CBCS SCHEME

USN

21AE/AS753

Seventh Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Air-traffic and Weather

Time: 3 hrs. Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-1

1 a. Explain briefly about the Earth's Atmosphere. (10 Marks)
b. Explain the following :
i. True altitude
ii. Indicated altitude
iii. Corrected altitude. (10 Marks)

OR

2 a. Describe about the stable and unstable air changes within upward and downward moving air. (10 Marks)
b. Define Clouds. Explain the types of clouds. (10 Marks)

Module-2

3 a. Explain the causes of turbulence with simple sketch. (10 Marks)
b. Describe the effects of structural Icing. (10 Marks)

OR

4 a. Write a brief note on Arctri weather with simple pictorial representation. (10 Marks)
b. Explain about the summer and winter monsoon weather. (10 Marks)

Module-3

5 a. Explain about the air traffic management functions. (10 Marks)
b. Elaborate about the Time Based Management(TBFM). (10 Marks)

OR

6 a. What are the three types of airport planning? Explain them. (10 Marks)
b. Write short notes of OIS. (10 Marks)

Module-4

7 a. Explain the general methods of Anti-icing system. (10 Marks)
b. Write a brief note of CDR. (10 Marks)

OR

8 a. Explain the FEA/FCA procedures in Aviation industry. (10 Marks)
b. Describe about the Global Air Traffic Management. (10 Marks)

Module-5

9 a. List out any five services provided by Air Navigation service provider and explain any three of them. (10 Marks)
b. Explain about METAR and SPECI. (10 Marks)

OR

10 a. Write short notes of Aviator Call Sign. (10 Marks)
b. Explore the impact of Technology on Air Traffic Control. (10 Marks)

* * * * *