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JAYA GROUP OF INSTITUTION-THIRUNINRAVUR
8TH SEMESTER – B.E. /B.Tech
INTERNAL ASSESSMENT-II (MODEL EXAMINATION-II)

Sub. Name: Engine System and Control

Date: 10/03/2015

Sub. Code: AE 2037

Branch: Aeronautical

Duration: 180Minutes

Max.Marks: 100

PART-A (10*2=20)

1. How can we measure RPM of the engine?
2. What are the types of scaling in aircraft instruments?
3. Define Boroscopic inspection.
4. Define Scaling.
5. State any four inspection method of Gas turbine engine system.
6. Define preventive maintenance.
7. Explain about Processing signals
8. State the engine sensors to maintain the performance of the engine.
9. Explain fuel flow indicator.
10. What are the function of vibration indicator

PART-B (5*16=80)

- 11)a. Write down the maintenance of gas turbine engine.

(or)

- b. Explain in detail the performance monitoring in engine system.

- 12)a. Explain the application of digital displays in aircraft instruments.

(or)

- b. Write down the analog control instruments used in engine control & any two of them in detail.

- 13)a. Explain the procedure of testing the overhauled gas turbine engine in test bed.

(or)

- b. Discuss in detail about monitoring of instruments/indicators.

- 14)a. Write short notes on

- i) Boroscopic inspection

- ii) In wing trim balance

(or)

- b. Classify the scaling of instruments indicators and explain its monitoring process.

- 15)a. Explain the maintenance activities of gas turbine engine fitted in heavy aircraft during the routine operational inspection after approximately 100 hrs of operation.

(or)

- b. Write down the engine sensor requirements and basic constructions.