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Total No. of Questions : 09

B.Tech.(ANE) (Sem.-6)
ELEMENTS OF AVIONICS
Subject Code : ANE-325
M.Code : 60534

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION 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

Q1. Attempt the following :

- (a) Define Directional Gyros.
- (b) What is the function of weather radar?
- (c) How environment affects the avionics equipment?
- (d) Define Bus and its function.
- (e) Explain the term 'IFF' and its importance.
- (f) What do you mean by communication systems? List various communication systems.
- (g) Explain marker beacons and their importance.
- (h) What do you understand by Doppler radar?
- (i) Define LRU.
- (j) How air data is sensed?

SECTION-B

- Q2. Distinguish between earlier and modern (glass) flight deck.
- Q3. Explain the role of Air Data Computer in air data sensing.
- Q4. Distinguish between 'HUD' and 'HDD'.
- Q5. Write a short note on 'RADALT'.
- Q6. Explain the working principal of 'Helmet Mounted Display'.

SECTION-C

- Q7. Write notes on the following navigation systems:
- (a) TCAS (5)
 - (b) VORTAC (5)
- Q8. Explain the working principal of 'ILS' and 'MLS'. What are the merits and demerits of 'ILS' over 'MLS'? (4,3,3)
- Q9. Write notes on the following :
- (a) CRT (5)
 - (b) ARINC 629 (5)

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.