

R09

Code No: 58089

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, September - 2020

AVIONICS AND INSTRUMENTS

(Aeronautical Engineering)

Time: 2 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

1. Describe the working of MIL-STD 1553B data bus in detail. [15]
2. With the help of a neat diagram explain the working of a Head-Up Display along with the function of its key components. [15]
3. Discuss various hyperbolic navigation systems. [15]
4. Discuss the components and working of a Global Positioning System along with errors involved in it. [15]
5. Explain the implementation of 'Fly-by-wire' concept along with the role of sensors on modern aircraft considering Boeing-777 as an example. [15]
6. Describe the working of Extended/Enhanced Ground proximity Warning System. [15]
7. Explain the salient features of operation of 'Surveillance Radar Element'. [15]
8. Describe the working of (a) Sun sensor (b) Magnetometer. [15]

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