



B.E DEGREE EXAMINATIONS: APRIL 2015

(Regulation 2009)

Eighth Semester

AERONAUTICAL ENGINEERING

AER144: Aircraft Safety Rules and Regulation

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Minor changes to CAR are to be treated as _____
 - a) Modification
 - b) New issue
 - c) Amendments
 - d) Revision
2. Agency responsible to ensure that aircraft has current and valid C of A (Certificate of Airworthiness)
 - a) Aircraft owner / Operator
 - b) Aircraft Manufacturer
 - c) DGCA
 - d) Regional Airworthiness Office
3. The aircraft is maintained in airworthy condition by subjecting it to _____
 - a) Periodic inspection
 - b) Repairs / Modifications
 - c) Life component replacements
 - d) All of the above
4. Defects observed at a place away from the normal base are recorded in _____
 - a) Aircraft Logbook
 - b) Journey Logbook column XI
 - c) Job-sheet
 - d) Defect Register
5. Reliability Monitoring Unit (RMU) is a part of _____
 - a) DGCA
 - b) RAO
 - c) Operator's operational wing
 - d) Operator's QC wings
6. Investigation of major defects shall be completed within _____
 - a) One month
 - b) Three months
 - c) Two months
 - d) Six months
7. A firm approved in category A carries out _____
 - a) Maintenance of aircraft
 - b) Manufacturer of aircraft
 - c) Testing of aircraft
 - d) Both A & B are correct

8. Certificate of registration is valid for
- a) One year
 - b) Six months
 - c) Two years
 - d) None of the above
9. Series aircraft shall be flight tested by pilots of _____
- a) Applicant
 - b) Manufacturer
 - c) Both a & b
 - d) None of the above
10. Weight schedule of an aircraft shall be retained for _____
- a) Two years
 - b) Five years
 - c) Ten years
 - d) Till replaced by a fresh schedule

PART B (10 x 2 = 20 Marks)

- 11. List out the difference between MEL and MMEL.
- 12. What is Continuing Airworthiness?
- 13. List out the difference Major defect and minor defect.
- 14. What is “Emergency Check List”?
- 15. Explain “Condition monitoring” type of maintenance.
- 16. Define “Defect”, list down its types.
- 17. Define “Alert value”
- 18. Draw the Aircraft classification table as per CAR series ‘F’
- 19. Define concession? Who can grant it and under what circumstance.
- 20. List down details of flight testing aircraft certification.

PART C (5 x 14 = 70 Marks)

21. a) Briefly discuss the functions and role of “Accountable Manager”, duties and responsibilities of CEM and QCM.

(OR)

- b) What is “MEL”? Explain in detail about framing process of MEL as per CAR series ‘B’

22. a) Write down the Procedures for defect recording, reporting, investigation, rectification and Analysis in accordance with CAR series ‘C’

(OR)

b) Discuss on the regulations that govern the carriage, handling, storage and transportation of dangerous goods.

23. a) Write in detail about the regulatory recommendations for “approval of organizations” as per CAR series ‘E’.

(OR)

b) Discuss the Procedure for issue/revalidation of Type certificate of aircraft and its engines / propeller.

24. a) Explain in detail about the procedure related to Aircraft registration in India.

(OR)

b) Explain the issue of AME licenses its classification and experience requirements.

25. a) Write in detail about Aircraft log book (ALB) as per CAR series-X.

(OR)

b) Explain in detail about the use of furnishing material in aircraft as per CAR series-X.
