

Reg. No. :

Question Paper Code : 90048

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

Sixth Semester

Aeronautical Engineering

AE 8002 – AIRCRAFT GENERAL ENGINEERING AND MAINTENANCE PRACTICES

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Draw a typical tripod jack of an aircraft and label it.
2. Draw a typical aircraft and show the mooring points.
3. Why HPA filters are used in modern jetliners?
4. What is the discomfort caused once the cabin has low humidity?
5. What are the procedures followed in continuous work shifts?
6. Write a note on the risk diamond.
7. How an inspection is scheduled for the aircraft?
8. What is the significance of aeronautical publication?
9. Why threaded fasteners are used in modern aircraft construction?
10. What is the significance of Camloc 4002 series fastener?

PART B — (5 × 13 = 65 marks)

11. (a) Explain with a neat sketch, why special attention must be paid during aircraft towing.

Or

- (b) Explain about hand cranking procedure to be followed in piston engine aircraft.

12. (a) Explain how the oxygen system is being serviced at the ground.

Or

(b) List down all the general maintenance precautions to be followed at the ground units.

13. (a) Explain about shop safety in detail.

Or

(b) Explain about flight line safety in detail.

14. (a) Discuss how are the checklist provided by the manufacturer of an aircraft being inspected.

Or

(b) Discuss briefly on type certificate data sheet (TCDS).

15. (a) Explain how an aircraft fluid line fittings are identified.

Or

(b) Explain about the rivets used in an airframe of a modern aircraft.

PART C - (1 × 15 = 15 marks)

16. (a) From a case study, highlight the accidents happened due to negligence in maintenance and suggestions to overcome such accidents in future.

Or

(b) Discuss on advancements in standards, regulations and certifications.