

**B.Tech. AEROSPACE ENGINEERING
(BTAE)**

Term-End Examination

00125 **December, 2014**

**BAS-011 : AIRCRAFT SYSTEMS AND
AIRWORTHINESS REQUIREMENTS**

Time : 3 hours

Maximum Marks : 70

Note : Answer any *ten* questions. All questions carry equal marks.

1. How do we maintain hydraulic system in the aircraft ? 7
2. Explain the various configurations of landing gears employed in majority of the aircrafts. 7
3. Differentiate between aircraft pneumatic and hydraulic systems. 7
4. Differentiate between cabin pressurization and air-conditioning system. 7
5. Write about the various system components which are being used in airplane control. 7
6. Explain the principles of voltage regulation in an airplane. 7

7. Describe the various quality check tests to be carried out on aviation fuel. 7
 8. Explain the Pitot-static air data sensor with the help of a neat sketch. 7
 9. Discuss the various components of a landing gear system. 7
 10. Describe briefly the basic fuel system components of a jet engine. 7
 11. What are the requirements for issuance of type certificate of an aircraft and its components as per Series 'F' of CAR Section 2 ? 7
 12. Write down the conditions for de-registration of an aircraft. 7
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