

Code: 9A21602

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2017

AVIONICS

(Aeronautical Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Explain in detail the processes involved in the development of a system for typical civil avionics.
- 2 Explain the components of display suite of EFIS (electronic flight instrumentation system) and discuss in detail about dumb display architecture.
- 3 Explain the principle of operation of SAT com (satellite communication).
- 4 Explain in detail the instrumentation part of VOR receiver with a neat sketch.
- 5 (a) Illustrate the subsystems of GPS (or) NAVSTAR receivers and explain in detail.
(b) Explain why GPS is integrated with INS.
- 6 Explain the working principle of accelerometers with a neat sketch.
- 7 Explain about ADS and different classes of ADS – B installation.
- 8 What is FMS? Explain the typical flight management system with a block diagram and discuss its benefits briefly.
