the difference between recommendation & practices	<b>K4</b>
2.1.4	Operation manual parts A, B, C, D	Make use of operation manual properly	<b>K3</b>
<b>III</b>	<b>AIR TRAFFIC CONTROL</b>		
3.1.0	ATC services	List out the roles & responsibilities of services provided by ATC units	<b>K4</b>
3.1.1	Airspace	Identify particular airspace according to the classification	<b>K3</b>
3.1.2	ICAO	Explain the functions of ICAO	<b>K2</b>
3.1.3	ATS flight plan	Explain the procedure of flight plan filling	<b>K2</b>
3.1.4	NOTAMS	Interpret the message given in NOTAMS	<b>K2</b>
<b>IV</b>	<b>AIR TRAFFIC MANAGEMENT</b>		
4.1.0	Air traffic management	Outline the procedure how Air traffic is managed	<b>K2</b>
4.1.1	ATC slots	Explain about ATC slots	<b>K2</b>
4.1.2	Capacity management	Organize the Ir traffic efficiently	<b>K3</b>

4.1.3	Airports	Explain the functions of Airport	<b>K2</b>
4.1.4	RVSM	List the procedure to fly in RVSM airspace	<b>K4</b>
4.1.5	Oceanic control	Explain hoe air traffic is managed over ocean	<b>K2</b>
<b>V</b>	<b>AVIATION WEATHER</b>		
5.1.0	Introduction to aviation weather	Outline the weather related to aviation	<b>K2</b>
5.1.1	Airmasses& fronts	Explain airmasses& fronts	<b>K2</b>
5.1.2	Pressure temperature & density	Discuss how pressure, temperature & density affects aircraft performance	<b>K6</b>
5.1.3	ISA	Make use of ISA values in Performance calculation	<b>K3</b>
5.1.4	Clouds	Interpret the types of clouds and its hazards	<b>K2</b>
5.1.5	Winds	Relate the types of wind & its associated hazard	<b>K1</b>
5.1.6	Precipitation	Categorize types of precipitation from different types of cloud	<b>K4</b>
5.1.7	Weather hazard	List out the weather hazard	<b>K4</b>
5.1.8	Aviation weather report and forecast	Explain about weather report & forecast	<b>K2</b>
5.1.9	Texual weather report & forecast	Interpret the coded weather report/forecast	<b>K2</b>
5.1.10	Weather charts	Summarize the information given in aviation charts	<b>K2</b>
5.1.11	Official weather sources	Find weather information from official weather sources	<b>K1</b>
5.1.12	Online services	Make use of online services for meteorological information	<b>K3</b>
5.1.13	MET stations	Explain the purpose of met stations	<b>K1</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"><li>1. Continuous Assessment Test I,II</li><li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li><li>3. End Semester Examination</li></ol>
<b>Indirect</b>
<ol style="list-style-type: none"><li>1. Course-end survey</li></ol>

**Name of the Course Co-ordinator: Captain Aarthi Kumari**



## **SBEC I: COMPUTER APPLICATION IN BUSINESS-I**

**(THEORY & PRACTICAL)**

**SEMESTER- III**

**CREDITS: 2**

**HOURS/WEEK: 2**

**CODE: U20AGPS1**

**TOTAL HOURS: 30**

### **1. COURSE OUTCOMES:**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Recall the characteristics, types, five generations and anatomy of computer for better utilization.	K1	I
2	Relate office functions as they contribute to sound business practices and procedures.	K2	II
3	Apply Microsoft office and Tally software knowledge in businesses	K3	V
4	Examine the basic concepts in computer applications.	K2	I
5	Estimate competence with a wide variety of electronic tools and perform the current speed and accuracy requirements for key operation in a business environment.	K6	IV
6	Develop business correspondence and create graphics and electronic presentations	K3	III

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION TO COMPUTERS**

**6 Hours**

Introduction to Computers, Types of Computers, Characteristics of computers, Generations of computers, Anatomy of a Digital Computer, Functions and components of Computer, Introduction to Operating System, Working with AI, IOT, Blog Management, Presentation software

**UNIT-II MS OFFICE -WORD****6 Hours**

Getting Started with Microsoft Word, Editing a Document- Formatting A Document, Using Editing and Proofing Tools, Changing the Layout of a Document, Inserting Elements to Word Documents, Working with Tables, Working with Columned Layouts & Section Breaks.

**UNIT-III MS OFFICE - POWERPOINT****6 Hours**

Introduction to PowerPoint, Adding and Formatting Text, Customizing Presentations, Working with Shapes and Pictures, Adding Objects and Effects, Outlining Proofing and Printing, Delivering Your Presentation.

**UNIT-IV MS OFFICE - EXCEL****6 Hours**

Introduction to MS Excel, Worksheets and Workbooks, Entering Information into MS Excel Formatting a Worksheet, Adding Elements to a Workbook, Charts- Formulas and Calculations

Excel Forms- Tables, Developing a Workbook

**UNIT-V INTRODUCTION TO TALLY****6 Hours**

Introduction, Fundamentals of computerized accounting, Computerized accounting VS manual accounting, Architecture and customization of Tally, Features of tally, Configuration of tally, Tally screen and menu.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Securing & Protecting spreadsheets	<a href="https://support.microsoft.com/en-us/office/protect-an-excel-file-7359d4ae-7213-4ac2-b058-f75e9311b599">https://support.microsoft.com/en-us/office/protect-an-excel-file-7359d4ae-7213-4ac2-b058-f75e9311b599</a>
2	Applying auto layouts	<a href="https://bettersolutions.com/powerpoint/layout/index.htm">https://bettersolutions.com/powerpoint/layout/index.htm</a>
3	Inventory in Tally	<a href="https://tallysolutions.com/features/inventory-management/">https://tallysolutions.com/features/inventory-management/</a>
4.	Entering Transactions	<a href="https://help.tallysolutions.com/article/Tally.ERP9/Tax_India/Getting_Started/Recording_Transactions.htm">https://help.tallysolutions.com/article/Tally.ERP9/Tax_India/Getting_Started/Recording_Transactions.htm</a>

**2C. TEXT BOOKS:**

1. Rajathi, Tally 9.0 2002, Rajathi Publications
2. Ananthi Sheshasaayee & Sheshasaayee, 8th Edition, 2010, Computer Applications in Business and Management, Margham Publication.

**2D. REFERENCE BOOKS:**

1. K.K Nandhani, 2009, Implementing Tally 9.0, BPB Publishers.

2. Agarwal -Tally 9,2007, Agarwal Book House.

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION TO COMPUTERS</b>		
<b>1.1.0</b>	Introduction to Computers	Define the usage of Computers in business organization	<b>K1</b>
<b>1.1.1</b>	Types of Computers	Identify the different types of Computers	<b>K1</b>
<b>1.1.2</b>	Characteristics of computers	Explain the Characteristics of computers	<b>K2</b>
<b>1.1.3</b>	Five Generations of Computers	Categorize Five Generations of Computers	<b>K2</b>
<b>1.1.4</b>	Anatomy of a Digital Computer	Recall Anatomy of a Digital Computer	<b>K1</b>
<b>1.1.5</b>	Functions and components of Computer	Explain the Functions and components of Computer	<b>K2</b>
<b>1.1.6</b>	Introduction to Operating System	Define Operating System and Compare different Operating System	<b>K4</b>
<b>II</b>	<b>MS OFFICE –WORD</b>		
<b>2.1.0</b>	Getting Started with Microsoft Word	Recall Microsoft Word	<b>K1</b>
<b>2.1.1</b>	Editing a Document- Formatting a Document	Apply formatting while Creating document.	<b>K3</b>
<b>2.1.2</b>	Using Editing and Proofing Tools	How to use Editing and proofing tools Make use of Editing and Proofing Tools during documentation Improve the layout of document using Editing and Proofing Tools	<b>K3</b> <b>K6</b>
<b>2.1.3</b>	Changing the Layout of a Document	What is a layout Apply different layout for	<b>K1</b>

		document preparation Discover different layout with editing tools	<b>K2</b> <b>K4</b>
<b>2.1.4</b>	Inserting Elements to Word Documents	a) How to insert elements in a document b) Make use of different elements in a document	<b>K3</b> <b>K3</b>
<b>2.1.5</b>	Working with Tables, Working with Columned Layouts & Section Breaks.	a) How to create table in a word document b) Construct different layout with tables c) Create tables with Columned Layouts & Section Breaks.	<b>K1</b> <b>K2</b> <b>K2</b>
<b>III</b>	<b>MS OFFICE – POWERPOINT</b>		
3.1.0	Introduction to PowerPoint	Explain the meaning and uses of Power Point during Business presentation	<b>K1</b>
3.1.1	Adding and Formatting Text	Apply formatting and add text in a power point presentation	<b>K3</b>
3.1.2	Customizing Presentations	Design presentation with different tools for customization.	<b>K4</b>
3.1.3	Working with Shapes and Pictures	a) How to insert shapes and pictures in power point presentation b) Make use of different shapes and pictures in a power point presentation	<b>K2</b> <b>K3</b>
3.1.4	Adding Objects and Effects	Create a power point presentation with Objects and Effects	<b>K2</b>
3.1.5	Outlining Proofing and Printing	Create presentation with Proofing and Printing for business presentation.	<b>K3</b>
3.1.6	Delivering Your Presentation.	a) How to deliver a presentation Examine the use of presentation	<b>K1</b>

		for business purpose	<b>K4</b>
<b>IV</b>	<b>MS OFFICE – EXCEL</b>		
4.1.0	Introduction to MS Excel	Explain the meaning and uses of Excel in business operations.	<b>K1</b>
4.1.1	Worksheets and Workbooks	<ul style="list-style-type: none"> <li>a) What is worksheet and workbook</li> <li>b) Explain the uses of worksheet and workbook.</li> <li>c) Create and work with a new workbook</li> </ul>	<b>K1</b>
4.1.2	Entering Information into MS Excel	<ul style="list-style-type: none"> <li>a) How to enter Information into MS Excel</li> <li>b) Organize data based on any classification.</li> <li>c) Create a worksheet with data or information</li> </ul>	<b>K1</b>
4.1.3	Formatting a Worksheet	<ul style="list-style-type: none"> <li>a) How to format a Worksheet</li> <li>b) Apply formatting tools in a worksheet</li> </ul>	<b>K1</b>
4.1.4	Adding Elements to a Workbook	<ul style="list-style-type: none"> <li>a) How to add elements to a workbook</li> <li>b) Make use of elements to a workbook</li> <li>c) Create a workbook with elements.</li> </ul>	<b>K3</b>
4.1.5	Charts- Formulas and Calculations	<ul style="list-style-type: none"> <li>a) How to insert chart and formulas</li> <li>b) Apply Formulas for calculation</li> <li>c) Analyze data with formulas</li> <li>d) Create Macro worksheet.</li> </ul>	<b>K3</b>
4.1.6	Excel Forms- Tables	<ul style="list-style-type: none"> <li>a) How to create data forms in Excel</li> <li>b) Make use of tables in data form creation</li> <li>c) Create data form for data entry with data ribbon.</li> </ul>	<b>K3</b>
4.1.7	Developing a Workbook	How to develop a workbook for	

		business data recordings.	<b>K2</b>
<b>V</b>	<b>INTRODUCTION TO TALLY</b>		
5.1.0	Introduction to Tally	Explain the meaning and importance of tally in business.	<b>K1</b>
5.1.1	Fundamentals of computerized accounting	Recall the fundamentals of computerized accounting	<b>K2</b>
5.1.2	Computerized accounting vs manual accounting	Identify the difference between Computerized accounting vs manual accounting and identify the effective type of accounting	<b>K4</b>
5.1.3	Architecture and customization of Tally	Analyse the architecture and customization of Tally.	<b>K4</b>
5.1.4	Features of tally	Identify the features of Tally	<b>K3</b>
5.1.5	Configuration of Tally	Outline the configuration of Tally	<b>K1</b>
5.1.6	Tally screen and menu	Recall Tally screen and different menus in Tally	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	H	M	L	H	H	H	M	M	H	-	H	L
CO2	M	H	H	H	M	H	M	M	L	M	L	H	L
CO3	H	H	M	M	H	M	M	H	M	H	M	H	M
CO4	H	M	H	M	H	H	M	M	M	H	M	H	-
CO5	M	H	H	M	H	H	H	M	M	H	L	M	M
CO6	H	H	H	M	H	H	M	H	M	H	M	H	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"><li>1. Continuous Assessment Test I,II</li><li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li><li>3. End Semester Examination</li></ol>
<b>Indirect</b>
<ol style="list-style-type: none"><li>1. Course-end survey</li></ol>

Name of the Course Co-ordinator: Mr. P. Ramaraj

**EXTRA DISCIPLINARY COURSE**  
**NMEC I: FUNDAMENTALS OF MANAGEMENT**

**SEMESTER-III**

**CODE: U20AG3E1**

**CREDITS: 2**

**TOTAL HOURS: 30**

**HOURS/WEEK: 2**

**1. COURSE OUTCOMES :**

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Summarize the basic principles and functions of management in functional areas of business and understand the contributions of experts to management thought.	K2	I
2	Apply the management knowledge to accomplish the given tasks effectively and to handle situations which may arise in management.	K3	I
3	Identify and use skills in planning and decision making in all areas of business aiming at achieving the goal of the organisation.	K3	II
4	Utilize and describe the basic theories and principles by which businesses are organized and managed in modern society	K3	III
5	Demonstrate the importance of staffing and control function that contributes to the achievement of organizational objectives.	K2	IV
6	Classify the different leadership styles and develop their leadership capabilities and recognize the significance of motivation in management	K2	V



## 2A. SYLLABUS

### UNIT-I INTRODUCTION

**6 Hours**

Management – Meaning – Definition - Importance of Management - Functions of management - Management vs. Administration - Taylor’s management - Fayol’s management.

### UNIT-II PLANNING

**6 Hours**

Planning – Meaning - Definition - Characteristics of Planning - Objective of Planning - Nature of Planning - Importance of Planning - Steps in Planning Process -Types of Planning - Barriers of Planning

### UNIT-III ORGANISATION

**6 Hours**

Organization – Meaning - Definition - Characteristics of Organization - Functions of Organization - Importance of Organization - Types of Organisation - Formal Organisation - Characteristics of Formal Organisation - Advantages of Formal Organisation - Disadvantages of Formal Organisation, Informal Organisation - Characteristics of Informal Organisation - Advantages of Informal Organisation - Disadvantages of Informal Organization - Matrix Organisation

### UNIT-IV STAFFING AND CONTROLLING

**6 Hours**

Staffing – Definition - Meaning - Objectives of Staffing - Functions of Staffing - Importance of Staffing, Controlling – Definition - Steps in Controlling process - Budgeting (Basic concepts only)

### UNIT-V MOTIVATION

**6 Hours**

Motivation - Meaning – Definition - Nature of Motivation - Importance of Motivation - Types of Motivation - Maslow Theory, Leadership – Meaning – Definition - Importance of Leadership - Types of Leader - Functions of Leader - Qualities of Leader - Leader vs Manger

## 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Self Motivation	<a href="https://jamesclear.com/motivation">https://jamesclear.com/motivation</a>

2	Overcoming Demotivation	<a href="https://www.lifehack.org/articles/productivity/10-types-demotivation-and-how-overcome-them.html">https://www.lifehack.org/articles/productivity/10-types-demotivation-and-how-overcome-them.html</a>
3	Leadership Training	<a href="https://money.howstuffworks.com/business/professional-development/leadership-training.htm">https://money.howstuffworks.com/business/professional-development/leadership-training.htm</a>

## 2C. TEXT BOOKS:

1. T. Ramaswamy, 2011, Principles of Management, Himalaya Publishing house
2. L M Prasad, 2012 Principles of Management, 9<sup>th</sup> Edition, S.Chand Publication

## 2D. REFERENCE BOOKS:

1. Tripathi& Reddy, Principles of Management,Mcgraw Hill, 5<sup>th</sup> edition, 2012
2. Koontz o' doneel, Principles of Management- McGraw Hill, 1<sup>st</sup> edition ,2004

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
<b>1.1.0</b>	Management	Explain the various concepts in management.	<b>K2</b>
<b>1.1.1</b>	Meaning	Explain the meaning of Management	<b>K2</b>
<b>1.1.2</b>	Definition	Define management	<b>K1</b>
<b>1.1.3</b>	Importance of Management	Outline the importance of management	<b>K2</b>
<b>1.1.4</b>	Functions of management	Demonstrate the various functions of management	<b>K2</b>
<b>1.1.5</b>	Management vs. Administration	Compare Management and Administration	<b>K2</b>

<b>1.1.6</b>	Taylor's management	Explain the use of Taylor's principles of management in a organisation	<b>K2</b>
<b>1.1.7</b>	Fayol's management	Explain the use of Fayol's principles of management in a organisation	<b>K2</b>
<b>II</b>	<b>PLANNING</b>		
<b>2.1.0</b>	Planning	Make use of planning in an organisation	<b>K3</b>
<b>2.1.1</b>	Meaning	Explain the meaning of Planning	<b>K2</b>
<b>2.1.2</b>	Definition	Define planning	<b>K2</b>
<b>2.1.3</b>	Characteristics of Planning	Summarize the various characteristics of planning	<b>K2</b>
<b>2.1.4</b>	Objective of Planning	Explain the objectives of planning	<b>K2</b>
<b>2.1.5</b>	Nature of Planning	Explain the nature of planning	<b>K2</b>
<b>2.1.6</b>	Importance of Planning	Relate the importance of planning in an organisation	<b>K2</b>
<b>2.1.7</b>	Steps in Planning Process	Apply the process of planning and implement in an organisation	<b>K3</b>
<b>2.1.8</b>	Types of Planning	Make use of various types of planning and utilize the right type	<b>K3</b>
<b>2.1.9</b>	Barriers of Planning	Summarize the barriers of planning	<b>K2</b>
<b>III</b>	<b>ORGANISATION</b>		
<b>3.1.0</b>	Organization	Explain the purpose of organizing	<b>K2</b>
<b>3.1.1</b>	Meaning	Explain the meaning of organizing	<b>K1</b>
<b>3.1.2</b>	Definition	Define organisation	<b>K2</b>

<b>3.1.3</b>	Characteristics of Organization	Summarize the various characteristics of organizing	<b>K2</b>
<b>3.1.4</b>	Functions of Organization	Make use of various functions of organisation	<b>K2</b>
<b>3.1.5</b>	Importance of Organization	Relate the importance of organizing in an organisation	<b>K2</b>
<b>3.2.0</b>	Types of Organisation	Demonstrate various types of organisation	<b>K2</b>
<b>3.3.0</b>	Formal Organisation	Utilize the formal structure in an organisation	<b>K3</b>
<b>3.3.1</b>	Characteristics of Formal Organisation	Build a formal structure in an organisation and analyse its characteristics	<b>K3</b>
<b>3.3.2</b>	Advantages of Formal Organisation	Identify the advantages of Formal Organisation	<b>K3</b>
<b>3.3.3</b>	Disadvantages of Formal Organisation	Identify the disadvantages of Formal Organisation	<b>K3</b>
<b>3.4.0</b>	Informal Organisation	Utilize the informal structure in an organisation	<b>K3</b>
<b>3.4.1</b>	Characteristics of Informal Organisation	Build a informal structure in an organisation and analyse its characteristics	<b>K3</b>
<b>3.4.2</b>	Advantages of Informal Organisation	Identify the advantages of informal Organisation	<b>K3</b>
<b>3.4.3</b>	Disadvantages of Informal Organization	Identify the disadvantages of informal Organisation	<b>K3</b>
<b>3.5.0</b>	Matrix Organisation	Utilize the Matrix structure in an organisation	<b>K3</b>
<b>IV</b>	<b>STAFFING &amp; CONTROLLING</b>		
<b>4.1.0</b>	Staffing	Plan staffing for an organisation	<b>K3</b>
<b>4.1.1</b>	Definition	Define staffing	<b>K2</b>
<b>4.1.2</b>	Meaning	Explain the meaning of staffing.	<b>K2</b>
<b>4.1.3</b>	Objectives of Staffing	Explain the various objectives	<b>K2</b>

		of staffing	
<b>4.1.4</b>	Functions of Staffing	Relate the various functions of staffing	<b>K2</b>
<b>4.1.5</b>	Importance of Staffing	Summarise the importance of staffing	<b>K2</b>
<b>4.2.0</b>	Controlling	Analyse the purpose of controlling in an organisation	<b>K3</b>
<b>4.2.1</b>	Definition	Define controlling	<b>K2</b>
<b>4.2.2</b>	Steps in Controlling process	Summarise the various steps in controlling process	<b>K2</b>
<b>4.3.0</b>	Budgeting (Basic concepts only)	Make use of budgeting in an organisation	<b>K3</b>
<b>V</b>	<b>MOTIVATION</b>		
<b>5.1.0</b>	Motivation	Motivate the staff for effective performance in the organisation	<b>K4</b>
<b>5.1.1</b>	Meaning	Perceive the meaning of motivation	<b>K5</b>
<b>5.1.2</b>	Definition	Define motivation	<b>K2</b>
<b>5.1.3</b>	Nature of Motivation	Explain the nature of motivation	<b>K2</b>
<b>5.1.4</b>	Importance of Motivation	Perceive the importance of motivation	<b>K5</b>
<b>5.1.5</b>	Types of Motivation	Explain the types of motivation	<b>K5</b>
<b>5.2.0</b>	Maslow Theory	Make use of Malow theory and understand the need for motivation	<b>K3</b>
<b>5.3.0</b>	Leadership	Motive the staff to develop leadership skills	<b>K4</b>
<b>5.3.1</b>	Meaning	Perceive the meaning of leadership	<b>K5</b>
<b>5.3.2</b>	Definition	Define leadership	<b>K2</b>
<b>5.3.3</b>	Importance of Leadership	Perceive the importance of leadership	<b>K5</b>

<b>5.4.0</b>	Types of Leader	Summarize various types of Leader	<b>K2</b>
<b>5.4.1</b>	Functions of Leader	Explain various functions of leadership	<b>K2</b>
<b>5.4.2</b>	Qualities of Leader	Perceive the qualities of leadership	<b>K5</b>
<b>5.5.0</b>	Leader vs Manger	Compare between a Leader and a Manger	<b>K5</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	H	H	M	H	M	H	M	H	M	H	H	M	M
<b>CO2</b>	H	H	M	H	M	H	M	H	M	H	H	H	H
<b>CO3</b>	H	H	H	H	M	H	H	H	H	H	H	H	H
<b>CO4</b>	H	H	H	H	-	M	M	M	M	M	H	M	M
<b>CO5</b>	H	M	H	M	H	H	H	H	H	H	H	H	H
<b>CO6</b>	H	M	H	H	H	H	H	H	H	H	H	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

Name of the Course Co-ordinator: Mr. J. Manikandan

### **SEMESTER IV**

<b>S.No</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Tamil IV	U18TM3L3
2.	English Through Literature	U21EGNL4
3.	Business Law and Aviation Flight Safety Law	U21AG404
4.	Training and Development (Elective-II)	U22AG4:A
	Services Marketing(Elective-II)	U22AG4:B
5.	Aviation Security	U20AG4Y6
6.	Airport Ground Handling Management	U21AGPS2
7.	Fundamentals of Marketing (NMEC)	U20AG3E2
8.	Life Skills	U16LFS41
9.	Extension Activities	U16ETA41

## **CORE IV: BUSINESS LAW & AVIATION FLIGHT SAFETY LAW**

**SEMESTER: IV**

**CODE: U21AG404**

**CREDITS: 3**

**TOTAL HOURS : 45**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Examine the various Acts related to business	K4	I
2	Understand the essential elements of a valid contract	K2	I
3	Compare the duties of different types of agents in a contract of Agency	K2	II
4	Discuss the rights and responsibilities of seller and buyer in a contract of business	K3	III
5	Outline the Indian aircraft act 1934	K2	IV
6	Outline the Indian aircraft act 1937	K2	V

### **2A. SYLLABUS**

#### **UNIT-I CONTRACT ACT & LAW OF AGENCY**

**9 Hours**

Contract Act, Definition, Classification, Essentials of a Contract, Mistake, Misrepresentation and fraud, Right and Obligations of Parties to Contract, Not Enforceable-Assignment, Breach, Performance and Discharge, Quasi Contract, Law of Agency, Nature appointment, Termination, Right and duties Liabilities, Relation with third parties, Types of Agents

#### **UNIT-II PARTNERSHIP & SALE OF GOODS ACT**

**9 Hours**

Partnership- Definition, Creation relation with Partner interest and to third party Liabilities. Sale of goods Act-Definition, Price, Conditions and warranties, Right and remedies in case of Breach



**UNIT-III INSURANCE****9 Hours**

Introduction to Insurance, Definition of Life Insurance, Kinds of life insurance policy, Definition of Non- life insurance, Types of Non-life insurance, Fire Insurance, Marine Insurance, Kinds of Marine policies, Characteristics, Warranties, Difference between Life Insurance& Other forms of insurance, Insurance Claims

**UNIT-IV INDIAN AIRCRAFT ACT, 1934****9 Hours**

Power to detain aircraft, Power of Central Government to prohibit or regulate construction of buildings, planting of trees, Payment of compensation, Penalty for act in contravention of rule made under this Act, Penalty for flying so as to cause danger, Penalty for abetment of offences and attempted offences, Laying of rules before Parliament, Use of patented invention on aircraft not registered in India, Saving for acts done in good faith under the Act.

**UNIT-V INDIAN AIRCRAFT RULES, 1937****9 Hours**

Short title and extent, Nationality of aircraft, Definitions and Interpretation, General condition of flying, General safety condition, Personnel of aircraft, Airworthiness, Radio telegraph Apparatus Aeronautical beacon, Ground lights and false lights, Log book, Investigation of accidents, Investigation of Incidents.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Intellectual Property Rights	<a href="https://www.innovation-asset.com/blog/the-4-main-types-of-intellectual-property-and-related-costs">https://www.innovation-asset.com/blog/the-4-main-types-of-intellectual-property-and-related-costs</a>
2	Consumer Protection Act,1986 and Competition Act, 2002	<a href="https://blog.ipleaders.in/relationship-competition-law-consumer-protection/">https://blog.ipleaders.in/relationship-competition-law-consumer-protection/</a>
3	Aviation regularity bodies in India	<a href="https://www.civilaviation.gov.in/en/aboutus/orgsetup">https://www.civilaviation.gov.in/en/aboutus/orgsetup</a>
4	Roles and duties of DGCA	<a href="https://en.wikipedia.org/wiki/Directorate_General_of_Civil_Aviation_(India)">https://en.wikipedia.org/wiki/Directorate_General_of_Civil_Aviation_(India)</a>

**2C. TEXT BOOK:**

1. N. D. Kapoor, Elements of Mercantile Law –, S. Chand Publications, 2014.
2. Pillai R.S. N and V. Bagavathi, Business Law - S.ChandPubilcations, 2007.

3. Indian Aviation Act 1934 by Ministry of Civil Aviation, Govt. of India.
4. Indian Aircraft Manual by Ministry of Civil aviation, Govt. of India.
5. Air Regulation Part by R.K Bali.

## 2D. REFERENCE BOOKS:

1. Davar, Mercantile Law, Progressive Corporation, 1967 -
  2. Venkatesan E., Mercantile Law, MLJ publications.2009
  3. Shukla, MercantileLa,S. Chand and sons, revised edition2002
  4. TandonB. NPrinciple of Mercantile Law -, S. Chand&sons, 1983
- IRDA material.

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>CONTRACT ACT &amp; LAW OF AGENCY</b>		
1.1.0	Definition	Define Contract	<b>K1</b>
1.1.1	Classifications of contracts	Classify Contracts under different headings	<b>K2</b>
1.1.2	Essentials of a Contract	List out the essentials of a contract	<b>K2</b>
1.1.3	Mistake, Misrepresentation and Fraud	Illustrate the meaning of mistake, misrepresentation and fraud	<b>K2</b>
1.1.4	Right and Obligations to parties of a contract	Explain the right and Obligations to parties of a contract	<b>K2</b>
1.1.5	Not enforceable Assignments	Illustrate the contracts not enforceable Assignments	<b>K1</b>
1.1.6	Breach	Demonstrate the impact of breach of contract	<b>K2</b>
1.1.7	Performance and Discharge	Discover the importance of performance and discharge of contracts	<b>K3</b>
1.1.8	Quasi contract	Understand the meaning of quasi contracts	<b>K1</b>
1.2.0	Law of Agency	Recall the meaning of Agency	<b>K1</b>
1.2.1	Nature and Appointment	Explain the nature and appointment	<b>K2</b>

		of agents	
1.2.2	Termination	Demonstrate the situations of termination of Agency	<b>K2</b>
1.2.3	Rights, Duties and Liabilities	Explain rights, duties and liabilities of agents	<b>K2</b>
1.2.4	Relation with third parties	Develop the relationship with third parties	<b>K3</b>
1.2.5	Types of Agents	Classify the agents	<b>K2</b>
<b>II</b>	<b>PARTNERSHIP &amp; SALE OF GOODS ACT</b>		
2.1.0	Partnership-Definition	Define the term Partnership	<b>K1</b>
2.1.1	Principles	Explain the principles of partnership	<b>K2</b>
2.1.2	Creation of relation with partner interest	Discover the relationship with partner interest	<b>K3</b>
2.2.3	Types of Partners	Classify partners	<b>K2</b>
2.2.4	Duties and Liabilities of Partners	Examine the duties and Liabilities of Partners	<b>K3</b>
2.3.0	Sale of Goods Act- Definition	Define Sale of goods Act	<b>K1</b>
2.3.1	Price	Explain the importance of price	<b>K2</b>
2.3.2	Conditions and Warranties	Illustrate the terms Conditions and Warranties	<b>K2</b>
2.3.3	Rights and Remedies in case of Breach	Examine the rights and remedies in case of Breach	<b>K3</b>
2.3.4	Stoppage in transit	Discover the consequences of Stoppage in transit	<b>K3</b>
2.3.5	Transfer of Property	Analyze the situations of transfer of property	<b>K3</b>
<b>III</b>	<b>INSURANCE</b>		
3.1.0	Introduction to Insurance	Recall the need of insurance	<b>K1</b>
3.1.1	Definition	Define the term Insurance	<b>K1</b>
3.1.2	Classifications of Insurance	Categorize the insurance	<b>K3</b>

3.1.3	Difference between Life insurance with other forms of insurance	Distinguish between Life insurance with other forms of insurance	<b>K3</b>
3.1.4	Kinds of Life Insurance policy	Classify the life insurance policies	<b>K2</b>
3.2.1	Fire insurance e-Definition	Define fire insurance	<b>K1</b>
3.2.2	Types	List the different types of fire insurance	<b>K2</b>
3.2.3	Claim	Analyze the conditions of claim settlement	<b>K3</b>
3.3.0	Marine insurance	Recall the term Marine insurance	<b>K1</b>
3.3.1	Definition	Define the term Marine insurance	<b>K1</b>
3.3.2	Characteristics	Extend the characteristics Of marine insurance	<b>K2</b>
3.3.3	Kinds of Marine policies	Classify Marine insurance	<b>K2</b>
3.3.4	Warranties	Explain the term warranty	<b>K2</b>
<b>IV</b>	<b>INDIAN AIRCRAFT ACT, 1934</b>		
4.1	Power to detain aircraft	List the power of central government to detain aircraft	<b>K4</b>
4.2	Power of central government to prohibit or regulate construction of building	Organize the construction of building around aerodrome	<b>K3</b>
4.3	Payment of compensation	Discuss the compensation between the owner and government	<b>K6</b>
4.4	Penalty for act in contravention of rule made under this act	Decide the penalty amount	<b>K5</b>
4.5	Penalty for flying so as to	Assess the penalty for flying so as to	<b>K5</b>

	cause danger	cause danger	
4.6	Penalty for abetment of offences and attempted offences	Decide the penalty for offences and attempted offences	<b>K5</b>
4.7	Laying of rule before parliament	Analyze the new rule made in parliament	<b>K4</b>
4.8	Use of patent invention on aircraft non registered in India	Opinion the use of patented invention on aircraft non registered in India	<b>K6</b>
4.9	Saving for act done in good faith under the act	Decide the act done in good faith under the act	<b>K5</b>
<b>V</b>	<b>INDIAN AIRCRAFT ACT, 1937</b>		
5.0	Short title and extend	Propose the purpose of aircraft act 1937	<b>K6</b>
5.1	Nationality of aircraft	List out what are the requirements for an aircraft to be registered in a country	<b>K4</b>
5.2	Definition & Interpretation	Summarize the general definition & Interpretation	<b>K2</b>
5.3	General condition of flying	Outline the general flying condition in India	<b>K2</b>
5.4	General safety condition	List out the condition for safe conduct of flight	<b>K4</b>
5.5	Personnel of aircraft	List out the requirements of personnel concerned with aviation	<b>K4</b>
5.6	Airworthiness	Define Airworthiness	<b>K1</b>
5.7	Radio telegraph apparatus	Explain the working principle of radio telegraph apparatus	<b>K2</b>
5.8	Aeronautical beacon	Discuss the function of aeronautical beacon	<b>K6</b>
5.9	Ground light & false light	Identify the ground lights and false lights	<b>K3</b>
5.10	Log book	List out the different types of log book	<b>K4</b>
5.11	Investigation of accident	Prioritize the procedure for accident Investigation	<b>K5</b>
5.12	Investigation of incidents	Prioritize the procedure for Incident Investigation	<b>K5</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	M	M	H	M	H	M	M	M	M	M	M	M	M
CO2	M	L	H	M	M	H	M	H	M	M	H	M	H
CO3	H	M	H	M	H	M	-	M	H	L	M	H	M
CO4	M	H	M	M	H	H	M	H	M	M	M	H	M
CO5	M	M	M	H	M	M	H	M	M	H	H	M	-
CO6	H	M	M	H	H	M	H	L	M	M	M	H	H
CO7	H	M	M	L	M	H	M	M	H	M	-	H	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## Elective II: TRAINING & DEVELOPMENT

**SEMESTER: IV**

**CODE: U22AG4:A**

**CREDITS: 5**

**TOTAL HOURS : 75**

**HOURS/WEEK: 5**

### 1. COURSE OUTCOMES:

On completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Identify the need for Training, choose correct method of Training and to evaluate the Training Programme.	K3	I
2	What motivates professionals to learn and the most appropriate methodologies to impart training.	K1	II
3	Illustrate a training program using an appropriate framework for evaluating needs for training, designing a training program, and evaluating the training output.	K2	III
4	Understand the concept of training audit & training evaluation.	K2	II
5	Understand various strategies used by organizations to measure performance & reward.	K2	IV
6	Organize a training module design and execute it	K3	V

### 2A. SYLLABUS

#### UNIT-I INTRODUCTION

**15 Hours**

Definition of Training, Need for training, Gaps in Training, Learning and its Principles.

#### UNIT-II TRAINING NEEDS & EVALUATION

**15 Hours**

Training needs analysis, Implementation of the Training Programme, Evaluation of Training Programme, How to Make Training Programme Effective?

#### UNIT-III METHODS OF TRAINING

**15 Hours**

Methods of Training: Traditional Training, On – The Job Training: Apprentice, Informal Training, Job Rotation, Job Instruction. Off – the Job Training: Lectures, Multimedia Tools, Laboratory Training, Case Study.

**UNIT -IV MANAGERIAL DEVELOPMENT**

**15 Hours**

Managerial Development and Training: Methods of Managerial Training, Executive Development, Managerial on the job Training: Job Rotation, Coaching. Managerial off the Job Training: Case Studies, Seminars, Games, Behavioural Modelling.

**UNIT-V TRAINING PROCESS**

**15 Hours**

Training Process: Steps in developing a Training Programme, Selection of Internal Trainers, Selection of External Trainers, Advantages and Disadvantages of trainers.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Guidance for Developing a Training Program for Quality Systems	<a href="https://www.epa.gov/sites/production/files/2016-03/documents/g10-final.pdf">https://www.epa.gov/sites/production/files/2016-03/documents/g10-final.pdf</a>
2	Training Design	<a href="https://bizfluent.com/facts-5761016-training-design-.html">https://bizfluent.com/facts-5761016-training-design-.html</a>
3	Distinction between Training needs analysis & Performance analysis	<a href="https://elearningindustry.com/training-needs-analysis-performance-analysis-difference">https://elearningindustry.com/training-needs-analysis-performance-analysis-difference</a>

**2C. TEXT BOOKS:**

1. Gary Dessler, Human Resource Management , Pearson Publication, 14<sup>th</sup> Edition.2005.
2. Aswathappa, Human Resource Management, McGraw Hill Publication, 2013.

**2D. REFERENCE BOOKS:**

1. Devendra Agochia, Every Trainer’s Handbook, Sage Publications, 2002.
2. Gary Kroehnert, Training for Trainers-, 2<sup>nd</sup>Edition, Tata McGrawHill.2009.

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
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<b>I</b>	<b>INTRODUCTION</b>		
1.1.0	Definition of Training	Define training.	<b>K1</b>
1.1.1	Need for training	List down the needs for training.	<b>K1</b>
1.1.2	Gaps in Training	Identify the gaps & the methods to fill the gaps in training.	<b>K3</b>
1.1.3	Learning and its Principles	Infer the principles of learning	<b>K2</b>
<b>II</b>	<b>TRAINING NEEDS &amp; EVALUATION</b>		
2.1.0	Training needs analysis	Identify the needs for training analysis.	<b>K3</b>
2.2.0	Implementation of the Training Programme	Demonstrate the implementation of training program.	<b>K2</b>
2.3.0	Evaluation of Training Programme	Assess the training programme.	<b>K5</b>
2.4.0	How to Make Training Programme Effective?	Organize the training programme to make it effective.	<b>K3</b>
<b>III</b>	<b>METHODS OF TRAINING</b>		
3.1.0	Methods of Training	Explain about various methods of training.	<b>K2</b>
3.2.0	Traditional Training	Recall the traditional training methods.	<b>K1</b>
3.3.0	On – The Job Training	Define & Classify the methods of On the job training	<b>K1</b>
3.3.1	Apprentice	Explain apprentice training	<b>K2</b>
3.3.2	Informal Training	Explain Informal training.	<b>K2</b>
3.3.3	Job Rotation	Explain Job rotation.	<b>K2</b>
3.3.4	Job Instruction	Explain Job Instruction.	<b>K2</b>

3.4.0	Off – the Job Training	Define & Classify the methods in Off the job training.	<b>K1</b>
3.4.1	Lectures	Define Lectures.	<b>K1</b>
3.4.2	Multimedia Tools	List down the various multimedia tools available for training.	<b>K1</b>
3.4.3	Laboratory Training	Explain Laboratory training.	<b>K2</b>
3.4.4	Case Study	Define & Present Case study training.	<b>K1</b>
<b>IV</b>	<b>MANAGERIAL DEVELOPMENT</b>		
4.1.0	Managerial Development and Training	Compare Managerial development & Training.	<b>K2</b>
4.2.0	Methods of Managerial Training	Classify the different types of Managerial training.	<b>K2</b>
4.3.0	Executive Development	Analyze executive development through managerial training.	<b>K4</b>
4.4.0	Managerial on the job Training	Classify the methods in Managerial On the job training.	<b>K2</b>
4.4.1	Job Rotation	Explain Job rotation.	<b>K2</b>
4.4.2	Coaching	Explain Coaching.	<b>K2</b>
4.5.0	Managerial off the Job Training	Classify the methods in Managerial Off the job training.	<b>K2</b>
4.5.1	Case Studies	Define & Present Case study training.	<b>K1</b>
4.5.2	Seminars	Explain Seminars.	<b>K2</b>
4.5.3	Games	Adapt games in training.	<b>K6</b>
4.5.4	Behavioural Modelling	Explain Behavioural	<b>K2</b>

		modelling.	
<b>V</b>	<b>TRAINING PROCESS</b>		
5.1.0	Training Process	Explain the steps in Training process.	<b>K2</b>
5.2.0	Steps in developing a Training Programme	Choose appropriate steps in developing a training program.	<b>K3</b>
5.3.0	Selection of Internal Trainers	Recall the characteristics expected in Internal trainers.	<b>K1</b>
5.4.0	Selection of External Trainers	Recall the characteristics expected in external trainers.	<b>K1</b>
5.5.0	Advantages and Disadvantages of trainers	List down the merits & demerits of Internal & External trainers.	<b>K1</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	H	M	H	L	L	H	M	M	H	M	H	-
CO2	H	M	H	M	H	M	M	H	L	H	-	H	L
CO3	M	H	-	-	M	H	-	L	M	M	H	M	H
CO4	-	M	H	M	H	L	H	M	-	H	M	-	M
CO5	M	-	H	L	M	M	H	H	H	-	M	H	M
CO6	H	L	H	M	H	M	L	-	M	M	H	M	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## Elective II: SERVICES MARKETING

**SEMESTER – IV**

**CREDITS: 5**

**HOURS/WEEK : 5**

**CODE: U22AG4:B**

**TOTAL HOURS: 75**

### 1. COURSE OUTCOMES

On Completion of this course, the students will be able to

S.No	Course Outcomes	Level	Unit Covered
1	Explain the recent opportunities in services marketing.	K2	I
2	Demonstrate the association between the fundamental Services concepts and the marketing mix.	K2	I
3	List the Service Quality models that can be adopted in corporate	K1	II
4	Apply the concept of quality function deployment to the various industries	K3	III
5	Evaluate the significance of various pricing strategies to face competition	K6	IV
6	Develop advertising strategies and tools for effective advertising decisions	K5	V

### 2A. SYLLABUS

#### UNIT-I INTRODUCTION TO SERVICES MARKETING

**15 Hours**

Services Marketing, Nature, Need, Classification of Services, Barriers and Issues in Services Marketing in the Indian Context.

#### UNIT –II MODELS OF SERVICES QUALITY

**15 Hours**

Gaps model of service quality, Expectations and perceptions, Measuring service quality, SERVQUAL, Building customer relationships and service recovery.

#### UNIT-III POSITIONING SERVICES

**15 Hours**

Positioning service, Development and designing services, Service Blue printing, Quality Function Deployment, Adding Value, Physical Evidence and services cape.

#### **UNIT-IV PRICING STRATEGIES**

**15 Hours**

Pricing strategies for services, Creating and Managing service delivery, Balancing demand and capacity, Waiting lines and reservation.

#### **UNIT-V PROMOTIONAL STRATEGIES**

**15 Hours**

Integrated services marketing communication, Services advertising strategies, Integrated model of services quality.

#### **2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
1	Inbound Marketing	<a href="https://www.hubspot.com/inbound-marketing">https://www.hubspot.com/inbound-marketing</a>
2	Outbound Marketing	<a href="https://www.wordstream.com/outbound-marketing">https://www.wordstream.com/outbound-marketing</a>
3	Interrupt Marketing	<a href="https://whatis.techtarget.com/definition/interrupt-marketing#:~:text=Interrupt%20marketing%2C%20so%20metimes%20referred%20to,Mail%20campaigns.">https://whatis.techtarget.com/definition/interrupt-marketing#:~:text=Interrupt%20marketing%2C%20so metimes%20referred%20to,Mail%20campaigns.</a>

#### **2C. TEXT BOOK:**

1. Valarie A Zeithmal and Mary Jo Bitner, “Services Marketing” – Integrating Customer Focus Across the Firm”, TATA McGRAW HILL, New Delhi – 2002, 2<sup>nd</sup> Edition.

#### **2D. REFERENCE BOOKS:**

1. Christopher Lovelock, “Services Marketing – People, Technology, Strategy” Addison Wesley Longman (Singapore), Pearsons Education Asia – 2001, 4<sup>th</sup> Edition.
2. Roland T Rust, Anthony J Zahorik and Timothy L Keiningham, “ Services Markeitng”, Addison Wesley Longman (Singapore).

#### **3. SPECIFIC LEARNING OUTCOMES (SLO):**

<b>UNIT</b>	<b>COURSE CONTENTS</b>	<b>LEARNING OUTCOMES</b>	<b>TAXONOMY LEVEL</b>
<b>I</b>	<b>INTRODUCTION TO SERVICES MARKETING</b>		

1.1	Services Marketing	Define Services Marketing	<b>K1</b>
1.1.1	Nature, Need, Classification of Services	Explain the need of services	<b>K2</b>
1.2	Barriers and Issues in Services Marketing in the Indian Context.	Analyze the barriers and issues in services marketing	<b>K4</b>
<b>II</b>	<b>MODELS OF SERVICES QUALITY</b>		
2.1	Gaps model of service quality	Illustrate the gaps model of service quality	<b>K2</b>
2.2	Expectations and perceptions	Summarize the concept of customer expectations and perceptions	<b>K2</b>
2.3	Measuring service quality	Apply the methods of measuring service quality	<b>K3</b>
2.4	SERVQUAL	Apply Servqual to measure the quality in organizations	<b>K3</b>
2.5	Building customer relationships and service recovery.	Explain the methods of building customer relationships and service recovery	<b>K2</b>
<b>III</b>	<b>POSITIONING SERVICES</b>		
3.1	Positioning service	Recall the concept involved in positioning service	<b>K1</b>
3.2	Development and designing services	Demonstrate the ways through which services can be designated and developed	<b>K2</b>
3.3	Service Blue printing	Illustrate the concept of Blue printing	<b>K2</b>
3.4	Quality Function Deployment	Examine the applicability of Quality Function Deployment	<b>K4</b>
3.5	Adding Value	List the ways through which value can be added	<b>K1</b>
3.6	Physical Evidence and services cape	Explain about physical evidence and services cape	<b>K2</b>
<b>IV</b>	<b>PRICING STRATEGIES</b>		
4.1	Pricing strategies for services.	Apply the pricing strategies in service sector	<b>K3</b>
4.2	Creating and Managing service delivery	Illustrate the ways of creating and managing service delivery	<b>K2</b>
4.3	Balancing demand and	Examine the methods through which	<b>K4</b>

	capacity	demand and supply can be matched	
4.4	Waiting lines and reservation.	Demonstrate the techniques of managing waiting lines and reservations	<b>K2</b>
<b>V</b>	<b>PROMOTIONAL STRATEGIES</b>		
5.1	Integrated services marketing communication	Explain about integrated services marketing communication	<b>K2</b>
5.2	Services advertising strategies	Analyze the services advertising strategies of an organization	<b>K4</b>
5.3	Integrated model of services quality.	Examine the uses of Integrated model of services quality.	<b>K4</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	M	M	H	-	-	H	M	M	-	H	H	H	M
CO2	M	H	H	M	M	H	M	M	-	H	H	M	M
CO3	M	M	M	M	H	H	H	H	M	H	H	H	M
CO4	H	M	M	H	M	M	M	L	-	M	H	H	M
CO5	M	L	H	H	M	M	M	H	L	H	H	M	M
CO6	M	M	H	M	M	M	M	M	L	H	H	M	H

#### 5. COURSE ASSESSMENT METHODS

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##### Direct

1. Continuous Assessment Test I,II
2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation
3. End Semester Examination

##### Indirect

1. Course-end survey



## AVIATION SECURITY

**SEMESTER-IV**

**COURSE CODE: U20AG4Y6**

**CREDIT: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 4**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Define the terms related to aviation security	K1	I
2	Identify the process & equipment required for screening	K3	II
3	Identify the objects which are restricted in flight	K3	III
4	Determine the threat level for aviation and convention related to safeguarding aviation	K5	IV
5	Summarize hostage negotiation plan	K2	V
6	Outline the objective of aviation security	K2	I

### 2A. SYLLABUS

#### UNIT I – DEFENITIONS, OBJECTIVES AND THREATS

**12 Hours**

Aviation security and Airport security – Terminologies related to aviation security – Objectives of Aviation security – Nature of threats – Types / Characteristics of offenders.

#### UNIT II– SCREENING AND SEARCHING OF PASSENGERS AND STAFF 12 Hours

Stages involved in inspection/screening process – Equipments required for screening – X-ray examination of baggage – Physical inspection of baggage.

#### UNIT III– RESTRICTED ARTICLES AND SUBSTANCES

**12 Hours**

Definition – Categories of restricted articles – Improvised explosive devices – Places of concealment of Explosives – Types of explosives detectors – Bomb threat – Threat to an airborne aircraft.

## UNIT IV– AIRCRAFT HIJACKING AND INTERNATIONAL CONVENTIONS

**12 Hours**

Unlawful seizure of Aircraft(Hijacking) – Why is Civil aviation considered as an attractive target? – Where can the threats come from? – Historical review of the past incidents – Dealing with the hijacking situation onboard – Tokyo convention Hague convention – Montreal convention.

## UNIT V- HOSTAGE NEGOTIATION

**12 Hours**

Hostage situation – Hostage situation move through several distinct phases – Hostage takers – The negotiator arrives on the scene – Negotiator objectives and tactics – Making a deal with the hostage taker – Role of Cabin crew in hostage situation.

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Emerging security threat in aviation security	<a href="http://blog.safe-passage.com/emerging-threats-to-aviation-security">http://blog.safe-passage.com/emerging-threats-to-aviation-security</a>
2	Improvised explosive devises	<a href="https://en.wikipedia.org/wiki/Improvised_explosive_device">https://en.wikipedia.org/wiki/Improvised_explosive_device</a>
3	Improved passenger screening technology	<a href="https://www.futuretravelexperience.com/2016/08/new-technologies-strive-to-enhance-airport-security/">https://www.futuretravelexperience.com/2016/08/new-technologies-strive-to-enhance-airport-security/</a>

### 2C. REFERENCE BOOKS:

R.K.Bali – Navigation

Ground Studies for Pilots - Navigation

Oxford – General Navigation

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>DEFENITIONS, OBJECTIVES AND THREATS</b>		
1.1	Aviation security and airport security	Explain the need of aviation security	<b>K2</b>
1.2	Terminology related to aviation security	Define the terms related to aviation security	<b>K1</b>

1.3	Objectives of aviation security	List out the roles & responsibilities of aviation security units	<b>K4</b>
1.4	Nature of threats	Determine the threats for aviation	<b>K5</b>
1.5	Characteristics of offenders	Identify the offenders	<b>K3</b>
<b>II</b>	<b>SCREENING AND SEARCHING OF PASSENGERS AND STAFF</b>		
2.1.0	Stages involved in inspection/screening process	List out the stages in screening process	<b>K4</b>
2.1.1	Equipment required for screening	Choose the correct equipment for specific purpose of screening	<b>K3</b>
2.1.2	x-ray examination of baggage	Explain the process of screening baggage using x-ray	<b>K2</b>
2.1.3	Physical inspection of baggage	Explain the process of physical inspection of baggage	<b>K2</b>
<b>III</b>	<b>RESTRICTED ARTICLES AND SUBSTANCES</b>		
3.1.0	Definition	Define the terms related with restricted article	<b>K1</b>
3.1.1	Categories of restricted items	List out the items which are restricted	<b>K4</b>
3.1.2	Improvised explosive devises	Explain IED	<b>K2</b>
3.1.3	Places of concealment of explosive	Identify the places of concealment of explosives	<b>K3</b>
3.1.4	Types of explosive detector	Compare different type of detector for a particular purpose	<b>K4</b>
3.1.5	Bomb threat	Decide what to do in bomb threat situation	<b>K5</b>
3.1.6	Threat to an airborne aircraft	Plan contingency procedure	<b>K6</b>
<b>IV</b>	<b>AIRCRAFT HIJACKING AND INTERNATIONAL CONVENTIONS</b>		
4.1.0	Unlawful seizure of aircraft	Explain the meaning of hijack	<b>K2</b>
4.1.1	Why civil aviation considered as an attractive target	List out the reason for hijack	<b>K4</b>
4.1.2	Where are the threats come from	Identify the area of threats	<b>K3</b>
4.1.3	Historical review of past	Recall past incidents for future	<b>K1</b>

	incidents	protection	
4.1.4	Dealing with hijacking situation onboard	Explain the procedure of negotiation	<b>K2</b>
4.1.5	Tokyo convention, hague convention, mondreal convention	List out the important contents of theses convention	<b>K4</b>
<b>V</b>	<b>HOSTAGE NEGOTIATION</b>		
5.1.0	Hostage situation	Assume the situation of hostages	<b>K4</b>
5.1.1	Hostage situation move through several distinct phases	Explain the situation of hostages during several phases	<b>K2</b>
5.1.2	The negotiators arrives on the scene	Outline the negotiation of the scene	<b>K2</b>
5.1.3	Negotiators objectives & tactics	Formulate the objective of negotiator	<b>K6</b>
5.1.4	Making a deal with hijackers	Outline the procedure of negotiation	<b>K2</b>
5.1.5	Role of cabin crew in hijacking situation	Decide the responsibility of cabin crew during negotiation process	<b>K5</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

##### Direct

1. Continuous Assessment Test I,II
2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation
3. End Semester Examination

##### Indirect

1. Course-end survey

## AIRPORT GROUND HANDLING MANAGEMENT

**SEMESTER-IV**

**COURSE CODE: U21AGPS2**

**CREDITS: 2**

**TOTAL HOURS: 30**

**HOURS/WEEK: 2**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Apply the previous knowledge in different scenario	K3	I
2	Experiment with manual flight planning & flight dispatch exercise	K3	I
3	Adapt to irregularity and handle the situation	K6	II
4	Take part in written and oral exam conducted by airline company	K4	II
5	Function as simulated flight dispatch operation	K4	III
6	Plan for diversion & rerouting	K3	III

### 2A. SYLLABUS

#### PRACTICAL EXERCISES – 1

**10 Hours**

- Integration of previously acquired knowledge and practical application in different scenarios
- Manual flight planning and flight dispatch exercises

#### PRACTICAL EXERCISES – 2

**10 Hours**

- Operational control and irregularity handling exercises
- Written and Oral exam preparation

#### PRACTICAL EXERCISES – 3

**10 Hours**

- Operations control and flight dispatch simulation
- Handling diversions and rerouting.

## 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Roles and responsibility of flight dispatcher	<a href="https://en.wikipedia.org/wiki/Flight_dispatcher">https://en.wikipedia.org/wiki/Flight_dispatcher</a>
2	Route diversion procedure	<a href="https://www.firstflight.com/private-pilot-course/diversions-and-lost-procedures/">https://www.firstflight.com/private-pilot-course/diversions-and-lost-procedures/</a>
3	Flight plan explanation	<a href="https://www.skybrary.aero/index.php/Flight_Plan_Completion">https://www.skybrary.aero/index.php/Flight_Plan_Completion</a>

## 2C. REFERENCE BOOKS:

ICAO Annex 14 Volume 1 Aerodrome Design and Operations.

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>PRACTICAL EXERCISES – 1</b>		
1.1	Integration of previously acquired knowledge and practical application in different scenarios	Apply the previous knowledge in different scenario	<b>K3</b>
1.2	Manual flight planning and flight dispatch exercises	Experiment with manual flight planning & flight dispatch exercise	<b>K3</b>
<b>II</b>	<b>PRACTICAL EXERCISES – 2</b>		
2.1.0	Operational control and irregularity handling exercises	Adapt to irregularity and handle the situation	<b>K6</b>
2.1.1	Written and Oral exam preparation	Take part in written and oral exam conducted by airline company	<b>K4</b>
<b>III</b>	<b>PRACTICAL EXERCISES – 3</b>		
3.1.0	Operations control and flight dispatch simulation	Function as simulated flight dispatch operation	<b>K4</b>
3.1.1	Handling diversions and	Plan for diversion & rerouting	<b>K3</b>

	rerouting		
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#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>



**EXTRA DISCIPLINARY COURSE  
NMEC II: FUNDAMENTALS OF MARKETING**

**SEMESTER: IV**

**CODE: U20AG3E2**

**CREDITS: 2**

**TOTAL HOURS: 30**

**HOURS/WEEK: 2**

**1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Demonstrate understanding of marketing terminology and concepts.	K2	I
2	Identify wants and environmental factors that shape marketing activities for certain target markets	K3	I
3	Demonstrate knowledge of the individual components of a marketing mix.	K2	II
4	Demonstrate knowledge of kinds of pricing within the marketing field.	K2	III
5	Identify the organizational processes involved in the channels of distribution	K3	IV
6	Demonstrate knowledge regarding Product advertising and sales promotion	K2	V

**2A. SYLLABUS**

**UNIT-I INTRODUCTION**

**6 Hours**

Marketing - Meaning – Features - Importance - Merchandising - Marketing & Selling - Macro view of marketing - What is service – Consumer - Direct marketing

**UNIT-II MARKETING MIX**

**6 Hours**

Marketing mix – Product – Meaning – Features – Classification - Product line - Product mix – Brand – Features – Types - Brand name

**UNIT-III PRICE**

**6 Hours**

Price – Meaning – Importance – Kinds - Price leader

**UNIT-IV PLACE- DISTRIBUTION**

**6 Hours**

Place - Channels of distribution (Types)

## UNIT-V PROMOTIONAL MIX

6 Hours

Promotion – Meaning – Importance - Types of Advertisement - Salespromotion – Publicity

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Green Marketing	<a href="https://www.businessmanagementideas.com/marketing/green-marketing/20101">https://www.businessmanagementideas.com/marketing/green-marketing/20101</a>
2	Global Marketing	<a href="https://www.businessmanagementideas.com/marketing/global-marketing/global-marketing/20654">https://www.businessmanagementideas.com/marketing/global-marketing/global-marketing/20654</a>
3	Advertising Management in Marketing	<a href="https://www.managementstudyguide.com/advertising-management.htm">https://www.managementstudyguide.com/advertising-management.htm</a>
4	Brand Strategies in Marketing	<a href="http://www.marketingmo.com/strategic-planning/brand-strategy/">http://www.marketingmo.com/strategic-planning/brand-strategy/</a>

### 2C. TEXT BOOK:

- 1.Rajan Nair, Marketing Management, 19<sup>th</sup> Edition, sultan Chand & Sons, 2020
2. Rajan Saxena, Marketing Management –4<sup>th</sup> Edition, McGraw Hill Education, 2009

### 2D. REFERENCE BOOKS:

- 1.Ramasamy and Namakumari , Marketing management, 4<sup>th</sup> Edition, Om Books, 2010
- 2.Michael J Etzel, Bruce J Walker, Fundamentals of Marketing, 14<sup>th</sup> Edition, McGraw Hill, International Edition, 2017
- 3.Philip Kotler, Marketing Management, 13<sup>th</sup> edition, Prentice hall of India ,2005

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
<b>1.1.0</b>	Marketing	Define Marketing	<b>K1</b>
<b>1.1.1</b>	Meaning	Explain the term marketing	<b>K2</b>
<b>1.1.2</b>	Features	List the features of marketing	<b>K2</b>

<b>1.1.3</b>	Importance	List the importance of marketing	<b>K2</b>
<b>1.2.0</b>	Merchandising	Explain the term merchandising	<b>K2</b>
<b>1.2.1</b>	Marketing& Selling	Compare marketing & selling	<b>K2</b>
<b>1.3.0</b>	Macro view of marketing	Recall Macro view of marketing	<b>K2</b>
<b>1.3.1</b>	What is service	Recall what is service	<b>K2</b>
<b>1.3.2</b>	Consumer	Recall the importance of consumer	<b>K2</b>
<b>1.3.3</b>	Direct Marketing	Illustrate the meaning of direct marketing	<b>K1</b>
<b>II</b>	<b>MARKETING MIX</b>		
2.1.0	Marketing Mix	Explain the concept of marketing mix	<b>K1</b>
2.1.1	Product	Recall the concept of product	<b>K1</b>
2.1.2	Meaning	Illustrate the meaning of product	<b>K1</b>
2.1.3	Features	List the features of product	<b>K2</b>
2.1.4	Classification	Explain the various classification of product	<b>K2</b>
2.2.0	Product Line	Explain product line	<b>K2</b>
2.3.0	Product mix	Explain product mix	<b>K2</b>
2.4.0	Brand	Explain the term Brand	<b>K2</b>
2.4.1	Features	List the features of brand	<b>K2</b>
2.4.2	Types	List the types of brand	<b>K2</b>
2.4.3	Brand Name	Illustrate the brand name	<b>K2</b>

<b>III</b>	<b>PRICE</b>		
3.1.0	Price	Define pricing	<b>K1</b>
3.1.1	Meaning	Illustrate the meaning of pricing	<b>K1</b>
3.1.2	Importance	Explain the importance of pricing	<b>K2</b>
3.1.3	Kinds of Pricing	List the kinds of pricing	<b>K2</b>
3.1.4	Price Leader	Explain the price leader	<b>K2</b>
<b>IV</b>	<b>PLACE - DISTRIBUTION</b>		
4.1.0	Place	Explain the term place	<b>K2</b>
4.2.0	Channels of Distribution(Types)	List the types of Channels of Distribution	<b>K2</b>
<b>V</b>	<b>PROMOTIONAL MIX</b>		
5.1.0	Promotion	Explain promotion	<b>K2</b>
5.1.1	Meaning	Illustrate the meaning of promotion	<b>K1</b>
5.1.2	Importance	Explain the importance of promotional mix	<b>K2</b>
5.1.3	Types of Advertisement	List the Types of Advertisement	<b>K2</b>
5.1.4	Sales Promotion	Demonstrate Sales Promotion	<b>K2</b>
5.1.5	Publicity	Demonstrate Publicity	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	H	H	M	H	H	M	M	M	H	M	L	M	H
<b>CO2</b>	H	M	H	H	H	M	M	H	M	L	-	L	H
<b>CO3</b>	M	M	M	M	M	L	M	H	-	M	M	M	M
<b>CO4</b>	H	H	M	M	L	H	H	M	L	H	M	H	L
<b>CO5</b>	M	M	M	H	L	M	M	M	-	H	-	H	-
<b>CO6</b>	H	M	M	M	L	H	L	H	L	M	L	M	L

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. <b>Continuous Assessment Test I,II</b></li> <li>2. <b>Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b></li> <li>3. <b>End Semester Examination</b></li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. <b>Course-end survey</b></li> </ol>

## SEMESTER V

<b>S.No</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Human Resource Management	U20AG505
2.	Planning And Crew Scheduling	U21AG506
3.	General Navigation	U20AG507
4.	Dangerous goods regulations	U20AG508
5.	Investment Management	U22AG5:A
	Project Management	U22AG5:B
	Retail Management	U22AG5:C
6.	Interview Skills	U20AG5S3

## **Core V: HUMAN RESOURCE MANAGEMENT**

**SEMESTER: V**

**CODE: U20AG505**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 6**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Interpret employee recruitment, selection, and retention plans and processes.	K2	I
2	Explain the methods to administer and contribute to the design and evaluation of the performance management system.	K2	III
3	Illustrate a training program using an appropriate framework for evaluating needs for training, designing a training program, and evaluating the training output.	K2	IV
4	Understand the HR environment in India, human resource functions within organizations, importance of workers participation in management and creating stress free work environment through counseling and mentoring.	K2	II
5	Plan human resources requirement and formulate HR policy of the organisation with regard to recruitment, selection, training and career planning.	K3	V
6	Appraise the employee's performance and formulate compensation policy which helps to make organizational excellence & analyze the ethical issues in HR management.	K5	I

## 2A. SYLLABUS

### UNIT-I INTRODUCTION TO HUMAN RESOURCE MANAGEMENT 15 Hours

Introduction, Processes and functions of HR management, HR Department Organization, Role of HR Manager in the organization.

### UNIT-II HUMAN RESOURCE PLANNING 15 Hours

HR Planning- Concepts and Methods: Job Analysis, Job Description, Job Specification, Selection process, Employment tests and interviews.

### UNIT-III INDUCTION AND PERFORMANCE APPRAISAL 15 Hours

Induction and Performance Appraisal, Induction programme, Different training methods in company, Performance appraisal and review.

### UNIT-IV WAGE AND SALARY ADMINISTRATION 15 Hours

Wage and Salary Administration, Job Evaluation methods, Wages: Different patterns of wage payments- time rate, Piece rate, Wage incentives and Bonus.

### UNIT-V INTRODUCTION TO HR AUDIT 15 Hours

Concept of HR Audit, Separation and its types, Retirement benefits: Gratuity, Provident Fund and pension scheme.

## 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Job Enrichment	<a href="https://www.digitalhrtech.com/job-enrichment/#:~:text=is%20job%20enrichment%3F-A%20definition,creating%20autonomy%2C%20and%20giving%20feedback.">https://www.digitalhrtech.com/job-enrichment/#:~:text=is%20job%20enrichment%3F-A%20definition,creating%20autonomy%2C%20and%20giving%20feedback.</a>
2	Trade Unions in India	<a href="https://en.wikipedia.org/wiki/Trade_unions_in_India">https://en.wikipedia.org/wiki/Trade_unions_in_India</a>
3	Participative Management	<a href="https://www.indeed.com/career-advice/career-development/participative-management">https://www.indeed.com/career-advice/career-development/participative-management</a>



## 2C. TEXT BOOKS:

1. S. P Gupta- Human Resource Management –15th Edition, S.Chand & sons, 2014
2. Praveen Durai- Human Resource Management -Pearson Publications.

## 2D. REFERENCE BOOKS:

1. Memoria – Personnel Management –Himalaya Publishing House, 2007.
2. Edwin Fillippo – Personnel Management –M.Graw Hill, 3<sup>rd</sup>Edition 1971.

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION TO HUMAN RESOURCE MANAGEMENT</b>		
1.1.0	Introduction	Explain the effective management of Human resource.	<b>K2</b>
1.1.1	Processes and functions of HR management	Recall the processes & to explain the functions involved in HR management.	<b>K1</b>
1.1.2	HR Department Organization	Recall the organization of HR Department.	<b>K1</b>
1.1.3	Role of HR Manager in the organization	Analyse the various roles of HR manager in the organization.	<b>K4</b>
<b>II</b>	<b>HUMAN RESOURCE PLANNING</b>		
2.1.0	HR Planning	Understand the meaning & scope of HR Planning.	<b>K2</b>
2.1.1	Concepts and Methods	Explain the concepts & different methods of HR Planning.	<b>K2</b>
2.1.2	Job Analysis	Classify the Job analysis methods.	<b>K2</b>
2.1.3	Job Description	Explain job description.	<b>K2</b>
2.1.4	Job Specification	Explain Job specification.	<b>K2</b>
2.1.5	Selection process	Recall the selection process involved in recruitment of human resource.	<b>K1</b>

2.1.6	Employment tests and interviews	Assess the different types of employment tests & interviews.	<b>K5</b>
<b>III</b>	<b>INDUCTION AND PERFORMANCE APPRAISAL</b>		
3.1.0	Induction and Performance Appraisal	Define Induction & to evaluate the Performance appraisal methods.	<b>K1</b>
3.1.1	Induction programme	Summarize the different steps in conducting Induction programme.	<b>K2</b>
3.1.2	Different training methods in company	List down the different training methods & know the importance of training the employees in an organization.	<b>K1</b>
3.1.3	Performance appraisal and review	Classify the performance appraisal system in a company & to know the importance of reviewing the appraisal system frequently.	<b>K2</b>
<b>IV</b>	<b>WAGE AND SALARY ADMINISTRATION</b>		
4.1.0	Wage and Salary Administration	Define & to know the importance of wage & salary administration.	<b>K1</b>
4.1.1	Job Evaluation methods	Classify the Job evaluation methods.	<b>K2</b>
4.1.2	Wages	Recall the principles & purpose of wage & salary administration.	<b>K1</b>
4.1.3	Different patterns of wage payments - Time rate, Piece rate	Demonstrate the different patterns of wage payments.	<b>K2</b>
4.1.4	Wage incentives and Bonus	Determine the wage incentives & bonus.	<b>K5</b>
<b>V</b>	<b>INTRODUCTION TO HR AUDIT</b>		
5.1.0	Concept of HR Audit	Explain the concepts of HR Audit.	<b>K2</b>
5.1.1	Separation and its types	Classify the different types of separation of employees from the organization.	<b>K2</b>

5.1.2	Retirement benefits.	Determine the importance of retirement benefits.	<b>K5</b>
5.1.3	Gratuity, Provident Fund and pension scheme.	Explain the various forms of retirement benefits.	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	H	M	H	L	M	H	M	H	M	M	-
CO2	L	-	H	M	H	H	M	-	L	M	H	H	L
CO3	H	H	-	-	M	H	M	L	-	M	H	L	H
CO4	M	L	H	M	M	L	H	M	L	H	M	-	L
CO5	H	H	H	L	M	M	H	H	H	L	-	H	M
CO6	H	M	H	M	-	M	L	H	H	-	H	M	M

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## PLANNING AND CREW SCHEDULING

**SEMESTER-V**

**CREDITS: 5**

**HOURS/WEEK: 6**

**COURSE CODE: U21AG506**

**TOTAL HOURS: 75**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Outline the basic flight planning procedure	K2	I
2	Summarize advanced flight planning procedure	K2	II
3	Organize the refuelling procedure	K3	III
4	Develop before flight preparation report	K6	IV
5	Organize crew roistering	K3	V
6	Explain the restriction during refueling of fight	K2	III

### 2A. SYLLABUS

#### UNIT I–BASIC FLIGHT PLANNING

**15 Hours**

Introduction to flight planning – Route and profile planning – Time, Speed and Fuel calculations – Weather considerations – Aircraft technical status considerations

#### UNIT II - ADVANCED FLIGHT PLANNING

**15 Hours**

Operational flight plan – Alternate airport selection – Practical flight planning exercises – Advanced dispatch techniques introduction.

#### UNIT III – FUELING AND RESTRICTIONS

**15 Hours**

Airport Restrictions – Airport Categorization – Sector Limitations – Fuel Calculations – Crew Duty and rest time Regulations – Ground Equipment – Refuelling Procedures and Services.

**UNIT IV- BEFORE FLIGHT PREPARATION REPORT****15 Hours**

Conversion – Met report briefing – load and Trim sheet – clearance from Flight Information Centre and Air Defence Centre.

**UNIT V – CREW SCHEDULING****15 Hours**

Definition of Flight time & Flight Duty Time – Flight Time & Flight duty time restrictions for a crew per day/per week/per month for domestic and international flight – restrictions on number of landings for a crew per day/per week/per month for domestic and international flight – maximum extension of flight duty period in case of flight crew is augmented

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Refueling and defueling risks	<a href="https://www.skybrary.aero/index.php/Refuelling_and_De_fuelling_Risks">https://www.skybrary.aero/index.php/Refuelling_and_De_fuelling_Risks</a>
2	Weather which affect the safety of aircraft operation	<a href="https://www.airservicesaustralia.com/about-us/our-services/how-air-traffic-control-works/impact-of-weather/">https://www.airservicesaustralia.com/about-us/our-services/how-air-traffic-control-works/impact-of-weather/</a>
3	How delay affects aviation business	<a href="https://www.trefis.com/stock/dal/articles/375013/what-is-the-impact-of-flight-delays/2016-08-31">https://www.trefis.com/stock/dal/articles/375013/what-is-the-impact-of-flight-delays/2016-08-31</a>

**2C. REFERENCE BOOKS:**

- R.K.Bali – Navigation
- Ground Studies for Pilots – Navigation

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>BASIC FLIGHT PLANNING</b>		
1.1	Introduction to flight	Outline the basic of flight planning	<b>K2</b>

	planning	procedure	
1.2	Route & profile planning	Decide the route and profile to be followed by a flight	<b>K5</b>
1.3	Time speed & fuel calculation	Solve calculation related to time speed and fuel	<b>K2</b>
1.4	Weather consideration	Plan a flight in accordance to weather condition	<b>K6</b>
1.5	Aircraft technical status consideration	Plan a flight in accordance to the technical status of aircraft	<b>K6</b>
<b>II</b>	<b>ADVANCED FLIGHT PLANNING</b>		
2.1.0	Operational flight plan	Construct a flight plan	<b>K3</b>
2.1.1	Alternate airport selection	Choose alternate airport	<b>K3</b>
2.1.2	Practical flight planning excerscise	Experiment with simulated flight planning	<b>K3</b>
2.1.3	Advanced dispatch technique introduction	Outline the basics of advanced dispatch technique	<b>K2</b>
<b>III</b>	<b>FUELING AND RESTRICTIONS</b>		
3.1.0	Airport restriction	Summarize the general restriction in airport	<b>K2</b>
3.1.1	Airport categorization	Categorize the airport according to its classification	<b>K4</b>
3.1.2	Sector limitation	List out the general limitation in sector	<b>K4</b>
3.1.3	Fuel calculations	Solve fuel calculations	<b>K2</b>
3.1.4	Crew duty and rest time regulation	Organize crew duty & rest time properly	<b>K3</b>
3.1.5	Ground equipments	List out ground equipments & its uses	<b>K4</b>
3.1.6	Refueling procedure & service	Explain the procedure for refueling	<b>K2</b>
<b>IV</b>	<b>BEFORE FLIGHT PREPARATION REPORT</b>		
4.1.0	Conversion	Recall basic unit conversion	<b>K1</b>
4.1.1	Met report briefing	Interpret met report	<b>K2</b>
4.1.2	Load & trim sheet	Construct load & trim sheet	<b>K3</b>
4.1.3	Clearance from FIC & ADC	Apply for FIC & ADC clearance	<b>K3</b>
<b>V</b>	<b>CREW SCHEDULING</b>		
5.1.0	Definition of flight time & flight duty time	Define Flight time & flight duty time	<b>K1</b>
5.1.1	Flight time & flight duty time restriction for a	List out the time restriction for a crew per day/ per week/ per month for domestic and	<b>K4</b>

	crew per day/ per week/ per month for domestic and international flight	international flight	
5.1.2	Restrictions of no of landings for a crew per day/ per week/ per month for domestic and international flight	List out the restrictions of no of landings for a crew per day/ per week/ per month for domestic and international flight	<b>K4</b>
5.1.3	Maximum extension of flight duty period in case of flight crew is augmented	Explain the procedure to extend the flight duty period in case of flight crew is augmented	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>



## GENERAL NAVIGATION

**SEMESTER-V**

**COURSE CODE:U20AG507**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 6**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Explain various terms of imaginary line over globe	K2	I
2	Solve the problem related to speed conversion	K6	II
3	Solve the problems related to mass calculation	K6	III
4	Select a particular chart for a particular region	K5	IV
5	Choose the efficient cruising level	K5	V
6	Explain the different messurent of airspeed	K2	II

### 2A. SYLLABUS

#### UNIT I - THE EARTH

**15 Hours**

The cardinal Points, The Earth Graticule, Great Circles, Meridians and Anti Meridians, Small Circles, The Equator, Latitude, Longitude, The Prime Meridian, Difference in Latitude and Longitude, Great Circle Tracks, Rhumb Line Tracks.,360 degree notation, True Direction, Magnetic Direction and Variation, Isogonals, Magnetic Direction, Compass Direction and Deviation, Convergency.

#### UNIT II - SPEED CONVERSIONS

**15 Hours**

Statute Mile, Nautical Mile, Kilometer, Conversion between Units, Departure, Meters and Feet, Basic principles of Circular Slide Rule., units of Speed, Knots, Miles per Hour, Kilometers per Hour, Indicated Airspeed, Rectified Airspeed, True Airspeed, Equivalent Airspeed, Ground Speed, Mach Number, Calibrated Airspeed, Correct Outside Air Temperature, Conversion of Rectified Airspeed to True Airspeed, Conversion of Mach number to True Airspeed, Speed, Distance and Time; Relationships and Calculations.

**UNIT III - PAYLOAD****15 Hours**

Basic empty mass – Tare weight – Dry operating Mass (DOM) – Traffic Load – Useful load – Fuel on Board – Zero Fuel Mass (ZFM) – Maximum Zero Fuel Mass (MZFM) – Take off Mass (TOM) – MTOM – Performance Limited takeoff mass – Regulated take off mass – Maximum Structural Landing Mass – (MLM) – Maximum Ramp Mass - Max Structural Taxi Mass – Calculation

**UNIT IV - MAPS AND CHARTS****15 Hours**

Mercator projection, Lambert Conical, Polar stereographic projection, Orthomorphism, Scale, The Reduced Earth, Topographical Maps

**UNIT V - FUEL AND NAVIGATIONAL EMERGENCY DATA****15 Hours**

Imperial Gallons and US Gall, Conversion factors, specific gravity, fuel flow and fuel consumption, selecting the most economical cruising level, Payload

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Latitudes and longitudes	<a href="https://www.geographyrealm.com/latitude-longitude/">https://www.geographyrealm.com/latitude-longitude/</a>
2	Different measurements of airspeed	<a href="https://en.wikipedia.org/wiki/Airspeed">https://en.wikipedia.org/wiki/Airspeed</a>
3	Comparison between different charts and its properties	<a href="https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=&amp;ved=2ahUKEwi7vKK31ojxAhV9yzgGHZo4DeoQFnoECAMQAA&amp;url=https%3A%2F%2Fwww.pilot18.com%2Fwp-content%2Fuploads%2F2017%2F06%2F3-GN-Charts-convergency-Map-projections.pdf&amp;usg=AOvVaw1N-YsKrLiQjxKi-HeUXC6K">https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=&amp;ved=2ahUKEwi7vKK31ojxAhV9yzgGHZo4DeoQFnoECAMQAA&amp;url=https%3A%2F%2Fwww.pilot18.com%2Fwp-content%2Fuploads%2F2017%2F06%2F3-GN-Charts-convergency-Map-projections.pdf&amp;usg=AOvVaw1N-YsKrLiQjxKi-HeUXC6K</a>

**2C. REFERENCE BOOKS:**

Ground studies for pilot-Navigation 6th edition royunder down& tony palmer.

Navigation for pilots by J. E. Hitchcock

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>THE EARTH</b>		
1.1	Cardinal points	List out the cardinal directions	<b>K4</b>

1.2	The earth graticule	Illustrate graticule	<b>K2</b>
1.3	Great circle	Explain great circle	<b>K2</b>
1.4	Meridian & anti meridian	Classify meridian and anti meridian	<b>K4</b>
1.5	Small circle	Define small circle	<b>K1</b>
1.6	Equator	Recall the definition of equator	<b>K1</b>
1.7	latitude	Recall the definition of latitude	<b>K1</b>
1.8	Longitude	Recall the definition of longitude	<b>K1</b>
1.9	Prime meridian	Recall the definition of prime meridian	<b>K1</b>
1.10	Difference between latitude and longitude	Classify the difference between latitude and longitude	<b>K3</b>
1.11	Rhumb line	Identify which is Rhumb line	<b>K3</b>
1.12	Track	Classify the different type types of track	<b>K3</b>
1.13	360 degree notation	Explain 360 degree notation	<b>K2</b>
1.14	True heading, magnetic heading, compass heading	Compare three heading	<b>K4</b>
1.15	Variation and deviation	Illustratie variation and deviation	<b>K2</b>
1.16	Convergency	Solve convergency problem	<b>K6</b>
<b>II</b>	<b>SPEED CONVERSIONS</b>		
2.1.0	Staute mile	Define statute mile	<b>K1</b>
2.1.1	Nautical mile	Define nautical mile	<b>K1</b>
2.1.2	Kilometer	Recall the definition of kilometer	<b>K1</b>
2.1.3	Conversion between units	Solve the problem of unit conversion	<b>K6</b>
2.1.4	Departure	Define departure	<b>K1</b>
2.1.5	Basic principle of semi circular rule	Outline the principle of semi circular rule	<b>K2</b>
2.1.6	IAS, TAS, EAS, Ground Speed, Mach. No, CAS	Explain the different methods of measurements of airspeed	<b>K2</b>
2.1.7	Corrected outside air temperature	Explain the purpose of measuring outside air temperature	<b>K2</b>
2.1.8	Conversion of RAS to TAS, Mach no to TAS	Solve the airspeed conversion	<b>K6</b>
2.1.9	Speed, Distance, Time, Relationship & calculation	Compare the relationship between speed, distance and time	<b>K2</b>
<b>III</b>	<b>PAYLOAD</b>		
3.1.0	Basic empty mass	Explain Basic empty mass	<b>K2</b>

3.1.1	Tare weight	Define Tare weight	<b>K1</b>
3.1.2	Dry operating mass	Measure dry operating mass	<b>K5</b>
3.1.3	Traffic load	Explain Traffic load	<b>K2</b>
3.1.4	Useful Load	Define useful load	<b>K1</b>
3.1.5	Fuel on board	Solve the fuel required on board	<b>K3</b>
3.1.6	Zero fuel mass, Max. Zero fuel mass	Differentiate between zero fuel mass and max zero fuel mass	<b>K4</b>
3.1.7	Take off mass, max take off mass & performance limiting take offmass, regulated take off mass	Differentiate different limitation of take off mass	<b>K4</b>
3.1.8	Max. structural landing mass	Explain max. structural landing mass	<b>K2</b>
3.1.9	Max. Ramp mass	Mesure max. ramp mass	<b>K5</b>
3.1.10	Max. structural Taxi mass	Solve problems related to mass calculation	<b>K3</b>
<b>IV</b>	<b>MAPS AND CHARTS</b>		
4.1.0	Mercator projection	Elaborate Mercator projection	<b>K6</b>
4.1.1	Lamberts conical	Explain the places where LCC can be used	<b>K2</b>
4.1.2	Polar stereographic	Choose the appropriate chart for appropriate area	<b>K5</b>
4.1.3	Orthomorphism scale	Explain orthomorphism scale	<b>K2</b>
4.1.4	Reduced earth	Construct reduced earth	<b>K6</b>
4.1.5	Topographical maps	Explain topographical maps	<b>K2</b>
<b>V</b>	<b>FUEL AND NAVIGATIONAL EMERGENCY DATA</b>		
5.1.0	Imperial and US gallons	Distinguish between Imperial and US gallons	<b>K4</b>
5.1.1	Conversion factor	Solve the problems related to unit conversion	<b>K6</b>
5.1.2	Specific gravity	Explain specific gravity	<b>K2</b>
5.1.3	Fuel flow and fuel consumption	Compare flow of fuel and consumption of fuel	<b>K5</b>
5.1.4	Select the most economical cruising level	Choose the economical cruising level	<b>K6</b>
5.1.5	Payload	Explain Payload	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## **DANGEROUS GOODS REGULATIONS**

**SEMESTER-V**

**COURSE CODE: U20AG508**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On Completion of this course, the student will be able to,

<b>T. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Know the importance of rules & recommendation by national & international governing bodies	K5	I
2	Categorize the dangerous goods and list out according the hazard and danger	K4	II
3	List out the different classification of dangerous goods and choose appropriate packing, marking and labelling	K2	III
4	Elobrate knowledge about handling different dangerous goods while loading them	K6	IV
5	Apply different emergency procedure according to the risk of hazardous material	K3	V
6	Compare the basic concepts of standard practices and safety measure when carrying dangerous goods	K5	IV

### **2A. SYLLABUS**

#### **UNIT I – CARRIAGE OF DANGEROUS GOODS**

**15 Hours**

ICAO requirements – Government of India requirements – Aircraft Act 1934 – The aircraft (carriage of dangerous goods) Rules, 2003.

#### **UNIT II- DANGEROUS GOODS DEFINITIONS**

**15 Hours**

Definition of dangerous goods – Dangerous goods categories.

#### **UNIT III– CLASSIFICATION OF DANGEROUS GOODS**

**15 Hours**

Name of the class – Divisions – Identification – Packing – Marking and labelling.

#### **UNIT IV – HANDLING OF DANGEROUS GOODS**

**15 Hours**

Preloading inspection – Loading requirements – [Loading of magnetized material – Loading of Carbon dioxide solid (Dry ice) – Loading of live animals with dangerous goods – Loading of cargo aircraft – Loading of expandable polymeric beads – Loading of wheel chairs and other battery powered mobility aids – non-spillable batteries – Loading of organic peroxides and self- reactive substances – Loading of radioactive material.]

## UNIT V- AIRCRAFT EMERGENCY RESPONSE DRILLS

**15 Hours**

Emergency response drills – Drill letter table – Numerical list of dangerous goods with drill codes.

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Role of dangerous goods inspector	<a href="http://164.100.60.133/manuals/DG_INSPECTORS%20HANDBOOK.pdf">http://164.100.60.133/manuals/DG_INSPECTORS%20HANDBOOK.pdf</a>
2	Introduction to IMDG codes	<a href="https://law.resource.org/pub/us/cfr/ibr/004/imo.imdg.1.2006.pdf">https://law.resource.org/pub/us/cfr/ibr/004/imo.imdg.1.2006.pdf</a>
3	Safe use and storage of chemicals (including pesticides and herbicides) in agriculture	<a href="https://www.safework.nsw.gov.au/_data/assets/pdf_file/0004/52870/Safe-use-and-storage-of-chemicals-including-">https://www.safework.nsw.gov.au/_data/assets/pdf_file/0004/52870/Safe-use-and-storage-of-chemicals-including-</a>

### 2C. REFERENCE BOOKS:

R.K. Bali- Air regulation

DGCA CAR, SECTION 11 – SAFE TRANSPORT OF DANGEROUS GOODS, SERIES ‘C’ PART I, ISSUE III

The International Air Transport Association (IATA)- Annex 18

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>CARRIAGE OF DANGEROUS GOODS</b>		
1.1	ICAO requirements	Explain the basic requirements of ICAO to be fulfilled	<b>K2</b>
1.2	Government of India requirements	Explain the requirements which are laid down by govt. of India	<b>K2</b>

1.3	Aircraft act 1934	Develop knowledge about rules over rules over aircraft operations & operators	<b>K3</b>
1.4	The aircraft rule 2003	Rules to be followed in or over India to carry dangerous goods	<b>K5</b>
<b>II</b>	<b>DANGEROUS GOODS DEFINITIONS</b>		
2.1.0	Definition of dangerous goods	Explain the dangerous goods and its properties	<b>K2</b>
2.1.1	Dangerous goods categories	Distinguish each dangerous goods by the nature of them	<b>K4</b>
<b>III</b>	<b>CLASSIFICATION OF DANGEROUS GOODS</b>		
3.1.0	Name of the class	Devide substance based on predominate hazard presented	<b>K4</b>
3.1.1	Division	Classify each class into several subdivision	<b>K4</b>
3.1.2	Identification	Identify the dangerous goods	<b>K3</b>
3.1.3	Packing	Choose which group of packing is required according to the class of dangerous goods	<b>K1</b>
3.1.4	Marking & labelling	Develop skill about the different marks & labels used for hazardous material while packing	<b>K6</b>
<b>IV</b>	<b>HANDLING OF DANGEROUS GOODS</b>		
4.1	Preloading inspections	Analyse the loading area safe or not	<b>K4</b>
4.2	Loading requirements (loading of magnetized material, CO2, live animals, of expandable polymeric beads – Loading of wheel chairs and other battery powered mobility aids – non-spillable batteries, organic peroxides and self-reactive substances, radioactive material)	Select appropriate loading methods in handling dangerous goods	<b>K3</b>
<b>V</b>	<b>AIRCRAFT EMERGENCY RESPONSE DRILLS</b>		
5.1.0	Emergency response drill	Define emergency drill	<b>K1</b>



5.1.1	Drill letter table	Identify the dangerous goods hazard in cargo section by drill letter	<b>K3</b>
5.1.2	Numeric list of dangerous goods with drill codes	Select appropriate code from the list	<b>K4</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## **Elective III: INVESTMENT MANAGEMENT**

**SEMESTER-V**

**CODE: U22AG5:A**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES:**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Identify various types of Investment sectors and schemes available for individuals	K2	I
2	Illustrate the process involved in investing in various investment avenues	K4	II
3	Demonstrate the features and functions of primary and secondary market.	K2	IV
4	Classify the various types of mutual funds available to the investors	K1	III
5	Make use of the concept of portfolio risk and return for suggesting suitable investment alternatives.	K3	IV
6	Explain the SEBI regulations on Stock Exchanges in India.	K2	V

### **2A. SYLLABUS**

#### **UNIT-I CONCEPT OF INVESTMENT**

**15 Hours**

Nature of investment, Definition, Need for Investment, Importance of studying Investment, Scope for Investment, Investment Media, Marketable securities, Non – Marketable securities

#### **UNIT-II INVESTMENT AVENUES**

**15 Hours**

Investment Alternatives, Organizing Financial Assets, Non – Marketable Financial Assets, Bank Deposits, Post Office Schemes, Government Savings Bonds, Public Provident Fund, Employees Provident Fund, Money Market Securities, Bonds or Debentures, Equity Shares, Mutual Fund Schemes, Financial Derivatives, Real Assets

### **UNIT-III INVESTMENT COMPANIES AND INDIRECT INVESTMENT 15 Hours**

Indirect Investing, Investment Company, Types of Investment Companies, Major types of Mutual Funds, Entities of Mutual Fund, Open – Ended Schemes, Close – Ended Schemes, Investing Internationally through Investment Companies, Benefits & Risk of Global Investing, Where to Invest, How to Invest

### **UNIT-IV CAPITAL MARKET 15 Hours**

Securities Market, Participants in Securities Market, Primary Market, Types of Primary Market, Features of Primary Market, Functions of Primary Market, Advantages of Primary Market, Disadvantages of Primary Market, Secondary Market, Types of Secondary Market, Features of Secondary Market, Functions of Secondary Market, Advantages of Secondary Market, Disadvantages of Secondary Market, Difference between Primary & Secondary Market, Portfolio Theory, Definition, Diversification, Portfolio Return and Risk

### **UNIT-V STOCK EXCHANGE AND TYPES OF STOCK 15 Hours**

Stock Exchange, Definition, Functions of Stock Exchange, Membership in Stock Exchange, Services of Stock Exchange, SEBI Regulations for Stock Exchange, Common Stocks, Analysis of Common Stock, Strategy of Common Stock, Mock Trading

## **2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
1	Securities Analysis	<a href="https://www.wallstreetmojo.com/security-analysis/">https://www.wallstreetmojo.com/security-analysis/</a>
2	Portfolio Management	<a href="https://www.managementstudyguide.com/portfoliomanagement.htm">https://www.managementstudyguide.com/portfoliomanagement.htm</a>
3	Speculation	<a href="https://www.investopedia.com/terms/s/speculation.asp">https://www.investopedia.com/terms/s/speculation.asp</a>
4	Hedging	<a href="https://www.karvyonline.com/knowledge-center/beginner/what-is-hedging-in-stock-market">https://www.karvyonline.com/knowledge-center/beginner/what-is-hedging-in-stock-market</a>

## **2C. TEXT BOOKS:**

1. V. Gangadhar, G. Rameshbabu, 2007, Investment Management, Anmol Publication,.
2. Punithivathi Pandian, 2012, Security Analysis and Portfolio Management, Second Edition, Vikas Publishing,

## **2D. REFERENCE BOOKS:**

1. Charles P. Jones, 2014, Investments Analysis and Management, 11<sup>th</sup> Edition.
2. Dr. L. Natarajan, 2000, Investment Management, Margham Publications 10<sup>th</sup> Edition.

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	Learning Outcomes	TAXONOMY LEVEL
<b>I</b>	<b>CONCEPT OF INVESTMENT</b>		
<b>1.1.0</b>	Nature of investment	Define investment	<b>K1</b>
<b>1.1.1 &amp; 1.1.2</b>	Definition Need for Investment	Explain the need for investment	<b>K2</b>
<b>1.1.3</b>	Importance of studying Investment	Demonstrate the importance of studying investment	<b>K2</b>
<b>1.1.4</b>	Scope for Investment	Explain the areas of applicability of investment concepts	<b>K3</b>
<b>1.1.5</b>	Investment Media	Classify the various investment alternatives available for investors	<b>K1</b>
<b>1.1.6</b>	Marketable securities	Illustrate the types of marketable securities	<b>K1</b>
<b>1.1.7</b>	Non – Marketable securities	Explain various types of non marketable securities	<b>K2</b>
<b>II</b>	<b>INVESTMENT AVENUES</b>		
<b>2.1.0 &amp; 2.2.0</b>	Organizing Financial Assets Non – Marketable Financial Assets	Organize various types of financial assets	<b>K3</b>
<b>2.3.1</b>	Bank Deposits	Compare the savings account and current account schemes in banks	<b>K3</b>
<b>2.3.2</b>	Post Office Schemes	Analyze the interest rate and features of post office schemes with other investment avenues	<b>K4</b>

2.3.3	Government Savings Bonds	Choose the appropriate savings bonds according to tenure of investment and expected returns	<b>K2</b>
2.3.4	Public Provident Fund, Employees Provident Fund	Identify the loan options available in EPF and PPF accounts	<b>K2</b>
2.4.0	Money Market Securities	Illustrate the types of money market instruments	<b>K2</b>
2.4.1	Bonds or Debentures	Explain the advantages and disadvantages of investing in bonds	<b>K2</b>
2.4.2	Equity Shares	Demonstrate the working of equity share market in India	<b>K2</b>
2.4.3	Mutual Fund Schemes	Classify the types of mutual fund schemes available to the investors	<b>K2</b>
2.4.4	Financial Derivatives	Show the types of financial derivatives in India	<b>K1</b>
2.4.5	Real Assets	Demonstrate the benefits and limitations associated with the real asset investments	<b>K3</b>
<b>III</b>	<b>INVESTMENT COMPANIES AND INDIRECT INVESTMENT</b>		
3.1.0	Indirect Investing	Explain the process of indirect investing	<b>K2</b>
3.2.0	Investment Company	Recall the concept of investment company	<b>K1</b>
3.3.0	Types of Investment Companies	Demonstrate the working of different investment companies	<b>K3</b>

<b>3.4.0</b>	Major types of Mutual Funds	Build a mutual fund portfolio for an individual according to the risk taking ability	<b>K5</b>
<b>3.4.1</b>	Entities of Mutual Fund	Explain the duties of the entities in mutual fund	<b>K2</b>
<b>3.4.2 &amp; 3.4.3</b>	Open – Ended Schemes, Close – Ended Schemes	Compare the features of open ended and close ended mutual fund schemes	<b>K3</b>
<b>3.5.0</b>	Investing Internationally through Investment Companies	Demonstrate the benefits of investing internationally through investment companies	<b>K3</b>
<b>3.5.1</b>	Benefits & Risk of Global Investing	Explain the process of global investing	<b>K2</b>
<b>3.5.2 &amp; 3.5.3</b>	Where to Invest and How to Invest	Analyze the available global investment options for investors	<b>K4</b>
<b>IV</b>	<b>CAPITAL MARKET</b>		
<b>4.1.0</b>	Securities Market, Participants in Securities Market	Classify the participants in securities market	<b>K2</b>
<b>4.2.0</b>	Primary Market, Types, Features and Functions of primary market	Identify the functions of primary market	<b>K2</b>
<b>4.2.1</b>	Advantages and Disadvantages of Primary Market	Compare primary market functions with secondary market functions	<b>K2</b>
<b>4.3.0</b>	Secondary Market	Demonstrate the working of secondary market	<b>K3</b>

<b>4.3.1</b>	Types, Features and Functions of secondary market	Make use of the concept of secondary market and plan an investment for an individual	<b>K2</b>
<b>4.3.2</b>	Advantages and Disadvantages of secondary Market	Analyze the advantages and disadvantages of secondary market	<b>K3</b>
<b>4.4.0</b>	Difference between Primary & Secondary Market	Compare primary market functions with secondary market functions	<b>K3</b>
<b>4.5.0</b>	Definition, Diversification	Illustrate the necessity of diversification	<b>K2</b>
<b>4.5.1</b>	Portfolio Return and Risk	Demonstrate the return and risk involved in portfolio	<b>K3</b>
<b>V</b>	<b>STOCK EXCHANGE AND TYPES OF STOCK</b>		
<b>5.1.0 &amp; 5.2.0</b>	Definition, Functions of Stock Exchange	Explain the functions of stock exchange	<b>K2</b>
<b>5.3.0</b>	Membership in Stock Exchange	Explain the duties of the members in stock exchanges	<b>K2</b>
<b>5.4.0</b>	Services of Stock Exchange	Demonstrate the services available for the brokers of stock exchanges	<b>K3</b>
<b>5.4.1</b>	SEBI Regulations for Stock Exchange	Illustrate the regulations for Stock exchanges	<b>K2</b>
<b>5.5.0</b>	Common Stocks	Recall the concept of common stocks	<b>K1</b>



<b>5.5.1</b>	Analysis of Common Stock	Make use of the common stock to build a portfolio of investors	<b>K3</b>
<b>5.5.2</b>	Strategy of Common Stock	Analyse the available common stocks and plan a profitable portfolio	<b>K3</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	H	H	H	M	M	L	M	M	L	H	M	H	M
<b>CO2</b>	H	H	M	M	L	M	H	H	M	H	H	M	M
<b>CO3</b>	M	H	M	M	L	M	M	M	L	H	M	H	M
<b>CO4</b>	H	H	M	H	M	H	H	M	L	M	H	H	H
<b>CO5</b>	H	M	H	H	L	H	M	H	L	H	M	H	H
<b>CO6</b>	H	H	M	M	M	L	H	H	M	H	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## **ELECTIVE III: PROJECT MANAGEMENT**

**SEMESTER: V**

**CODE: U22AG5:B**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Understand project characteristics and various stages of a project.	K2	I
2	Understand the various project techniques & skills required for project managers.	K2	II
3	Apply the risk management plan and analyze the role of stakeholders.	K3	IV
4	Analyze and understand the techniques of Project planning, scheduling and Execution Control.	K4	IV
5	Understand the contract management, Project Procurement, Service level Agreements and productivity.	K2	V
6	Elaborate the conceptual clarity about project organization, feasibility analysis & closing of a project	K6	III

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION**

**15 Hours**

Introduction: Principles of project management, Project management life cycle, Quality management, Relationship between project management and other methodologies.

#### **UNIT-II PROJECT TECHNIQUES**

**15 Hours**

Project Techniques: Defining projects, Rules for managing projects, Competencies and skills for project managers, Job functions and tasks for project management, Techniques of project.

**UNIT-III PROJECT ACTIVITIES****15 Hours**

Project Activities: Identify project activities, Estimate activity duration, Resource requirement and cost organize, Conduct the joint project planning session.

**UNIT-IV RISK MANAGEMENT****15 Hours**

Risk management: Risk management within a project-based approach, Gantt project planning charts, critical path method.

**UNIT-V IMPLEMENTATION****15 Hours**

Implementation: Recruit, organize and manage project team, monitoring and controlling, Steps in closing project.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Management of Time & Stress	<a href="https://managementhelp.org/personalproductivity/time-stress-management.htm">https://managementhelp.org/personalproductivity/time-stress-management.htm</a>
2	Organizing & Staffing the Project office & Team	<a href="https://learning.hccs.edu/faculty/robert.frederick/bmgt1021-1/power-point-slides-chapters-1-6/chapter-4-organizing-and-staffing-the-project-office-and-team">https://learning.hccs.edu/faculty/robert.frederick/bmgt1021-1/power-point-slides-chapters-1-6/chapter-4-organizing-and-staffing-the-project-office-and-team</a>
3	The variables for Project success	<a href="https://learning.hccs.edu/faculty/robert.frederick/bmgt1021/power-point-slides-chapters-7-10/chapter-9-the-variables-for-success">https://learning.hccs.edu/faculty/robert.frederick/bmgt1021/power-point-slides-chapters-7-10/chapter-9-the-variables-for-success</a>

**2C. TEXT BOOK:**

1. Robert Wysocki, Robert beck Jr, David b. crane -Effective project management-Wiley Publication 7<sup>th</sup> Edition 2013.

**2D. REFERENCE BOOKS:**

1. D. Vanwell - Stam, f. Lindenaar. S Vankinderen -Project risk management-, Kogan Page Ltd. 2004.
2. Martink. Starr -Production and operation management - John Wiley & Sons Publishers 1996.
3. CLEMENTS/GIDO -Effective project management- Cengage Learning 2012.

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
1.1.0	Introduction	Define Project Management.	<b>K1</b>
1.1.1	Principles of project management	Outline the principles of project management	<b>K2</b>
1.1.2	Project management life cycle	Illustrate the project management life cycle.	<b>K2</b>
1.1.3	Quality management	Relate quality management with projects.	<b>K1</b>
1.1.4	Relationship between project management and other methodologies	Analyze the relationship between project management and other methodologies.	<b>K4</b>
<b>II</b>	<b>PROJECT TECHNIQUES</b>		
2.1.0	Project Techniques	Classify the different project techniques.	<b>K2</b>
2.1.1	Defining projects	Define a project.	<b>K1</b>
2.1.2	Rules for managing projects	Assess the rules for managing projects.	<b>K5</b>
2.1.3	Competencies and skills for project managers	Determine the competencies & skills required for a project manager.	<b>K5</b>
2.1.4	Job functions and tasks for project management	Identify the functions & tasks involved in project management.	<b>K3</b>
2.1.5	Techniques of project	Analyze the different techniques that could be applied in projects.	<b>K4</b>
<b>III</b>	<b>PROJECT ACTIVITIES</b>		
3.1.0	Project Activities	Summarize the different activities of a project.	<b>K2</b>
3.1.1	Identify project activities	Identify the various	<b>K3</b>

		activities involved in a project.	
3.1.2	Estimate activity duration	Estimate the amount of time taken to complete an activity.	<b>K5</b>
3.1.3	Resource requirement and cost organize	Analyse the requirement of resources & estimation of cost.	<b>K4</b>
3.1.4	Conduct the joint project planning session	Examine the conduct of joint project planning.	<b>K4</b>
<b>IV</b>	<b>RISK MANAGEMENT</b>		
4.1.0	Risk management	Infer the risk management.	<b>K2</b>
4.1.1	Risk management within a project-based approach	Analyze the risks involved in a project & to explain the management of such risks.	<b>K4</b>
4.1.2	Gantt project planning charts	Illustrate Gantt project planning charts.	<b>K2</b>
4.1.3	Critical path method	Demonstrate the Critical path method.	<b>K2</b>
<b>V</b>	<b>IMPLEMENTATION</b>		
5.1.0	Implementation	Examine the implementation of a project.	<b>K4</b>
5.1.1	Recruit, organize and manage project team, monitoring and controlling	Assess the crucial activities of a project.	<b>K5</b>
5.1.2	Steps in closing project	Explain the steps involved in closing a project.	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	H	M	H	M	H	-	L	M	M	H	H	L
CO2	M	L	H	M	H	H	M	M	L	H	M	H	-
CO3	M	H	-	-	M	H	M	L	H	H	H	M	H
CO4	H	-	H	M	M	L	H	H	M	H	M	-	M
CO5	-	M	H	L	-	M	H	-	H	M	-	H	M
CO6	H	H	H	M	H	-	L	H	-	-	L	M	L

#### 5. COURSE ASSESSMENT METHODS

##### Direct

1. Continuous Assessment Test I,II
2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation
3. End Semester Examination

##### Indirect

1. Course-end survey

## **Elective III: RETAIL MANAGEMENT**

**SEMESTER- V**

**CREDITS: 5**

**HOURS/WEEK: 5**

**CODE: U22AG5:C**

**TOTAL HOURS: 75**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Identify the importance of Retail Industry	K3	I
2	Demonstrate the importance of retailing mix	K2	II
3	Make use of the marketing concepts in different formats of retailing structures	K3	III
4	Apply the concept of customer buying behaviour in retail industry	K3	IV
5	Illustrate the use of private labels in retailing	K2	III
6	Analyse the customer traffic flows and patterns in the retail store	K5	V

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION**

**15 Hours**

An introduction to the retailing system, Evolution of retailing, Emerging trends in retailing.

#### **UNIT-II RETAILING MIX**

**15 Hours**

Retailing mix, Social forces, Economic forces, Technological forces, Competitive forces.

#### **UNIT-III RETAILING STRUCTURE**

**15 Hours**

Retailing definition, Structure, Different formats, Marketing concepts in retailing

#### **UNIT-IV CONSUMER BUYING BEHAVIOUR**

**15 Hours**

Consumer purchase behaviour, Cultural and social group influence on consumer purchase behaviour, Private labels in retail branding.

## UNIT-V STORE LOCATION & MANAGEMENT

15 Hours

Retail store location, Traffic flow and analysis, Population and its mobility, Exteriors and layout Customer traffic flows and pattern, Creative display.

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Retail store design and layout	<a href="https://www.smartsheet.com/store-layout">https://www.smartsheet.com/store-layout</a>
2	E-tailing	<a href="http://tips.thinkrupee.com/articles/what-is-e-tailing.php">http://tips.thinkrupee.com/articles/what-is-e-tailing.php</a>
3	FDI in Indian Retail sector	<a href="https://www.jagranjosh.com/general-knowledge/foreign-direct-investment-in-retail-sector-in-india-1448884097-1#:~:text=FDI%20is%20not%20permitted%20in%20Multi%20Brand%20Retailing%20in%20India%20yet.&amp;text=It%20is%20an%20easiest%20way,the%20For eign%20Exchange%20Management%20Act.">https://www.jagranjosh.com/general-knowledge/foreign-direct-investment-in-retail-sector-in-india-1448884097-1#:~:text=FDI%20is%20not%20permitted%20in%20Multi%20Brand%20Retailing%20in%20India%20yet.&amp;text=It%20is%20an%20easiest%20way,the%20For eign%20Exchange%20Management%20Act.</a>

### 2C. TEXT BOOK:

1. LEVI & WEITZ -RETAIL MANAGEMENT- The McGraw Hill ,9<sup>th</sup> Edition ,2014.

### 2D. REFERENCE BOOKS:

1. GEORGE H LUCAS, ROBERT P BUSH, LARRY G GRESHAM – Retailing –All India publishers & distributors, Chennai – 8 4. 1994.
2. Chetan Bajaj and Rajnish Tuli -Retail Management –, OXFORD 2010.
3. Swapna Pradhan – Retailing Management –The McGraw Hill Companies. 2012
4. Lamba -Retailing – Tata Mcgraw Hill.,2002.

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
I	INTRODUCTION		
1.1.0	An introduction to the retailing system	Define Retail Management	K1
1.1.1	Evolution of retailing	Illustrate the evolution of retail over the time	K2
1.1.2	Emerging trends in	Explain the recent trends in retailing	K2



	retailing		
<b>II</b>	<b>RETAILING MIX</b>		
2.1.0	Retailing mix	Illustrate the applications of retailing mix	<b>K2</b>
2.1.1	Social forces	Explain the impact of social factors in retailing	<b>K2</b>
2.1.2	Economic forces	Explain the impact of Economic factors in retailing	<b>K2</b>
2.1.3	Technological forces	Explain the impact of Technological factors in retailing	<b>K3</b>
2.2.0	Competitive forces.	Explain the impact of Competitive factors in retailing	<b>K3</b>
<b>III</b>	<b>RETAILING STRUCTURE</b>		
3.1.0	Retailing definition	Define the concept of retailing.	<b>K3</b>
3.1.1	Structure	Analyse the importance of structure in retailing	<b>K4</b>
3.1.2	Different formats	Explain the different formats in retailing	<b>K4</b>
3.1.3	Marketing concepts in retailing	Demonstrate the marketing concepts in retailing.	<b>K2</b>
<b>IV</b>	<b>CONSUMER BUYING BEHAVIOUR</b>		
4.1.0	Consumer purchase behaviour	Demonstrate the purchase behaviour in retailing	<b>K2</b>
4.1.1	Cultural and social group influence on consumer purchase behaviour	Examine the influence of cultural and social factors in changes on purchase behaviour	<b>K4</b>
4.1.2	Private labels in retail branding	Demonstrate the usage of private labels in retailing branding	<b>K2</b>
<b>V</b>	<b>STORE LOCATION &amp; MANAGEMENT</b>		
5.1.0	Retail store location	Explain the process selection of a store location	<b>K2</b>
5.1.1	Traffic flow and analysis	Demonstrate the Traffic flow and analysis	<b>K2</b>

5.1.2	Population and its mobility	Explain the importance of population study	<b>K2</b>
5.1.3.	Exteriors and layout	Explain the importance of Exteriors and layout	<b>K2</b>
5.1.4	Customer traffic flows and pattern	Explain the Customer traffic flows and pattern	<b>K2</b>
5.1.5	Creative display	Explain the importance of Creative display	<b>K2</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## **SBEC III: INTERVIEW SKILLS**

**SEMESTER: V**

**CODE: U20AG5S3**

**CREDITS: 2**

**TOTAL HOURS: 30**

**HOURS/WEEK: 2**

### **1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Construct bio-data.	K3	I
2	Explain the basics of the Interview Process	K2	II
3	Develop the modern methods of interview processes	K3	III
4	Contrast various types of interviews and its objectives	K2	IV
5	Compare the modern techniques of interview with ancient methods	K2	V
6	Build the essential requirements for preparing of interview	K3	V

### **2A. SYLLABUS**

#### **UNIT-I INTRODUCTION TO INTERVIEW**

**6 Hours**

Introduction, Interviews, concept of mutuality, Getting update with current affairs, How to prepare CV, Preparation before interview.

#### **UNIT-II GROOMING**

**6 Hours**

Grooming, Grooming for interview, Tips to make interview successful, Mock Interviews

#### **UNIT-III INTERVIEWSKILLS**

**6 Hours**

Interview – skills, Analysing behaviour, Listening skills, Presentation skills, Levels of interviewing, Pre-and post-interview behaviour.

#### **UNIT-IV TYPES OF INTERVIEW**

**6 Hours**

Interview types, Selection, Negotiating interview, Counselling interview, Stress interview, Appraisal interview, Exit interview

**UNIT-V MODERN METHODS****6 Hours**

Tele - communication interview, Latest methods of interview , Video conferencing.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Techniques and tactics to prior to interview	<a href="https://www.helpguide.org/articles/work/interviewing-techniques-and-tips.htm">https://www.helpguide.org/articles/work/interviewing-techniques-and-tips.htm</a>
2	Strategy for negotiating salary issues	<a href="https://hbr.org/2014/04/15-rules-for-negotiating-a-job-offer">https://hbr.org/2014/04/15-rules-for-negotiating-a-job-offer</a> <a href="https://www.themuse.com/advice/how-to-negotiate-salary-37-tips-you-need-to-know">https://www.themuse.com/advice/how-to-negotiate-salary-37-tips-you-need-to-know</a>
3	Perspective of a hiring manager	<a href="https://www.greenhouse.io/blog/a-hiring-managers-perspective-synergizing-with-recruiters">https://www.greenhouse.io/blog/a-hiring-managers-perspective-synergizing-with-recruiters</a>
4	Effective communication	<a href="https://www.thebalancecareers.com/communication-interview-questions-and-best-answers-2061251">https://www.thebalancecareers.com/communication-interview-questions-and-best-answers-2061251</a>

**2C. TEXT BOOKS:**

1. Sudhir Andrews -How to succeed at Interview. - Tata McGraw Hill, 2008.

**2D. REFERENCE BOOKS:**

1. Bills Scott -Skills for communicating - Guwer Publication, 1986.

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>INTRODUCTION</b>		
1. 1.1	Meaning of interview	Define and illustrate the meaning of interviews	<b>K1</b>
1.1.2	Purpose of Interview	Explain the purpose of Interview	<b>K2</b>
1.1.3	Concept of Mutuality	Demonstrate the Mutuality concept	<b>K2</b>
1.1.4	Preparation of CV	Construct CV	<b>K3</b>
1.1.5	CV and Resume	Contrast the terms CV and Resume	<b>K3</b>
1.1.6	Preparation before interview	Summarize the preparation before	<b>K4</b>

		interview	
<b>II</b>	<b>PURPOSE OF INTERVIEW</b>		
2.1.1	Meaning of Grooming	Recall the meaning of grooming while interview	<b>K1</b>
2.1.2	Importance of grooming	Demonstrate the importance of grooming while interview	<b>K2</b>
2.1.3	Personal hygiene	Show the need of personal hygiene	<b>K2</b>
2.1.4	Dress code	Classify the dress codes for interview	<b>K2</b>
2.2.1	Success in Interview	Develop the methods for the success in interview	<b>K3</b>
2.3.1	Mock Interviews	Take part of mock interview for practice	<b>K3</b>
<b>III</b>	<b>INTERVIEW SKILLS</b>		
3.1.1	Interview skills-Importance	Recall the importance of interview skills	<b>K1</b>
3.1.2	Analysis of behaviour	Discover different types of behavior	<b>K3</b>
3.1.3	Listening skills	Examine listening skills for an interview	<b>K3</b>
3.1.4	Presentation skills	Inspect presentation skills	<b>K3</b>
3.2.1	Levels of Interviewing	Classify different levels of interviewing	<b>K2</b>
3.3.1	Pre and post interview behavior	Build behavior for pre and post interview	<b>K4</b>
<b>IV</b>	<b>TYPES OF INTERVIEW</b>		
4.1.1	Types of interview	List the different types of interview	<b>K2</b>
4.2.1	Selection	Explain the process of selection	<b>K2</b>
4.3.1	Negotiating interview	Illustrate the importance of Negotiating interview	<b>K2</b>
4.3.2	Counseling interview	Examine the need of Counseling interview	<b>K3</b>
4.3.3	Stress interview	Test for stress interview in the firm	<b>K3</b>
4.3.4	Appraisal interview	Select method of appraisal interview	<b>K3</b>
4.3.5	Exit interview	Utilize exit interview for development of performance in	<b>K4</b>

		future	
<b>V</b>	<b>MODERN METHODS OF INTERVIEW</b>		
5.1.1	Modern methods	Demonstrate the methods of interview	<b>K2</b>
5.2.1	Emergence of modern methods of interview	Explain the modern methods of interview	<b>K2</b>
5.3.1	Tele-communication interview	Discover the advantages of tele-communication interview	<b>K3</b>
5.3.2	Latest methods of interview	Apply innovative methods for an effective interview	<b>K3</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	M	H	M	H	M	M	M	M	M	M	M	M
CO2	M	L	H	M	M	H	M	H	M	M	H	M	H
CO3	M	M	H	M	H	H	M	M	H	L	M	H	M
CO4	M	H	M	M	H	H	M	H	M	M	L	H	M
CO5	M	M	H	H	M	L	H	M	M	M	H	M	M
CO6	M	H	M	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## SEMESTER VI

<b>S.No</b>	<b>Course Title</b>	<b>Course Code</b>
1.	Strategic Management	U20AG609
2.	Research Methodology & Introduction to Statistical Packages (Theory and Practical)	U20AGP10
3.	Passenger Facilitation	U21AG611
4.	Ramp Service Management	U21AG612
5.	Internship	U20AG6F1
6.	Gender Studies	U16GST61



## Core IX: STRATEGICMANAGEMENT

**SEMESTER: VI**

**CODE: U20AG609**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 6**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Examine the formulation of strategy methods in an organization.	K4	I
2	Understand the Environmental & Industry Analysis in an organization in a practical manner.	K2	II
3	Prefer the Porter's five force model in various organizations dimensions.	K5	II
4	Contrast the Organizational Competence and Resource Analysis decision in a structural way.	K5	III
5	Analyse the Social responsibilities of management in an organization.	K4	IV
6	Realize the Strategies of Leading Indian Companies and its best practices.	K5	V

### 2A. SYLLABUS

#### UNIT-I INTRODUCTION TO STRATEGY

**15 Hours**

Introduction to Strategy-Total organizational view - The concept of strategy policy - Planning hierarchies - Evolution strategy - Philosophy of strategy - Formulation of the Strategy

#### UNIT-II ENVIRONMENTAL & INDUSTRY ANALYSIS

**15 Hours**

Environmental & Industry Analysis - SWOT Analysis - Environmental analysis - Industry analysis - Porter's five force model

#### UNIT-III ORGANIZATIONAL COMPETENCE AND RESOURCE ANALYSIS

**15 Hours**

Organizational Competence and Resource Analysis - Organizational competence and resource analysis - Matching opportunities and resources strategy -Values - Social responsibilities of management - Social audit

#### **UNIT-IV TYPES OF STRATEGIES**

**15 Hours**

Types of Strategies -Generic Strategies - Grand Strategies - Strategies of Leading Indian Companies

#### **UNIT-V STRATEGY IMPLEMENTATION**

**15 Hours**

Strategy Implementation -Implementing the Strategy -Organization design and structure relationships -Processes and leadership -Performance standards - corrective action.

#### **2B. TOPICS FOR SELF STUDY**

<b>S. No</b>	<b>Topics</b>	<b>Web Links</b>
1	Corporate Governance In Strategic Management	<a href="https://bizfluent.com/info-7959976-corporate-governance-strategic-management.html">https://bizfluent.com/info-7959976-corporate-governance-strategic-management.html</a>
2	Core Competencies In Strategic Management	<a href="https://www.bain.com/insights/management-tools-core-competencies/">https://www.bain.com/insights/management-tools-core-competencies/</a>
3	Gap Analysis In Strategic Management	<a href="https://expertprogrammanagement.com/2017/09/gap-analysis/">https://expertprogrammanagement.com/2017/09/gap-analysis/</a>

#### **2C. TEXT BOOK:**

1. L.M. Prasad-Business Policy –Sultan Chand, 2015.

#### **2D. REFERENCE BOOKS:**

1. Azar Kassmi-Business Policy - Tata McGraw Hill 3<sup>rd</sup> Edition, 2008.

#### **3. SPECIFIC LEARNING OUTCOMES (SLO):**

<b>UNIT</b>	<b>COURSE CONTENTS</b>	<b>LEARNING OUTCOMES</b>	<b>TAXONOMY LEVEL</b>
<b>I</b>	<b>INTRODUCTION</b>		
<b>1.1.0</b>	Introduction to Strategy	Define strategy and concepts	<b>K1</b>
<b>1.1.1</b>	Total organizational view	Analyse the organization	<b>K4</b>

<b>1.1.2</b>	The concept of strategy policy	Explain the concept of strategies and their various policies	<b>K2</b>
<b>1.1.3</b>	Planning hierarchies	Build organizational hierarchies	<b>K6</b>
<b>1.1.4</b>	Evolution strategy	Analyse the evolution of strategy	<b>K4</b>
<b>1.1.5</b>	Philosophy of strategy	Defining the philosophy of strategy towards management	<b>K1</b>
<b>1.1.6</b>	Formulation of the Strategy	Formulate the strategies for business purpose	<b>K6</b>
<b>II</b>	<b>ENVIRONMENTAL &amp; INDUSTRY ANALYSIS</b>		
<b>2.1.0</b>	Environmental & Industry Analysis	List out the analysis part	<b>K1</b>
<b>2.1.1</b>	SWOT Analysis	Illustrate the strength weakness opportunities and threats	<b>K2</b>
<b>2.1.2</b>	Environmental analysis	Classify the environment analysis	<b>K2</b>
<b>2.1.3</b>	Industry analysis	Classify the industry analysis	<b>K2</b>
<b>2.1.4</b>	Porter's five force model	Formulate the examples of this particular model	<b>K6</b>
<b>III</b>	<b>ORGANIZATIONAL COMPETENCE AND RESOURCE ANALYSIS</b>		
<b>3.1.0</b>	Organizational Competence and Resource Analysis	Find out the organizational competence level	<b>K1</b>
<b>3.1.1</b>	Matching opportunities and resources strategy	Match the resources and their opportunities	<b>K1</b>
<b>3.1.2</b>	Values	Defining the values	<b>K1</b>
<b>3.1.3</b>	Social responsibilities of management	List out the social responsibilities	<b>K1</b>

<b>3.1.4</b>	Social audit	Evaluate the social audit	<b>K5</b>
<b>IV</b>	<b>TYPES OF STRATEGIES</b>		
4.1.0	Types of Strategies	List out the different kinds of strategy	<b>K1</b>
4.1.1	Generic Strategies	Define the generic strategy	<b>K1</b>
4.1.2	Grand Strategies	Define the grand strategy	<b>K1</b>
4.1.3	Strategies of Leading Indian Companies	Define the strategies of	<b>K1</b>
<b>V</b>	<b>STRATEGY IMPLEMENTATION</b>		
5.1.0	Strategy Implementation	Define the strategy implementation	<b>K1</b>
5.1.1	Implementing the Strategy.	Demonstrate the strategy	<b>K2</b>
5.1.2	Organization design and structure relationships	Build an organisation and their structure	<b>K3</b>
5.1.3	Processes and leadership	Define the process and leadership	<b>K1</b>
5.1.4	Performance standards – corrective action	Define the performance standard	<b>K1</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	M	H	M	H	H	M	M	M	H	M	L	M	L
<b>CO2</b>	H	M	H	H	M	H	H	M	H	L	-	L	H
<b>CO3</b>	H	M	H	M	L	L	M	H	-	M	M	M	M
<b>CO4</b>	M	M	M	M	L	M	L	H	L	-	L	H	L
<b>CO5</b>	H	-	H	M	L	M	-	M	L	H	-	H	H
<b>CO6</b>	-	M	M	H	-	M	L	L	M	-	L	H	L

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. <b>Continuous Assessment Test I,II</b></li> <li>2. <b>Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b></li> <li>3. <b>End Semester Examination</b></li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. <b>Course-end survey</b></li> </ol>

**Core X: RESEARCH METHODOLOGY & INTRODUCTION TO  
STATISTICAL PACKAGES (Theory & Practical)**

**SEMESTER: V**

**CODE: U20AGP10**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 5**

**1. COURSE OUTCOMES :**

On completion of this course, the student will be able to,

<b>S. No</b>	<b>Course Outcomes</b>	<b>Level</b>	<b>Unit Covered</b>
1	Explain the basic nature and purpose of Research and its advantages to business	K2	I
2	Identify a research problem and carry out research	K2	I
3	Apply an understanding of business research design	K3	II
4	Identify and use the most appropriate statistical analysis technique for a given problem situation and interpret the results from the same.	K2	III
5	Develop instruments for collecting Data	K3	II
6	Compile an excellent research report	K6	V

**2A. SYLLABUS**

**UNIT-I CONCEPTS OF RESEARCH AND DESIGN 15 Hours**

Research – Definition - Meaning-Characteristics-Research process-Research need-Formulating the problem-Sampling-Pilot-testing-Data collection-Research design-

**UNIT-II SCALING TECHNIQUES 15 Hours**

Measurement-Nature-Scales-Scaling nature – Methods-Sampling – Nature – Simple probability- Complex probability-

**UNIT-III DATA ANALYSIS 15 Hours**

Sources of collection of data-Primary sources-Secondary sources-Survey observation-Experimentation – Coding-Data-entry-Tabulation-Cross tabulation-

**UNIT-IV INTRODUCTION TO SPSS 15 Hours**

Hypothesis-Meaning-Types-Statistical testing-Chi-square -SPSS procedures-Application -Practical-

**UNIT-V REPORT WRITING 15 Hours**

Presenting Results-Written-Oral reports - Introduction to Plagiarism software - Research Ethics.

## 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Correlation Analysis	<a href="https://research-methodology.net/research-methods/quantitative-research/correlation-regression/">https://research-methodology.net/research-methods/quantitative-research/correlation-regression/</a>
2	Regression Analysis	<a href="https://research-methodology.net/research-methods/quantitative-research/regression-analysis/">https://research-methodology.net/research-methods/quantitative-research/regression-analysis/</a>
3	Factor Analysis	<a href="https://stats.idre.ucla.edu/spss/seminars/introduction-to-factor-analysis/a-practical-introduction-to-factor-analysis/">https://stats.idre.ucla.edu/spss/seminars/introduction-to-factor-analysis/a-practical-introduction-to-factor-analysis/</a>

## 2C. TEXT BOOK

1. Saravanavel, Research Methodology –Sultan Chand publications, 10<sup>th</sup> Edition2013
2. Research Methodology-Ravilochani (Margham Publication)

## 2D. REFERENCE BOOKS

1. CR KOTHARI, Research Methodology - New Age International, second edition2004
2. EMORY AND COOPER, Business Research Methods - McGraw-Hill, 10<sup>th</sup> edition. 2008

## 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>CONCEPTS OF RESEARCH AND DESIGN</b>		
<b>1.1.0</b>	Research	Demonstrate the process of research	<b>K2</b>
<b>1.1.1</b>	Definition	Define research	<b>K1</b>
<b>1.1.2</b>	Meaning	Outline the meaning of research	<b>K2</b>
<b>1.1.3</b>	Characteristics	Show the characteristics of research	<b>K1</b>
<b>1.2.0</b>	Research process	Explain the research process	<b>K2</b>
<b>1.2.1</b>	Research need	Summarize the research need	<b>K2</b>

<b>1.2.2</b>	Formulating the problem	Apply the research in formulating the problem	<b>K3</b>
<b>1.2.3</b>	Sampling	Build sampling data from the data points	<b>K3</b>
<b>1.2.4</b>	Pilot-testing	Apply Pilot-testing	<b>K3</b>
<b>1.2.5</b>	Data collection	Build data collection models	<b>K3</b>
<b>1.2.6</b>	Research design	Build or Choose the research design models	<b>K6</b>
<b>II</b>	<b>SCALING TECHNIQUES</b>		
2.1.0	Measurement	Illustrate and apply measurements in research	<b>K2,K3</b>
2.1.1	Nature	Outline the meaning of nature	<b>K2</b>
2.1.2	Scales	Illustrate and apply scales in research	<b>K2,K3</b>
2.1.3	Scaling nature	Develop models in applying scales to nature	<b>K3</b>
2.1.4	Methods	Identify the required methods of scaling	<b>K3</b>
2.2.0	Sampling	Build sampling data from the data points	<b>K3</b>
2.2.1	Nature	Outline the meaning of nature	<b>K2</b>
2.2.2	Simple probability	Apply Simple probability	<b>K3</b>
2.2.3	Complex probability	Apply Complex probability	<b>K3</b>
<b>III</b>	<b>DATA ANALYSIS</b>		
3.1.0	Sources of collection of data	Outline the Sources of collection of data	<b>K2</b>
3.1.1	Primary sources	Outline the Sources of Primary sources	<b>K2</b>
3.1.2	Secondary sources	Outline the Sources of Secondary sources	<b>K2</b>
3.1.3	Survey observation	Apply Survey observation	<b>K3</b>



3.2.0	Experimentation	Apply Experimentation	<b>K3</b>
3.3.0	Coding	Apply Coding	<b>K3</b>
3.4.0	Data-entry	Build Data-entry	<b>K3</b>
3.5.0	Tabulation	Model Tabulation	<b>K3</b>
3.5.1	Cross tabulation	Model Cross Tabulation	<b>K3</b>
<b>IV</b>	<b>INTRODUCTION TO SPSS</b>		
4.1.0	Hypothesis	Outline the need of Hypothesis	<b>K2</b>
4.1.1	Meaning	Outline the meaning of Hypothesis	<b>K2</b>
4.1.2	Types	Summarize the types of Hypothesis	<b>K2</b>
4.2.0	Statistical testing	Apply Statistical testing	<b>K3</b>
4.2.1	Chi-square	Apply Chi-square testing	<b>K3</b>
4.3.0	SPSS procedures	Apply SPSS procedures	<b>K3</b>
4.3.1	Application	Model Application	<b>K3</b>
4.3.2	Practical	Experiment with practical needs	<b>K3</b>
<b>V</b>	<b>REPORT WRITING</b>		
5.1.0	Presenting Results	Compile Results	<b>K6</b>
5.1.1	Written	Elaborate written proofs	<b>K6</b>
5.1.2	Oral reports	Compose oral reports	<b>K6</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	H	M	M	H	H	M	M	M	H	M	L	M	H
<b>CO2</b>	H	M	H	H	H	M	M	H	M	L	-	L	H
<b>CO3</b>	M	M	H	M	H	L	M	H	-	M	M	M	M
<b>CO4</b>	H	M	M	L	L	M	L	H	L	-	L	H	L
<b>CO5</b>	H	-	H	M	L	M	-	M	L	M	-	M	H
<b>CO6</b>	-	M	H	H	-	M	L	L	M	-	H	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. <b>Continuous Assessment Test I,II</b></li> <li>2. <b>Open book test; Assignment; Seminar; Journal paper review, Group Presentation</b></li> <li>3. <b>End Semester Examination</b></li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. <b>Course-end survey</b></li> </ol>

## PASSENGER FACILITATION

**SEMESTER-VI**

**COURSE CODE: U21AG611**

**CREDITS: 5**

**TOTAL HOURS: 75**

**HOURS/WEEK: 6**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Gain relevant knowledge and understanding in passenger handling and requirement	K2	I
2	Familiarize with check in procedure in airport	K2	II
3	Monitor, track illegal immigrants in order to promote security of country	K5	III
4	Carry out the process in handling the baggage & ticketing	K5	IV
5	Help students to improve their communication & leadership skill	K5	V
6	Manage irregular operation and passenger required special handling	K3	I

### 2A. SYLLABUS

#### UNIT I - ROLES OF CSA

**15 Hours**

Passenger reception at check in desk – luggage at ticket check in – delay and irregularity management – airline services management – passenger boarding and disembark at the gate – management of passenger with difficulty – escort service for unaccompanied minors.

#### UNIT II - CHECK IN PROCEDURE

**15 Hours**

Why passenger has to check in? – where to check in? – passenger identity registration – baggage registration – seating arrangements.

#### UNIT III - IMMIGRATION

**15 Hours**

Understanding of immigration – purpose of immigration – laws and ethics – impact of undocumented immigrants – impact on the sending countries

#### UNIT IV -BAGGAGE AND TICKETING

**15 Hours**

Responsibilities – duties of ticketing officer – how does ticketing work? – checking baggage inside airport – baggage sorting – oversize baggage

## UNIT V - PERSONALITY DEVELOPMENT

15 Hours

Communication – confidence – leadership – group discussion – presentation – personal hygiene and grooming – hair and skin care – motivation – interview techniques – resume writing

### 2B. TOPICS FOR SELF STUDY

S. No	Topics	Web Links
1	Efficient handling of air passengers	<a href="https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=&amp;ved=2ahUKEwjIIXd2IjxAhVKIEsFHQKRBPmQFnoECBYQAA&amp;url=http%3A%2F%2Fcolbournecollege.webly.com%2Fuploads%2F2%2F3%2F7%2F9%2F23793496%2Funit_19_lo_1_2_handling_air_passengers_score_sheet.pdf&amp;usg=AOvVaw0fR-H1dO11O17ln7psTEhY">https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=&amp;ved=2ahUKEwjIIXd2IjxAhVKIEsFHQKRBPmQFnoECBYQAA&amp;url=http%3A%2F%2Fcolbournecollege.webly.com%2Fuploads%2F2%2F3%2F7%2F9%2F23793496%2Funit_19_lo_1_2_handling_air_passengers_score_sheet.pdf&amp;usg=AOvVaw0fR-H1dO11O17ln7psTEhY</a>
2	Airport check in procedure	<a href="https://en.wikipedia.org/wiki/Airport_check-in">https://en.wikipedia.org/wiki/Airport_check-in</a>
3	Baggage checking procedure	<a href="https://www.esky.com/travel-guide/airline-tickets/check-in-and-passenger-service/airport-counter-check-in">https://www.esky.com/travel-guide/airline-tickets/check-in-and-passenger-service/airport-counter-check-in</a>

### 2C. REFERENCE BOOKS:

R.K. Bali- Air Regulations.

A Practical Guide to Airline Customer Service: From Airline Operations to Passenger Services by Collin c Law.

### 3. SPECIFIC LEARNING OUTCOMES (SLO):

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>ROLES OF CSA</b>		
1.1	Passenger reception at check in desk	Inspect passenger documentation	<b>K4</b>
1.2	Luggage at ticket check in	Process luggage and ensure that it complies with airline policy	<b>K4</b>
1.3	Delay and irregular management	Manage irregular operation at airport	<b>K3</b>
1.4	Airline service management	Explain process included in managing airline service	<b>K2</b>
1.5	Passenger boarding and	Make public address, announcement	<b>K3</b>

	disembarking at the gate	whenever required	
1.6	Management of passenger with difficulty	Prioritize the passenger with difficulty	<b>K5</b>
1.7	Escord services for unaccompanied moinars	Handle escord service for unaccompanied minors	<b>K2</b>
<b>II</b>	<b>CHECK IN PROCEDURE</b>		
2.1.0	Why passenger has to do check in	Explain the importance of check in	<b>K2</b>
2.1.1	Where to check in?	Locate the appropriate check in	<b>K4</b>
2.1.2	Passenger identity registration	Extend knowledge about passenger registration	<b>K2</b>
2.1.3	Baggage registration	List out the requirement in baggage registration	<b>K2</b>
2.1.4	Seating arrangements	Select passenger and organize the aircraft seating	<b>K3</b>
<b>III</b>	<b>IMMIGRATION</b>		
3.1.0	Understanding of immigration	Understand the role of immigration	<b>K2</b>
3.1.1	Purpose of immigration	Explain the purpose of immigration	<b>K2</b>
3.1.2	Laws & ethics	List out the rule followed in immigration	<b>K1</b>
3.1.3	Impact of undocumented immigration	Understand the problems emerged by undocumented immigration	<b>K3</b>
3.1.4	Impact of the sending countries	Define sending country and its impact	<b>K2</b>
<b>IV</b>	<b>BAGGAGE AND TICKETING</b>		
4.1.0	Responsibilities	Explain the responsibility of who is handling baggage and ticketing	<b>K1</b>
4.1.1	Duties of ticketing officer	Understand the role of ticketing officer	<b>K2</b>
4.1.2	How does ticketing work	List out the process included in ticketing	<b>K4</b>
4.1.3	Checking baggage inside airport	Demonstrate baggage checking at airport	<b>K2</b>
4.1.4	Baggage sorting	Categorize baggage by weight	<b>K4</b>
4.1.5	Oversize baggage	Evaluate and remove the extra weight for safe operation of flight	<b>K5</b>
<b>V</b>	<b>PERSONALITY DEVELOPMENT</b>		
5.1.0	Communication	Motivate them to increase communication skill	<b>K4</b>
5.1.1	Confidence	Develop the confidence	<b>K6</b>
5.1.2	Leadership	Extend the leadership skill	<b>K2</b>
5.1.3	Group discussion	Show their special skills	<b>K1</b>
5.1.4	Presentation	Extend the skill in presentation	<b>K2</b>
5.1.5	Personal hygiene &	Explain the importance of personal	<b>K2</b>

	grooming	health	
5.1.6	Hair & skin care	Develop their physical appearance	<b>K3</b>
5.1.7	Motivation	Understand the value of motivation	<b>K2</b>
5.1.8	Interview techniques	Improve technical knowledge	<b>K6</b>
5.1.9	Resume writing	Construct resume	<b>K6</b>

#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
CO1	H	L	M	M	M	-	M	M	M	M	M	M	M
CO2	M	H	-	M	L	L	H	H	H	L	H	H	H
CO3	M	L	H	H	H	H	H	M	M	L	-	L	H
CO4	L	M	H	H	H	H	M	M	M	-	M	H	M
CO5	M	M	H	H	-	L	M	M	M	-	L	M	M
CO6	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>

## RAMP SERVICES MANAGEMENT

**SEMESTER-IV**

**COURSE CODE: U21AG612**

**CREDIT: 4**

**TOTAL HOURS: 60**

**HOURS/WEEK: 5**

### 1. COURSE OUTCOMES :

On Completion of this course, the student will be able to,

S. No	Course Outcomes	Level	Unit Covered
1	Comprehend the methods of fueling with safety measure	K2	I
2	Accomplish the given task efficiently and to handle emergency situation	K3	II
3	Practice the process of managing different documents required in aircraft operation	K3	III
4	Extend the knowledge in understanding the risk of man made errors	K2	IV
5	Practice the process of ramp devices including ground handling, deicing, baggage handling	K3	V
6	Develop the situation awareness & evaluate the ideas of organization	K2	II

### 2A. SYLLABUS

#### UNIT I - FUEL

**12 Hours**

Basics of Static electricity – Types of Fuel – Refueling Procedure – Methods of Refueling – Safety Measures – Quality of Fuel – Grounding Aircraft, Procedure to remove spilled fuel.

#### UNIT II - SIGNALS AND MARSHALLING

**12 Hours**

Methods of transmitting emergency signal from air in case of RT failure – light signals to a/c in flight and in ground – Survivors Signals (Accident site) – uses of Marshalling uses and signals to aircraft.

#### UNIT III - DOCUMENTS

**12 Hours**

Documents to be maintained for an aircraft and aviation personal – engine log book – journey log book – propeller log book – Snag log book – Maintenance Schedule.



**UNIT IV - INHERENT RISK****12 Hours**

Accident and Incident Definition – Personal Injury – Aircraft Damage – Refuelling and Defueling Risk – Fire – Wrong calculation and wrong loading of cargo.

**UNIT V - RAMP SERVICES****12 Hours**

Connecting and Disconnecting Ground Services – Baggage and Freight handling – Aircraft towing – High Pressure Air – Push back – De-icing / Anti icing.

**2B. TOPICS FOR SELF STUDY**

S. No	Topics	Web Links
1	Aircraft marshalling procedure	<a href="https://en.wikipedia.org/wiki/Aircraft_marshalling">https://en.wikipedia.org/wiki/Aircraft_marshalling</a>
2	Aircraft towing procedure	<a href="https://www.skybrary.aero/index.php/Aircraft_Towing">https://www.skybrary.aero/index.php/Aircraft_Towing</a>
3	Class of fire and correct fire extinguisher	<a href="https://www.ifsecglobal.com/global/choose-right-type-fire-extinguisher/">https://www.ifsecglobal.com/global/choose-right-type-fire-extinguisher/</a>

**2C. REFERENCE BOOKS:**

DGCA CAR Section – 7

Airport Operations 3rd Edition by Norman Ashford, Pierre Coutu, John Beasley

**3. SPECIFIC LEARNING OUTCOMES (SLO):**

UNIT	COURSE CONTENTS	LEARNING OUTCOMES	TAXONOMY LEVEL
<b>I</b>	<b>FUEL</b>		
1.1	Basic of static electricity	Define importance of static during refuelling procedure	<b>K1</b>
1.2	Types of fuel	Classify different types of fuel	<b>K2</b>
1.3	Refuelling procedure	Outline the list of steps to be followed while refuelling	<b>K2</b>
1.4	Methods of refuelling	Explain the different types of refuelling	<b>K2</b>
1.5	Safety measures	Select appropriate safety measure	<b>K4</b>
1.6	Quality of fuel	Evaluate the fuel quality	<b>K5</b>
1.7	Grounding aircraft	Demonstrate the grounding of aircraft while fuelling	<b>K2</b>

1.8	Procedure to remove spilled fuel	Practice the removal of spilled fuel from ramp	<b>K3</b>
<b>II</b>	<b>SIGNALS AND MARSHALLING</b>		
2.1.0	Method of transmitting emergency signal from air in case of RT failure	Demonstrate the signal to be transmitted from air in case of RT failure	<b>K2</b>
2.1.1	Signals to aircraft in flight and in ground	Choose appropriate signal to pass information to aircraft during RT failure	<b>K3</b>
2.1.2	Survivors signal	Explain signals to be used by survivors from an accident	<b>K2</b>
2.1.3	Uses of marshalling signals to aircraft	Show signals to guide aircraft from taxiway to Ramp	<b>K1</b>
<b>III</b>	<b>DOCUMENTS</b>		
3.1.0	Documents to be maintained for an aircraft and aviation personal	List out the required documents for operation	<b>K1</b>
3.1.1	Engine logbook	Evaluate the life of engine	<b>K5</b>
3.1.2	Propeller log book	Outline the uses of propeller log book	<b>K2</b>
3.1.3	Snag log book	List the problem caused in aircraft	<b>K4</b>
3.1.4	Maintenance schedule	Decide the correct time for scheduled maintenance	<b>K5</b>
<b>IV</b>	<b>INHERENT RISK</b>		
4.1.0	Accident and incident definition	Define the difference between accident and incident	<b>K1</b>
4.1.1	Personal injury	Explain what is personal injury	<b>K2</b>
4.1.2	Aircraft damage	Identify the damages in aircraft	<b>K4</b>
4.1.3	Refuelling and defueling risk	List out the risk possibilities in fueling	<b>K4</b>
4.1.4	Fire	Explain the risk factors of fire	<b>K2</b>
4.1.5	Wrong calculation and wrong loading and cargo	Interpret the risk of wrong calculation and loading of cargo	<b>K2</b>
<b>V</b>	<b>RAMP SERVICES</b>		
5.1.0	Connecting and disconnecting ground service	Explain the process of connecting and disconnecting ground device	<b>K2</b>
5.1.1	Baggage and freight handling	Describe the handling method of baggage and freight	<b>K2</b>
5.1.2	Aircraft towing	Define the procedure in towing aircraft	<b>K1</b>
5.1.3	High pressure air	Explain the usage of high pressure air in aircraft	<b>K2</b>
5.1.4	Push back	Outline the process included in push back	<b>K2</b>

5.1.5	De icing and anti icing	Understand the importance of deicing and anti icing of aircraft	<b>K5</b>
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#### 4. MAPPING:

	PROGRAMME OUTCOMES									PROGRAMME SPECIFIC OUTCOMES			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
<b>CO1</b>	H	L	M	M	M	-	M	M	M	M	M	M	M
<b>CO2</b>	M	H	-	M	L	L	H	H	H	L	H	H	H
<b>CO3</b>	M	L	H	H	H	H	H	M	M	L	-	L	H
<b>CO4</b>	L	M	H	H	H	H	M	M	M	-	M	H	M
<b>CO5</b>	M	M	H	H	-	L	M	M	M	-	L	M	M
<b>CO6</b>	M	M	H	H	H	M	H	L	M	M	M	H	H

#### 5. COURSE ASSESSMENT METHODS

<b>Direct</b>
<ol style="list-style-type: none"> <li>1. Continuous Assessment Test I,II</li> <li>2. Open book test; Assignment; Seminar; Journal paper review, Group Presentation</li> <li>3. End Semester Examination</li> </ol>
<b>Indirect</b>
<ol style="list-style-type: none"> <li>1. Course-end survey</li> </ol>