

IV B.Tech I Semester Supplementary Examinations, April/May 2005

AIRCRAFT INSTRUMENTATION

(Electronics & Instrumentation Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE Questions  
All Questions carry equal marks

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1. Describe the power plant cycle by drawing a schematic diagram of the same and indicate in it the positions of measurement of flow in the cycle.
2. Describe the two basic physical principles used in Gyroscopes?
3. Discuss in detail the errors encountered with magnetic compass.
4. What are the functional units of cockpit in an aircraft? Describe them with a neat sketch.
5. Differentiate between air speed indicator and vertical speed indicator.
6. What are the mass flow rate measurement techniques used in power plants? Describe one of them in detail.
7. Differentiate between free gyro, rate gyro and restrained gyro?
8. Write short notes on:
  - (a) Turn and slip indicator
  - (b) Panels in Aircraft instrumentation.

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