Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Aerospace Engg.) (2012 Onwards) (Sem.–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) Split bus bar system

(b) Special purpose cables

(c) Compass swing

(d) Cooper Harper scale

(e) Plasma panel

(f) Electronic warfare

(g) Inertial navigation unit

(h) Transmitter-receiver

(i) DVI

(j) ILS

SECTION-B

2. Distinguish between gyroscopic and inertial platform. Explain structure of stable platform.

3. Explain the working principle of 'MIL-STD 1553B'.

4. Explain the need for avionics in aviation.

5. Explain the common modes of failure of electronic flight control system.

6. Explain the working principle of 'LED'.

SECTION-C

7. Explain the principle of digital systems. Discuss the role of digital systems in aviation. 4,6

8. Write notes on the following :

   (a) Civil cockpit and Military cockpit 5

   (b) Flight control systems 5

9. Explain the following :

   (a) Typical avionics subsystems 4

   (b) HOTAS 3

   (c) MFDS 3

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.