

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Aerospace Engg.) (2012 Batch) (Sem.–7,8)

AVIONICS

Subject Code : ASPE-404

M.Code : 72567

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- a) What do you understand by 'Touch screen'?
- b) Define redundancy and explain its importance.
- c) What do you mean by control laws? Categorize control laws.
- d) How environment affects the avionics equipments?
- e) Define bus bar and explain its function.
- f) What do you mean by air data and how is it displayed?
- g) What do you understand by 'astronavigation'?
- h) Explain the term 'IFF' and its importance.
- i) What do you mean by navigation? List various navigation instruments.
- j) Explain briefly, how 'LED' is used for display.

SECTION-B

2. Distinguish between glass cockpit and electro-mechanical cockpit.
3. Explain the importance of digital systems in aviation.
4. Explain the working principal of 'VOR'.
5. Write a short note on 'Circuit Controlling devices'.
6. Explain the working principle of 'HUD'.

SECTION-C

7. What do you mean by avionics subsystems? Explain the working principles and function of various components of typical avionics subsystems.
8. Explain the following with respect to Inertial Navigation system :
 - a) Inertial alignment
 - b) Inertial interface system
 - c) Compass swing
9. Write notes on the following :
 - a) CRT
 - b) Plasma Panel

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.