

No. of Printed Pages : 03

Roll No.

H345

B.Tech. EXAMINATION, May 2019

(Eighth Semester)

(B. Scheme) (Main & Re-appear)

(AER)

AER436B

AVIONICS

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

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P.T.O.

Unit I

1. Discuss the impact of avionics technology on aviation. Explain, how avionics architecture of commercial aircraft is different from that of military aircraft. **8,7**
2. Write notes on the following :
 - (a) ARINC 629
 - (b) Environmental effects on Avionics. **8,7**

Unit II

3. (a) What do you mean by air data sensing ?
Explain the use of pitot static system in air data sensing. **8**
 - (b) Explain the working principle and applications of Weather Radar. **7**
4. Write notes on the following :
 - (a) MHRS
 - (b) Inertial sensing and types. **7,8**

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Unit III

5. (a) Differentiate between earlier and modern flight deck. **7**
 - (b) Differentiate between HDD and HUD. Explain the working of both display system. **8**
6. Write notes on the following :
 - (a) TCAS
 - (b) IFF
 - (c) CRT Display. **5,5,5**

Unit IV

7. (a) Explain the importance of navigation in aviation. List various navigation systems. **3,2**
 - (b) Explain the function and working principles of GPS and differential GPS. **10**
8. Write notes on the following :
 - (a) ILS
 - (b) Longitudinal, lateral and directional autopilot. **7,8**

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