

Code: 9A21802

R09

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013

AEROSPACE TRANSPORTATION SYSTEMS

(Aeronautical Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Explain various modes of transportation systems in detail. Differentiate between air and space transportation systems.
- 2 (a) Explain how the pressure, density and temperature varies in standard atmosphere with geopotential altitude.
(b) Write about the different techniques in reduction of drag.
- 3 Discuss briefly about three different types of airplane construction with its components and functioning.
- 4 Explain the factors to be considered in the estimation of performance of an aircraft and how the estimation is carried out.
- 5 Explain in brief aerodrome air traffic control equipment and operation.
- 6 Write short notes on ICAO and IATA authorities and limitations.
- 7 (a) Describe about manned and unmanned space vehicles.
(b) Describe briefly about international space stations, its mission and applications.
- 8 Write a short notes on:
 - (a) Wireless telegraphy.
 - (b) VHF radio.
 - (c) HF radio.
 - (d) ACARS.
