Roll No…….. **Total No. of Printed Pages: [01]**

Total No. of Questions: [09]

B.Sc. (Hons.) AME (Semester – 3rd)

AIRCRAFT STRUCTURE

Subject Code: BAME3-318

Paper ID: [20131112]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a. What is Mass balancing?
b. What is fail safe concept in aircraft construction?
c. Write about Hoop stress.
d. Write about doublers used in aircraft.
e. Write about engine mount.
f. Define wing ribs used in aircraft wing construction.
g. Describe about structure assembly techniques riveting.
h. Write about anodizing surface protection method.
i. What is Plug type cabin door used in aircraft?
j. What is zone number in aircraft?

Section – B **(5 marks each)**

Q2. What is air stair used in aircraft?

Q3. Describe about lighting strike protection & Bonding system of aircraft.

Q4. Describe about Wing structure of an aircraft.

Q5. Write about fuel storage used in aircrafts.

Q6. Describe about semimonocoque type fuselage constructions.

Section – C **(10 marks each)**

Q7. Write about aircraft station identification & Zonal location system.

Q8. Describe about five stresses that may act on an aircraft & its part.

Q9. Explain briefly about alignment & symmetry check of aircraft.