

Code No: 58017

Set No. 1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

RELIABILITY ENGINEERING-[ME,AME,MIM]

Objective Exam

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Space craft must have components with exponentially high []
a) Reliability factor b) Availability factor c) Profitably factor d) None
2. The reliability of a standby system is _____ that of parallel system []
a) Less than b) Equal c) Greater than d) None
3. A battery unit to the operation theater of a hospital is example for _____ redundancy []
a) Standby b) Component c) Unit d) None
4. Operational availability surface is a _____ surface []
a) Concave b) convex c) flat d) none
5. The manufacturing cost means []
a) Development and production cost b) Reliability Cost
c) Both a & b d) None
6. Objects of reliability management is []
a) Optimize reliability b) Minimize waste
c) Maximum output d) All of the above
7. Availability is []
a) $\frac{\text{uptime}}{\text{uptime} + \text{down time}}$ b) $\frac{\text{uptime} + \text{Down time}}{\text{down time}}$
c) $\frac{\text{Down time}}{\text{uptime} + \text{down time}}$ d) $\frac{\text{uptime} + \text{down time}}{\text{uptime}}$
8. k- out - of - m system popularly known as []
a) Component redundancy b) Unit redundancy
c) Mixed redundancy d) Partial redundancy
9. Which of the following is not Customer cost []
a) Purchasing Cost b) Planning Cost c) operation Cost d) Depreciation Cost
10. An eight cylinder automobile engine for satisfactory performance at least _____ cylinders in operation, in example k- out - of - m systems []
a) Two b) Four c) Six d) Eight

Cont.....2

II Fill in the Blanks:

11. _____ can be improve by the technique of introducing redundancy.
12. In a situation where the safety of human being is involved the quality assurance will be dominated _____ the cost.
13. The _____ is the total time for which a system is down for active maintenance.
14. For optimum cost there is a _____ between redundancy and reliability.
15. A _____ defined as a set of elements, if then removed from block diagram will disconnect input and output.
16. The existence of more than one means of performing a given function is known as _____
17. Probability of success for _____ devices whose operation is limited to a single operating cycle.
18. In component reliability MTTSF stands for _____
19. A plot shows the frequency of failures and the several causative factors is known as _____ chart
20. Component Redundancy is _____ to unit redundancy.

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Set No. 2

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

RELIABILITY ENGINEERING-[ME,AME,MIM]

Objective Exam

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Operational availability surface is a _____ surface []
a) Concave b) convex c) flat d) none
2. The manufacturing cost means []
a) Development and production cost b) Reliability Cost
c) Both a & b d) None
3. Objects of reliability management is []
a) Optimize reliability b) Minimize waste
c) Maximum output d) All of the above
4. Availability is []
a) $\frac{\text{uptime}}{\text{uptime} + \text{down time}}$ b) $\frac{\text{uptime} + \text{Down time}}{\text{down time}}$
c) $\frac{\text{Down time}}{\text{uptime} + \text{down time}}$ d) $\frac{\text{uptime} + \text{down time}}{\text{uptime}}$
5. k- out - of - m system popularly known as []
a) Component redundancy b) Unit redundancy
c) Mixed redundancy d) Partial redundancy
6. Which of the following is not Customer cost []
a) Purchasing Cost b) Planning Cost c) operation Cost d) Depreciation Cost
7. An eight cylinder automobile engine for satisfactory performance at least _____ cylinders in operation, in example k- out - of - m systems []
a) Two b) Four c) Six d) Eight
8. Space craft must have components with exponentially high []
a) Reliability factor b) Availability factor c) Profitably factor d) None
9. The reliability of a standby system is _____ that of parallel system []
a) Less than b) Equal c) Greater than d) None
10. A battery unit to the operation theater of a hospital is example for _____ redundancy []
a) Standby b) Component c) Unit d) None

Cont.....2

II Fill in the Blanks:

11. For optimum cost there is a _____ between redundancy and reliability.
12. A _____ defined as a set of elements, if then removed from block diagram will disconnect input and output.
13. The existence of more than one means of performing a given function is known as _____
14. Probability of success for _____ devices whose operation is limited to a single operating cycle.
15. In component reliability MTTSF stands for _____
16. A plot shows the frequency of failures and the several causative factors is known as _____ chart
17. Component Redundancy is _____ to unit redundancy.
18. _____ can be improve by the technique of introducing redundancy.
19. In a situation where the safety of human being is involved the quality assurance will be dominated _____ the cost.
20. The _____ is the total time for which a system is down for active maintenance.

Code No: 58017

Set No. 3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

RELIABILITY ENGINEERING-[ME,AME,MIM]

Objective Exam

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Objects of reliability management is []
a) Optimize reliability b) Minimize waste
c) Maximum output d) All of the above
2. Availability is []
a) $\frac{\text{uptime}}{\text{uptime} + \text{down time}}$ b) $\frac{\text{uptime} + \text{Down time}}{\text{down time}}$
c) $\frac{\text{Down time}}{\text{uptime} + \text{down time}}$ d) $\frac{\text{uptime} + \text{down time}}{\text{uptime}}$
3. k- out - of - m system popularly known as []
a) Component redundancy b) Unit redundancy
c) Mixed redundancy d) Partial redundancy
4. Which of the following is not Customer cost []
a) Purchasing Cost b) Planning Cost c) operation Cost d) Depreciation Cost
5. An eight cylinder automobile engine for satisfactory performance at least ____ cylinders in operation, in example k- out - of - m systems []
a) Two b) Four c) Six d) Eight
6. Space craft must have components with exponentially high []
a) Reliability factor b) Availability factor c) Profitably factor d) None
7. The reliability of a standby system is _____ that of parallel system []
a) Less than b) Equal c) Greater than d) None
8. A battery unit to the operation theater of a hospital is example for _____ redundancy []
a) Standby b) Component c) Unit d) None
9. Operational availability surface is a _____ surface []
a) Concave b) convex c) flat d) none
10. The manufacturing cost means []
a) Development and production cost b) Reliability Cost
c) Both a & b d) None

II Fill in the Blanks:

11. The existence of more than one means of performing a given function is known as _____
12. Probability of success for _____ devices whose operation is limited to a single operating cycle.
13. In component reliability MTTSF stands for _____
14. A plot shows the frequency of failures and the several causative factors is known as _____ chart
15. Component Redundancy is _____ to unit redundancy.
16. _____ can be improve by the technique of introducing redundancy.
17. In a situation where the safety of human being is involved the quality assurance will be dominated _____ the cost.
18. The _____ is the total time for which a system is down for active maintenance.
19. For optimum cost there is a _____ between redundancy and reliability.
20. A _____ defined as a set of elements, if then removed from block diagram will disconnect input and output.

Set No. 4

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

Objective Exam

Hall Ticket No.

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I. Choose the correct alternative:

- Cont....2**

II Fill in the Blanks:

11. In component reliability MTTSF stands for _____
12. A plot shows the frequency of failures and the several causative factors is known as _____ chart
13. Component Redundancy is _____ to unit redundancy.
14. _____ can be improve by the technique of introducing redundancy.
15. In a situation where the safety of human being is involved the quality assurance will be dominated _____ the cost.
16. The _____ is the total time for which a system is down for active maintenance.
17. For optimum cost there is a _____ between redundancy and reliability.
18. A _____ defined as a set of elements, if then removed from block diagram will disconnect input and output.
19. The existence of more than one means of performing a given function is known as _____
20. Probability of success for _____ devices whose operation is limited to a single operating cycle.