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10AE753

Seventh Semester B.E. Degree Examination, June/July 2019
Aircraft Maintenance, Repair and Overhaul

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART – A

- 1 a. Explain the equipments used in oxyacetylene welding. (10 Marks)
b. List the characteristics to ensure the quality of weld. (05 Marks)
c. Write difference between soldering and Brazing. (05 Marks)
- 2 a. Determine the number of rivets required per lap joint for a repair. (06 Marks)
b. What are the classification of sheet metal damage? (04 Marks)
c. Write a note on different types of NDT methods in aircraft industry. (10 Marks)
- 3 a. Explain Maintenance and repair of plastic materials. (10 Marks)
b. List the types of plastics used in aircraft. Write short note on forming plastics and bonding plastics. (10 Marks)
- 4 a. Give the purpose of autoclaves in composite manufacturing along their types. (10 Marks)
b. Explain the procedure of aircraft leading edge repair for composite structure with neat sketch. (10 Marks)

PART – B

- 5 a. What is aircraft rigging? With a neat sketch explain control surface installation and rigging process. (08 Marks)
b. Explain in detail balancing of helicopter main rotor. (12 Marks)
- 6 a. Explain the procedure for inspection of retractable landing gear in fixed wing aircraft. (10 Marks)
b. What are the different flight instruments used in aircraft? Briefly explain. (10 Marks)
- 7 a. Explain with neat sketch windshield wiper system of an aircraft. (05 Marks)
b. With a neat sketch, explain take off warning indicator. (10 Marks)
c. Explain inspection and servicing of fire protection. (05 Marks)
- 8 a. Define trouble shooting process. List the steps in trouble shooting process with chart. (10 Marks)
b. Explain theory behind hazardous material storage handling in aircraft. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.