

เฉลยแบบทดสอบ RCM (RELIABILITY CENTERED MAINTANENCE)

1. Maintenance discipline required whom to comply with all written guidance to ensure required repairs, inspections and documentation are completed in a safe, timely and effective manner ?

- a. Supervisors
- b. Planners
- c. All maintenance personnel
- d. Executive officers

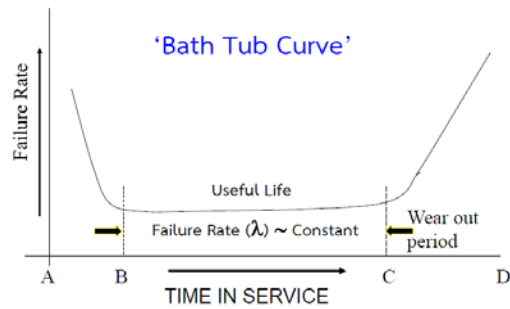
2. Which of the followings are DAE Ethics consecutively ?

- a. Safety, Standard, Operations Responsiveness, Economic.
- b. Standard, Safety, Operations Responsiveness, Economic.
- c. Safety, Standard, Economic, Operations Responsiveness, Economic.
- d. Standard, Safety, Economic, Operations Responsiveness.

3. What is the meaning of “Reliability Control” ?

- a. A system that monitors and maintains components’ hard time intervals below a predetermined value.
- b. A system that monitors and maintains components life cycle cost below a predetermined value.
- c. A system that monitors and maintains components’ life below a predetermined value.
- d. A system that monitors and maintains components “failure rate” below a predetermined value.

4. From the bath tub curve below, the portion with failures rate are high and are caused by design and manufacturing problems is called ?



- a. wear out period
 - b. early failure or infant mortality.
 - c. useful life
 - d. design life
5. From the bath tub curve, random failure (B – C) is the portion with failures rate is almost constant, then what type of maintenance is recommended for reliability theory ?
- a. HT (Hard Time) or TCI (Time Change Item)
 - b. OC (On Condition)
 - c. CM (Condition Monitoring)
 - d. All of the above a, b and c are correct.
6. From the bath tub curve, the optimum time for overhaul or restore a component is ?
- a. just prior to point C
 - b. at point C
 - c. between point B and point C
 - d. before point D
7. Regarding "Preventive Maintenance or Scheduled Maintenance", which of the following statement is correct ?
- a. it can minimize deterioration of inherent reliability, and increase reliability.
 - b. it can minimize deterioration of inherent reliability, but not increase reliability.

c. it can maximize inherent reliability, and reduce maintenance cost.

d. it can maximize inherent reliability, and prolong useful life.

8. MSG 3 (Maintenance Steering Group 3) is task oriented by identify specific tasks as shown in the figure below. Which tasks are very important to aircraft airworthiness ?



a. Significant Item (SI)

b. Significant Item (SI), Zonal Program and Specific Zonal Program

c. Significant Item (SI) and Structural Significant Item (SSI)

d. Structural Significant Item (SSI)

9. What do we call a preventive maintenance process which requires a part to be periodically inspected or checked against a physical standard to determine whether it can stay in service and to remove the part from service before failure occurs ?

a. Hard Time (HT) or TCI (Time Change Item)

b. On Condition (OC)

c. Condition Monitoring (CM)

d. Overhaul or Restorative

10. What do we call a maintenance process which the part or component is allowed to fail, but the failure rate or the performance is monitored by statistical analysis ?

a. Condition Monitoring (CM)

- b. Engine Trend Monitoring (ETM) and Oil Consumption Monitoring (OCM)
- c. System Reliability Monitoring (SRM) and Component Reliability Monitoring (CRM)
- d. All of the above a, b and c are correct.

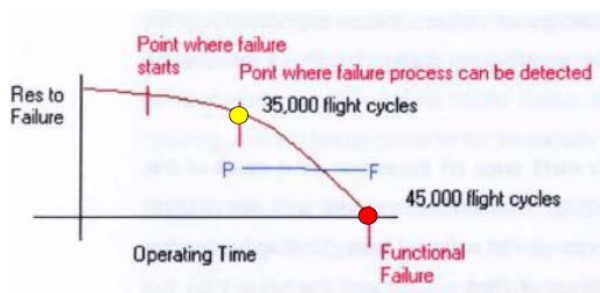
11. Which of the following statement is correct regarding reliability ?

- a. System Reliability Monitoring (SRM) is to find out how many failures occurred to each aircraft system within an average of 100 flying hours.
- b. Component Reliability Monitoring (CRM) is to find out how many failures occurred to significant components within an average of 1,000 flying hours.
- c. Engine Trend Monitoring (ETM) and Oil Consumption Monitoring (OCM) are to find out engine performance tendency and oil consumptions compare to standard values (standard baseline) or customized values (generic baseline).
- d. All of the above a, b and c are correct.

12. What is the objective of reliability data analysis ?

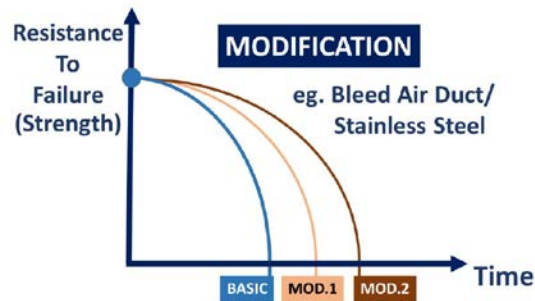
- a. to recognize the need for preventive action, establish preventive action and determine the effectiveness.
- b. to recognize the need for restorative action, establish restorative action and determine the effectiveness.
- c. to recognize the need for corrective action, establish corrective action and determine the effectiveness.
- d. to recognize the need for new design of a component.

13. From the P-F Curve (Potential – Functional Failure) below, which statement is correct ?



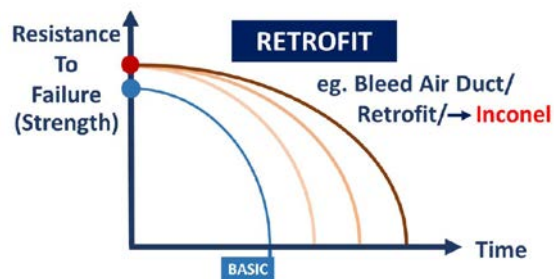
- a. It is required to find point P and take corrective action immediately.
- b. It is required to find point P and take corrective action before point F.
- c. It is required to find point P and close watch until point F.
- d. It is required to find point P and send a component to overhaul at point F.

14. From the P-F Curve (Potential – Functional Failure) below, which statement is correct ?



- a. modification of a component cannot increase resistant to failure (strength) and the useful life is not prolong.
- b. modification of a component can increase resistant to failure (strength) and the useful life is prolong.
- c. modification of a component can prolong useful life but the resistant to failure (strength) is not increasing.
- d. modification of a component cannot prolong useful life but the resistant to failure (strength) is increasing.

15. From the P-F Curve (Potential – Functional Failure) below, which statement is correct ?



- a. retrofit (new design with new material) of a component can increase resistant to failure (strength) and the useful life is prolong.

b. retrofit (new design with new material) of a component cannot increase resistant to failure (strength) and the useful life is not prolong.

c. retrofit (new design with new material) of a component can increase resistant to failure (strength) but the useful life is not prolong.

d. retrofit (new design with new material) of a component cannot increase resistant to failure (strength) but the useful life is prolong.

16. In aircraft structural design, an SSI (Structural Significant Item) which has “safe life” means ?

a. that SSI may be replace at a specified hard time.

b. that SSI must be replace at a specified hard time.

c. that SSI is a fail-safe item.

d. that SSI is a damage tolerance item.

17. Aircraft structural damages are classified as follow ?

a. Accidental Damage (AD)

b. Environmental Damage (ED)

c. Fatigue Damage (FD)

d. All of the above a, b and c are correct.

18. The initiation of a crack or cracks due to cyclic loading and subsequent cracks propagation is called ?

a. Accidental Damage (AD)

b. Environmental Damage (ED)

c. Fatigue Damage (FD)

d. Corrosion Damage (CD)

19. Physical deterioration of an item’s strength or resistant to failure as a result of chemical interaction with its climate or environment is called ?

- a. Accidental Damage (AD)
- b. Environmental Damage (ED)
- c. Fatigue Damage (FD)
- d. Inherent Damage (ID)

20. Physical deterioration of an item caused by contact or impact with an object or influence which is not part of the aircraft, or by human error during manufacture, operation of the aircraft, or maintenance practice is called ?

- a. Accidental Damage (AD)
- b. Environmental Damage (ED)
- c. Fatigue Damage (FD)
- d. Natural Damage (ND)

21. From the “Reliability Centered maintenance (RCM)”, a non significant area inspections dividing or splitting the complete aircraft into zones, is called ?

- a. Combustible materials inspection
- b. Electrical Wiring Interconnect System (EWIS)
- c. Zonal inspection program
- d. All of the above a, b and c are correct.

22. From the “Reliability Centered maintenance (RCM)”, wiring system inspection and combustible materials inspection is called ?

- a. Enhanced Zonal inspection
- b. Zonal inspection program
- c. ASIP (Aircraft Structural Integrity Program)
- d. SSID (Supplement Structural Inspection Document)

23. Which of the following is the keyword for “Reliability Centered maintenance (RCM)” ?

- a. Inherent safety

- b. Reliability capabilities
- c. Minimum cost
- d. All of the above a, b and c are correct.

24. Which of the following is not the keyword for “Reliability Centered maintenance (RCM)” ?

- a. Speed of Maintenance
- b. Aircraft Readiness
- c. Mission Capable Rate
- d. All of the above a, b and c are correct.

25. A mechanic inspects the aircraft tire every day before each flight, what type of maintenance does he perform ?

- a. On Condition Task
- b. Scheduled Discard Task
- c. Scheduled Restoration Task
- d. Failure Finding Task

26. A standby inverter is functional check by a mechanic for proper operation during a routine scheduled maintenance, what type of maintenance does he perform ?

- a. On Condition Task
- b. Scheduled Discard Task
- c. Scheduled Restoration Task
- d. Failure Finding Task

27. During a C-Check inspection, a mechanic removed an AC Generator and send for overhaul due to time expired, what type of maintenance does he perform ?

- a. On Condition Task
- b. Scheduled Discard Task

c. Scheduled Restoration Task

d. Failure Finding Task

28. During an A-Check inspection, a mechanic removed and replace a fire extinguisher squib and disposed of it, what type of maintenance does he perform ?

a. On Condition Task

b. Scheduled Discard Task

c. Scheduled Restoration Task

d. Failure Finding Task

29. The objective of “Reliability Centered Maintenance (RCM)” is ?

a. to maintain continued airworthiness of the aircraft

b. to enhance safety

c. to minimize cost

d. All of the above a, b and c are correct.

30. Low utilization aircraft maintenance program is applicable to ?

a. aircraft fly less than 100 flying hours per month or 1,200 flying hours per year.

b. aircraft fly less than 200 flying hours per month or 2,400 flying hours per year.

c. aircraft fly less than 250 flying hours per month or 3,000 flying hours per year.

d. aircraft fly less than 300 flying hours per month or 3,600 flying hours per year.

31. Low utilization aircraft maintenance program concerns aircraft Environmental Damage (ED) due to corrosion, therefore, ?

a. maintenance scheduled tasks are based interval to flight cycles based.

b. maintenance scheduled tasks are based interval to flying hours based.

c. maintenance scheduled tasks are based interval to calendar based.

d. maintenance scheduled tasks are based interval to landing cycles based.

32. Aircraft maintenance program should be reviewed ?

- a. every year
- b. every other year
- c. every 3 years
- d. every 4 years

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