

B.E., DEGREE EXAMINATIONS: MAY/JUNE 2013

Eighth Semester

AERONAUTICAL ENGINEERING

AER143:Aircraft Maintenance Management

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. IATA formed in the year _____
 - a) April 1954
 - b) May 1985
 - c) June 1946
 - d) April 1945
2. _____ is responsible for the execution and interpretation of policies in the aviation industry
 - a) ICAO
 - b) Middle management
 - c) Operating management
 - d) IATA
3. The product of seat offered by the airline for sale to the distance is called as _____
 - a) Airline production
 - b) Passenger load factor
 - c) Aircraft economy
 - d) Passenger tariff
4. Aircraft utilization is _____
 - a) Total revenue generated per year
 - b) Total amount of fuel used per year
 - c) Total flying hours per year
 - d) Total distance travelled per year.
5. The total cost of the aircraft, spare parts, flight training and ground equipments is called as _____
 - a) Operating cost
 - b) Maintenance cost
 - c) Equipment cost
 - d) Acquisition cost
6. International passenger tariff are fixed by _____
 - a) DGCA
 - b) ICAO
 - c) IATA
 - d) BCAS
7. The aging life of an aircraft is _____
 - a) 15 Years
 - b) 20 Years
 - c) 25 Years
 - d) 10 Years

8. ETOPS stands for _____
- a) Extended-range Twin-engine Operational Performance Standards b) Extended range of operations
- c) Extended Two Engine operation and propeller performance d) None of the above
9. _____ inspection technique that does not change the unit being inspected
- a) NDT b) NDI
- c) Dye-injection d) ultrasonic
10. _____ is the aircraft onboard maintenance system
- a) BITE b) MRO
- c) EROPS d) EICAS

PART B (10 x 2 = 20 Marks)

11. Draw the structure of Airlines operational management.
12. What do you mean by SARP?
13. List the difference between airline production and Load factor? How does CRS affect the load factor?
14. What is flight plan? How are they scheduled?
15. What is flight assignment and aircraft routing?
16. Define “Down time”
17. What is EROPS?
18. Define dispatch reliability.
19. Name the checks necessary for a twin engine aircraft for each 48 hours ?
20. What are objectives of an airline maintenance program?

PART C (5 x 14 = 70 Marks)

21. a) What is IATA and ICAO? Explain the role of IATA and ICAO in aviation Industry.

(OR)

- b) What are different levels of aviation management? Explain the function and responsibilities of the each level of aviation management.
22. a) Briefly explain how the passenger fare is fixed? What are the factors affecting passenger fare?

(OR)

b) Explain the principles of airline economics.

23. a) Explain the procedure and factors considered for preparation of flight plans.

(OR)

b) What is hub and spoke scheduling? Explain the advantages and disadvantages of each.

24. a) Explain the condition monitoring maintenance method followed in aviation industry.

(OR)

b) Explain the following:

(i) Aging aircraft program (7)

(ii) Corrosion control program for old aircraft (7)

25. a) Explain the factors considered for scheduling aircraft operations and maintenance with respect to engineering.

(OR)

b) Explain the types of aircraft on board maintenance systems.
