

Code No: 37157/37158

R05

Set No - 3

IV B.Tech I Semester Regular Examinations, Nov/Dec 2009

AVIONICS

Aeronautical Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

1. Using "DATA BUS" concept, explain "Data Transfer Methodology" with the help of simple schematic Layout amongst avionic sub-Systems. [16]
2. What is 'Distance Measuring Equipment'? Describe its operation and use. [12+4]
3. What do you mean by 'flight deck' of an aircraft? Discuss the development of a modern flight deck right from the beginning. [4+12]
4. (a) What are the specialities of SSR used for civil airliner?
(b) How the system can be utilized on TCAS - I, TCAS - II & TCAS - III. [8+8]
5. Give an overview of American "GPS" Satellite Navigation System for both civil and military users. [16]
6. (a) List out basic differences (functional) between "Strapped Down" and "Stable Platform" INS.
(b) Why "Strapped Down INS" is generally not used for Aircraft Navigation? [8+8]
7. What are 'special navigation systems'? List and explain any two special navigation systems used in aerospace applications. [4+6+6]
8. Explain the principle and operation of UHF communication system. Explain its applicability. Compare it with VHF communication system. [8+2+6]
