



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.																			
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End - Term Examinations - December 2025

Date: 11 - 12- 2025

Time: 09:30am - 12:30pm

School: SOC / SOM (UG)	Program: BBA Aviation Management		
Course Code : BAV3023	Course Name: Air Traffic Control		
Semester: III	Max Marks: 100	Weightage: 50%	

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	20	20	20	20	20

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	List the four generic elements of an ATC system.	2 Marks	L1	CO1
2.	Label the two types of ATC surveillance radars.	2 Marks	L1	CO1
3.	List the three main components of Air Traffic Management.	2 Marks	L1	CO2
4.	Define Airspace Management (ASM).	2 Marks	L1	CO2
5.	Why are departure instructions important?	2 Marks	L1	CO3
6.	What is meant by route of flight?	2 Marks	L1	CO3
7.	What does Ground Control manage?	2 Marks	L1	CO4
8.	Who handles aircraft transitioning between airport and en-route phases?	2 Marks	L1	CO4
9.	What is the purpose of ADS-B in NexGen?	2 Marks	L1	CO5
10.	What is the function of SWIM in NexGen?	2 Marks	L1	CO5

Part B

Answer ALL the Questions. Each question carries 7 marks.

5Q x 7M = 35M

11.	Outline the main responsibilities of an Air Traffic Controller.	07 Marks	L2	C01
Or				
12.	Classify the basic ATC services under safety and efficiency functions.	07 Marks	L2	C01
13.	Compare controlled and uncontrolled airspace.	07 Marks	L2	C02
Or				
14.	Illustrate how Remote and Virtual Tower (RVT) technology operates.	07 Marks	L2	C02
15.	Explain the procedure for issuing ATC clearances.	07 Marks	L2	C03
Or				
16.	Explain the process of aircraft identification in ATC communication.	07 Marks	L2	C03
17.	Explain the key functions of Flight Data Control.	07 Marks	L2	C04
Or				
18.	Explain the objectives and operations of Clearance Delivery Control.	07 Marks	L2	C04
19.	Describe the operational strategies of Air Traffic Flow Management (ATFM).	07 Marks	L2	C05
Or				
20.	Explain the purpose and strategies of Ground Delay Programs (GDPs).	07 Marks	L2	C05

Part C

Answer any three Questions. Each question carries 15marks

3Q x 15M=45M

21.	Apply your understanding to explain how pilots and air traffic controllers communicate effectively during radio transmissions.	15 Marks	L3	C01
22.	Apply your understanding to explain the structure and functions of Tower Control, Terminal Control, and Enroute Control Centres.	15 Marks	L3	C02
23.	Construct a detailed explanation of holding, reporting, and clearance procedures as applied in congested airspace.	15 Marks	L3	C03
24.	Explain in detail how all tower units integrate to manage aircraft from pre-departure to post-landing.	15 Marks	L3	C04
25.	Explain the concepts of improved aircraft separation and negotiated routes in future air traffic management.	15 Marks	L3	C05