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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 lightning 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.