USN | | | | | | | | | | **18AE641**

Sixth Semester B.E. Degree Examination, July/August 2022
Aircraft Transportation Systems

Time: 3 hrs.   Max. Marks: 100

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

Module-1

1 a. With a neat figure write a short note on environmental aspects in ATs.   **(10 Marks)**
   b. With a neat figure illustrate the transport and mobility in ATs.   **(10 Marks)**

OR

2 a. With neat sketch, explain how the developments of aircraft design driver speed and range took place in early eras.   **(10 Marks)**
   b. Explain briefly about the role of ICAO and development of airlines and airports.   **(10 Marks)**

Module-2

3 a. With neat figure explain in detail about flight envelope and payload range diagram.
                                                                                     (10 Marks)
   b. Explain the detailed structure and cabin design on considering the passengers comfort.
                                                                                     (10 Marks)

OR

4 a. Illustrate the role of aircraft manufactures.   **(10 Marks)**
   b. Explain in detail about the process involved in development of aircraft.   **(10 Marks)**

Module-3

5 a. Write a note on different role of airport.   **(10 Marks)**
   b. Explain in detail about the type of airlines and steps involved in MRO.   **(10 Marks)**

OR

6 a. Explain the airport operation and services in detail.   **(10 Marks)**
   b. Elaborate in detail about fleet strategy and aircraft selection.   **(10 Marks)**

Module-4

7 a. Explain in detail about the roles of aircraft navigation.   **(10 Marks)**
   b. How different modes of communication system are subdivided in ATS? Explain.   **(10 Marks)**

OR

8 a. Briefly explain emission, noise and sound of air transport. Also elaborate these effects on climate.   **(10 Marks)**
   b. Explain integrated air traffic management and control systems.   **(10 Marks)**

Module-5

9 a. Explain the variables involved in marketing mix.   **(10 Marks)**
   b. Write a short note on fleet planning.   **(10 Marks)**

OR

10 a. Briefly explain the principles of airline scheduling.   **(10 Marks)**
    b. Explain Ari Cargo-market for air freight.   **(10 Marks)**

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