#### UNIVERSITY OF MUMBAI

No.UG/ 123 of 2015-16 MUMBAI- 400 032 30<sup>th</sup> November, 2015

The Senior Manager,
Federation of Indian Pilots,
Institute of Aviation and Aviation Safety (I.A.A.S.)
Air India Complex,
Old Air Port, Kalina,
Santacruz (East),
MUMBAI- 400 029.

Sir,

I am to invite your attention to the Syllabi relating to the Diploma in Aviation Safety and Hospitality, vide this office Circular No. UG/66 of 2013-14, dated 11<sup>th</sup> October, 2013 and the Principals of affiliated Colleges in Science and the Head of the recognized Science Institutions concerned are hereby informed that the recommendation made by the Faculty Science at its meeting held on 11<sup>th</sup> August, 2015 has been accepted by the Academic Council at its meeting held on 31<sup>st</sup> August, 2015 vide item No.4.15 and that in accordance therewith, the revised syllabus as per Credit Based Semester and Grading System in the course of Diploma in Aviation Safety and Hospitality, which is available on the University's web site (www.mu.ac.in) and that the same has been brought into force with effect from the academic year 2015-16.

REGISTRAR

#### A.C/4.15/31/08/2015

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No. UG/123-A of 2015

MUMBAI-400 032

30th November, 2015

Copy forwarded with compliments for information to :-

- 1) The Dean, Faculty of Science.
- 2) The Chairman, Ad-hoc Board of Studies in Aviation.
- 3) All the Principals /Directors of Colleges institutes of Aviation.
- 4) The Professor-cum-Director, Institute of Distance and Open Learning (IDOL)
- 5) The Director, Board of Colleges and University Development,
- 6) The Co-Ordinator, University Computerization Centre,
- 7) The Controller of Examinations.

Offg. Deputy Registrar Under Graduate Studies

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### **INFRASTRUCTURE**

Front / Reception Area	1
Class Rooms (A/C)	3
Rooms for Practicing Application of First Aid to the passengers	1
Live Aircraft	1
Computer Lab 10 Computers with Internet facility	1
Grooming Rooms	1
Aircraft Chairs	10
Computers, Printers, Scanners & Laptops for Audio Visual	3
Presentations	
Emergency Equipment like Fire Extinguishers, Life Jackets,	-
Oxygen Cylinders, Live Aircraft as required	
Dummy for CPR (Cardio Pulmonary Re-Sustentation) as required	-
First Aid Kits for Teaching First Aid	6

# R. 8622 Scheme of Examination

SEM	COURSE	TITLE
	CODE	
	USDAV101	INTRODUCTION TO THE AVIATION INDUSTRY & AVIATION HOSPITALITY AND GOVERNMENT REGULATORY AGENCIES
I		
	USDAV102	PROFESSIONAL COMMUNICATION SKILLS
	USDAV103	AVIATION TERMS & TIME ZONES, AIRCRAFT FAMILIARISATION AND ROLES & RESPONSIBILITIES OF AIRLINE STAFF.
	USDAV104	INFLIGHT SERVICE PROCEDURES, LIFESTYLE CHANGESAND ANINTRODUCTION TO CHEESE AND DANGEROUS GOODS
	USDAVP1	Practical 1.1
	USDAV201	CREW RESOURCE MANAGEMENT (CRM)
II	USDAV202	EMERGENCY PROCEDURES IN EVACUATION AND DITCHING
	USDAV203	FIRE SAFETY AND AVIATION SECURITY PROCEDURES
	USDAV204	ADAPTATIONS & HEALTHY LIVING, AN INTRODUCTION TO WINES AND BEVERAGES AND MEDICAL EMERGENCIES & FIRST AID
	USDAVP2	Practical 1.2

Semester	Course	Theory	Marks	Practical	Total	Credits
		Internal	Sem End (2 Hours Duration)	Internal Marks		
	USDAV101	40	60		100	2
I						
	USDAV102	40	60		100	2
	USDAV103	40	60		100	2
	USDAV104	40	60		100	2
	USDAVP1			50	50	2
II	USDAV201	40	60		100	2
_	USDAV202	40	60		100	2
	USDAV203	40	60		100	2
	USDAV204	40	60		100	2
	USDAVP2			50	50	2
Total				100	900	20

Internal Evaluation	Marks
Active Participation	05
Overall Conduct	05
One Test	10
One Project /Case Study/	20
Assignment	
Total	40

# Semester End Question Paper Pattern for each course:

Question	Unit	Marks	Maximum Marks with option
Q1	Ι	15	20
Q2	II	15	20
Q3	III	15	20
Q4	I, II, III	15	20

## **Practical Evaluation Specify**

#### **Practical examination**

Practical examination shall be conducted at the end of Semester I and Semester II.

### R. 8623 passing standard

- a) Learner shall be awarded Diploma if he/she obtains any one of the grade 'O', 'A', 'B', 'C', 'D', 'E' in each of the course of Semester I and II
- b) Learner shall be admitted to second semester of the program irrespective of the grades secured in any of the course of the first semester
- c) Learner shall be allowed to appear for additional examination in theory in the courses where he/she has secured grade 'F'
- d) Additional examination will be conducted within one month after declaration of the result of semester II

SEMESTER I				
COURSE – I	LECTURE	PRACTICAL		
USDAV101 – INTRODUCTION TO THE AVIATION INDUSTRY, AVIATION HOSPITALITY AND GOVERNMENT REGULATORY AGENCIES	HOURS	HOURS		
UNIT IA— INTRODUCTION TO THE AVIATION INDUSTRY  1. Civil aviation in India 2. Infrastructure and related facilities 3. Scheduled airlines 4. Airline alliance 5. Airlines in India 6. Full service carriers 7. Low cost carriers 8. Corporate jets and charters  UNIT IB— AVIATION HOSPITALITY	20	10		
1. Introduction to civil aviation hospitality 2. The Cabin Crew profession 3. History, origin and milestones of the cabin crew profession 4. Duties and responsibilities 5. A typical working day in the life of the cabin crew 6. Benefits and challenges of the profession				
UNIT II- PERSONAL DEVELOPMENT AND GROOMING  1. Qualification, Physical requirements and Medical fitness 2. Grooming and Etiquette 3. Hairstyles 4. Hands and Feet 5. Makeup 6. Jewellery and other accessories 7. Perfumes and Scents 8. Dress code and attire	15			
UNIT III—(Shifted from Course III — Unit 1)  GOVERNMENT REGULATORY AGENCIES  1. Role of Government Regulatory Agencies 2. Director General of Civil Aviation 3. Civil Aviation Requirements (CAR) 4. Civil Aviation rules and authority of Pilot in command. 5. International Civil Aviation Organization (ICAO) 6. International Transport Association (IATA) 7. Travel documents for International Travel 8. Customs and Immigration	15			

COURSE – II  USDAV102 –PROFESSIONAL COMMUNICATION SKILLS	LECTURE HOURS	PRACTICAL HOURS
<u>UNIT I</u> –  ENGLISH LANGUAGE (LISTENING & SPEAKING)  Communication Skills: All communication required for plain  English language speaking skills, namely, listening and speaking	15	10
<u>UNIT II</u> –  ENGLISH LANGUAGE (READING & WRITING)  All communication required for plain English language speaking skills vizReading and writing.	15	
UNIT III- CROSS CULTURAL COMMUNICATION Cross cultural Communication and Influence. Managing passenger interaction Difficult situations, difficult passengers and Passenger complaints	15	

COURSE – III  USDAV103 –AVIATION TERMS & TIME ZONES, AIRCRAFT FAMILIARISATION AND ROLES AND RESPONSIBILITIES OF AIRLINE STAFF	LECTURE HOURS	PRACTICAL HOURS
UNIT I – (Shifted from Course III – Unit II) AVIATION TERMS AND TIME ZONES  1. Aircraft Types 2. Passenger jets 3. Common aviation terms and abbreviations 4. Twenty-four hour clock 5. Time zones 6. Greenwich mean time and Universal Coordinated time 7. Airport codes 8. Airline designators	15	20
UNIT II — (Shifted from Course III — Unit III) AIRCRAFT FAMILIARISATION  1. Theory of flight and how aircrafts fly 2. Visit to an aircraft 3. Airplane controls and cockpit 4. Aircraft cabin familiarisation 5. Aircraft layout terminology 6. Aircraft furnishing and systems.	15	
UNIT III—(Shifted from Course IV — Unit I)  ROLES AND RESPONSIBILITIES OF AIRLINE STAFF  1. Preparing to undertake a flight 2. Pre-flight briefing 3. Prior to passenger boarding 4. Boarding of passengers 5. Special handling of passengers 6. Public announcements 7. Safety demonstration 8. During taxiing 9. Preparing for take- off 10. During cruise 11. Preparing for landing 12. After landing 13. Critical phases of a flight	15	

COURSE – IV  USDAV104 – INFLIGHT SERVICE PROCEDURES, LIFESTYLE CHANGES AND AN INTRODUCTION TO CHEESE AND DANGEROUS GOODS	LECTURE HOURS	PRACTICAL HOURS
UNIT I – GALLEY EQUIPMENT AND MEAL SERVICE PROCEDURES (shifted from Course IV – Unit II)  1. Aircraft galleys and equipment 2. Proper handling techniques of galley equipment 3. Pre-flight galley checks 4. Airline catering and delivery of catering on board 5. Food Service and Hygiene 6. Types of meals and special meals 7. Special meal codes 8. Meal service, types and service levels  UNIT IIA- LIFESTYLE CHANGES(Part shifted from Course I – Unit III)  1. Lifestyle changes and service with them	15	40
<ol> <li>Lifestyle changes and coping with them</li> <li>Healthy lifestyles</li> <li>Food and nutrition</li> <li>Exercise and benefits of regular exercise</li> <li>Techniques for getting quality rest</li> <li>UNIT IIB</li> <li>INTRODUCTION TO CHEESE(Part shifted from Course IV – Unit III)</li> <li>Types of Cheese</li> <li>Production of Cheese</li> <li>Service of Cheese</li> </ol>		
<ul> <li>UNIT III</li> <li>DANGEROUS GOODS(Shifted from Course VIII – Unit I)</li> <li>1. Dangerous goods definition and classification</li> <li>2. Rules relating to carriage of dangerous goods</li> <li>3. Cabin crew procedures for a dangerous goods emergency.</li> </ul>	15	

# **SEMESTER II**

COURSE – V USDAV201 – CREW RESOURCE MANAGEMENT(CRM)	LECTURE HOURS	PRACTICAL HOURS
UNIT 1 – INTERPERSONAL SKILLS  1. Team Building 2. Handling communication between crew members 3. Interpersonal skills 4. Communicating with passengers	15	10
UNIT II – ENHANCING CREATIVITY AND RESOURCES  1. Enhancing creativity in different areas. 2. Utilizing resources for difficult situations 3. Using innate reflexes to handle emergencies	15	
UNIT III— PERSONALITY TYPES AND CREW RESOURCE MANAGEMENT  1. Barriers to communication 2. Understanding personality types 3. Enhancing free flow of communication between crew members and passengers 4. Crew resource management 5. Writing resumes, handling interviews and group discussions	15	

COURSE – VI  USDAV202 – EMERGENCY PROCEDURES IN EVACUATION AND DITCHING	LECTURE HOURS	PRACTICAL HOURS
UNIT I SAFETY AND EMERGENCY PROCEDURES  1. Emergency situations 2. Safety and emergency procedures manual 3. Safety demonstration 4. Brace positions 5. Emergency guidelines	15	40
UNIT II EVACUATION  1. Planned evacuation 2. Briefing by the Pilot Command 3. Briefing the cabin crew by the Cabin In-charge 4. Emergency announcement 5. Cabin Preparation 6. Initiating Evacuation 7. Unanticipated Evacuation	15	
UNIT III DITCHING  1. Evacuation over water 2. Briefing by the Pilot in Command 3. Briefing the cabin crew by the Cabin In-charge 4. Emergency announcement 5. Cabin Preparation 6. Initiating Ditching 7. Survival at Sea	15	

COURSE – VII  USDAV203 – FIRE SAFETY ANDAVIATIONSECURITY PROCEDURES	LECTURE HOURS	PRACTICAL HOURS
<u>UNIT I</u>	15	40
FIRE SAFETY AND FIRE- FIGHTING		
1. Classification of fires		
2. Cabin fires and common causes		
3. Lavatory fires		
4. Smoke evacuation		
5. Fire-fighting, equipment and procedures		
<u>UNIT II</u>	1.5	
DECOMPRESSION	15	
1. Asphyxia and its effects		
2. Rapid decompression		
3. Slow decompression		
4. Cabin indication for decompression		
5. Actions and procedures during decompression		
6. Crew incapacitation		
<u>UNIT III</u>	1.5	
AVIATION SECURITY	15	
1. General precautions		
2. Bomb threats, types, procedures and handling		
3. Hijacking, action and procedures		
4. Unruly passengers		

COURSE – VIII	LECTURE	PRACTICAL
USDAV204 – ADAPTATIONS &HEALTHY	HOURS	HOURS
LIVING,INTRODUCTION TO WINES & BEVERAGES AND MEDICAL EMERGENCIES & FIRST AID		
WIEDICAL EMERGENCIES & FIRST AID		
<u>UNIT IA</u> (Part shifted from Course I – Unit III) ADAPTATIONS AND HEALTHY LIVING	20	40
1. Personal health	20	40
2. Health risks of frequent flying		
3. Known effects of frequent flying		
4. Personal safety and security		
5. While travelling and at the hotel		
6. Sightseeing or staying out of the hotel		
7. Preparing for emergency while on duty travel		
<u>UNIT IB</u> (Part shifted from Course IV – Unit III)		
INTRODUCTION TO WINES AND BEVERAGES		
1. History of wines, wine making and wine producing areas		
2. Service of wines		
3. Types of beverages		
4. Service of beverages		
UNIT II		
MEDICAL EMERGENCIES AND FIRST AID		
1. In-flight medical emergencies	15	
2. Identification of roles and responsibilities		
3. Symptoms and treatment		
4. Importance of First Aid		
5. Food Poisoning		
6. Death on board		
<u>UNIT III</u>		
<u>USE OF INFLIGHT RESOURCES</u>	1.5	
1. Carriage of first aid and physician's kit on board	15	
2. Use of an on-board medical professional		
3. Use of inflight resources  4. Plead borns notherens and universal pressurious		
<ul><li>4. Blood borne pathogens and universal precautions</li><li>5. Reporting to ground service about the nature of an emergency</li></ul>		
6. First aid Practicals		

#### List of Practical's

The following practicals are suggestive and minimum.

Practicals are based on each Unit of the course in the syllabus

#### USDAV P1

Practical 1.1: Preparation, Application and Projection of Skills.

Grooming, Makeup and Hairstyles

Practical 1.2: Attending passenger complaints and interaction Practical 1.3: Airport Code, Station Code and related terms

familiarization from internet

Practical 1.4: Visit to an Aircraft

Visit to an Airline catering unit and a wine

distribution centre.

#### **USDAV P2**

Practical 2.1:Communication between crew members and passengers Crew Resource Management

Practical 2.2: Swimming

Practical 2.3: Handling and operation of fire-fighting equipment Practical 2.4: First Aid and Identification of dangerous goods

	THEORY	<b>PRACTICALS</b>	NOTIONAL	Total	Credit
Semester I	185	80	70	335	10
Semester II	185	130	70	385	10
Total	370	210	140	720	20