

**Eighth Semester B.Tech Degree Examination, April /May 2016**

**(2008 scheme)**

**Branch: Aeronautical Engineering**

**08.806.03 RESEARCH METHODOLOGY**

Time. 3 Hours

Max.Marks : 100

***Answer all questions from part-A and one full question from each module of Part-B.***

**PART A (10x4=40 Marks)**

1. Explain Conceptual research and meaning of research
2. Explain significance of research
3. What are the qualities of good research
4. What is dependent variable and independent variable?
5. Explain the features of good design
6. What do you mean by sample design?
7. What are the different steps in Processing of data?
8. Illustrate HoltzmanInkbolt Test(HIT)
9. Characteristics of a good research report.
10. Different steps in writing report.

**PART B**

**(3x20=60 Marks)**

**MODULE -I**

11. (a) What do you mean by research? Explain its significance in modern times

(OR)

(b) Explain the research process with the help of a flow-chart

**MODULE -II**

12. (a) Explain the important concepts relating to research design

(OR)

(b) Explain and illustrate the following research design

- i. Two group simple randomized design
- ii. Latin square design
- iii. Random replications design

- iv. Simple factorial design
- v. Informal experimental design.

### **MODULE -III**

13. (a) Explain the layout of the research report in detail .

(OR)

(b) What are the precautions for writing research reports?