

Code: 9A21602**R09**

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2015/2016

AVIONICS

(Aeronautical Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 What are avionic systems employed in flight vehicles? What are the principles on which these function?
- 2 (a) Describe the all-glass instrumentation.
(b) What are semi-smart and fully smart display systems? Explain briefly.
- 3 What is a VHF communication system? Explain in detail. Describe SATCOM (satellite communication system).
- 4 What is DME? How does it work? Why is it required in an aircraft?
- 5 (a) Describe the functioning of GPS.
(b) How was the flight path of the MH-370 of 8th March 2014 traced?
- 6 Describe the functioning of a stabilized platform.
- 7 Explain transponder mode and S-mode of functioning of ATC.
- 8 Write short notes on:
 - (a) Automatic flight control system (auto-pilot).
 - (b) Mechanical back-up for automatic flight control system.
 - (c) ARINC429.
