

**R09**

Code No: 56073

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year II Semester Examinations, December - 2018**

**AIRCRAFT SYSTEMS**  
(Aeronautical Engineering)

Time: 3 hours

Max. Marks: 75

**Answer any five questions**  
**All questions carry equal marks**

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1. Discuss about various airframe system. Describe them. [15]
2. Explain in detail the electrical system components and working with a schematic diagram. [15]
3. Explain the components and working principle of a hydraulic system and discuss briefly about the brake management system with neat sketches. [15]
4. Explain about refrigeration systems and types with neat sketches and write a short note on process and types of passenger & crew evacuation/ejection system. [15]
5. Explain in detail various modes of fuel system and explain the engine control evolution, fuel flow control, control system parameter with some examples. [15]
6. Explain the flight primary and secondary flight controls for civil and fighter a/c. Write about actuation types and redundancy. [15]
7. Explain the purpose, location brief description, aspects/safety of navigation and cockpit displays systems with sketches and tables showing 3 examples each. [15]
8. Discuss briefly about Interdependence of aircraft systems and need for integration-examples. [15]

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