

National Testing Agency

Question Paper Name :	Condition Monitoring and Maintenance Management 28th August 2021 Shift 2
Subject Name :	Condition Monitoring and Maintenance Management
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Condition Monitoring and Maintenance Management

Group Number :	1
Group Id :	94091840
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No

Condition Monitoring and Maintenance Management-1

Section Id :	94091868
Section Number :	1
Section type :	Online

Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	940918111
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 9409182420 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 2 Wrong Marks : 0

Which of the following are maintenance schedule preparation stages.....

1. Sequencing
2. Assignment
3. Work Scheduling
4. All of these

Options :

- 9409188645. 1
- 9409188646. 2
- 9409188647. 3
- 9409188648. 4

Question Number : 2 Question Id : 9409182421 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 2 Wrong Marks : 0

Through the compensatory off (c'off) policy

1. Availability and Maintainability of the machines can be improved
2. It reduces the absenteeism of the workmen
3. Workers are de-motivated to work
4. None of these

Options :

9409188649. 1

9409188650. 2

9409188651. 3

9409188652. 4

Question Number : 3 Question Id : 9409182422 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Scheduling.....X..... is done using Johnson's Rule.

1. n jobs X 1 machine
2. n jobs X 2 machines
3. n jobs X 3 machines
4. All of these

Options :

9409188653. 1

9409188654. 2

9409188655. 3

9409188656. 4

Question Number : 4 Question Id : 9409182423 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The abbreviation of SPT is..... .

1. Simple Predictive Technique
2. Simple Process Time
3. Shortest Process Time
4. Shortest Predictive Technique

Options :

9409188657. 1

9409188658. 2

9409188659. 3

9409188660. 4

Question Number : 5 Question Id : 9409182424 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Scheduling.....X..... is done using Jackson's Rule.

1. n jobs X 1 machine
2. n jobs X 2 machines
3. n jobs X 3 machines
4. All of these

Options :

9409188661. 1

9409188662. 2

9409188663. 3

9409188664. 4

Question Number : 6 Question Id : 9409182425 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following are unplanned maintenance strategies.....

1. Breakdown Maintenance
2. Emergency Maintenance
3. No maintenance
4. All of these

Options :

9409188665. 1

9409188666. 2

9409188667. 3

9409188668. 4

Question Number : 7 Question Id : 9409182426 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The objective of Maintenance Prevention is

1. Replacement of Parts
2. Repair of Machine
3. Greasing of the Machine
4. None of these

Options :

9409188669. 1

9409188670. 2

9409188671. 3

9409188672. 4

Question Number : 8 Question Id : 9409182427 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Themaintenance is carried out when shortage of materials.....

1. Break down maintenance
2. Preventive maintenance
3. Shut down maintenance
4. All of these

Options :

9409188673. 1

9409188674. 2

9409188675. 3

9409188676. 4

Question Number : 9 Question Id : 9409182428 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The following is not a classification of maintenance.

1. Corrective maintenance
2. Timely Maintenance
3. Scheduled Maintenance
4. Preventive Maintenance

Options :

9409188677. 1

9409188678. 2

9409188679. 3

9409188680. 4

Question Number : 10 Question Id : 9409182429 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Belt of an electric motor is broken, it needs.....

1. Corrective Maintenance
2. Scheduled Maintenance
3. Preventive Maintenance
4. Timely Maintenance

Options :

9409188681. 1

9409188682. 2

9409188683. 3

9409188684. 4

Question Number : 11 Question Id : 9409182430 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The plant maintenance activity comprises of

1. Installation, Erection and Commissioning of machines
2. Prevention of the failures of the machines
3. Restoring the condition of the machines in case of any failures
4. All of these

Options :

9409188685. 1

9409188686. 2

9409188687. 3

9409188688. 4

Question Number : 12 Question Id : 9409182431 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Another name of Maintenance Department

1. Engineering Department
2. Plant Engineering Department
3. Processing Department
4. None of these

Options :

9409188689. 1

9409188690. 2

9409188691. 3

9409188692. 4

Question Number : 13 Question Id : 9409182432 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

When a machine fails to perform the intended function..... type of maintenance is applicable.

1. Breakdown Maintenance
2. Preventive maintenance
3. Corrective maintenance
4. All of these

Options :

9409188693. 1

9409188694. 2

9409188695. 3

9409188696. 4

Question Number : 14 Question Id : 9409182433 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Design out Maintenance Means.....

1. Updation of technological features of machines
2. Replacing the old machines
3. Repairing the machine and make available for production purpose
4. All of these

Options :

9409188697. 1

9409188698. 2

9409188699. 3

9409188700. 4

Question Number : 15 Question Id : 9409182434 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The maintenance crew regularly carryout inspection, overhauls, lubrication etc in known as

.....

1. Productive maintenance
2. Preventive maintenance
3. Break down maintenance
4. Predictive maintenance

Options :

9409188701. 1

9409188702. 2

9409188703. 3

9409188704. 4

Question Number : 16 Question Id : 9409182435 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

In the Machine Life Cycle: During old age phase of wear out failure the trend of failure rate will be.....

1. Increasing
2. Decreasing
3. Constant
4. None of these

Options :

9409188705. 1

9409188706. 2

9409188707. 3

9409188708. 4

Question Number : 17 Question Id : 9409182436 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

In the Machine Life Cycle: During Infancy phase of early failure the cost of failures will be.....

1. Low
2. Medium to High
3. High
4. None of these

Options :

9409188709. 1

9409188710. 2

9409188711. 3

9409188712. 4

Question Number : 18 Question Id : 9409182437 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Thetrend implies that the machine is improving with time.

1. No Trend
2. Negative Trend
3. Positive Trend
4. All of these

Options :

9409188713. 1

9409188714. 2

9409188715. 3

9409188716. 4

Question Number : 19 Question Id : 9409182438 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Thetrend implies that the machine is deteriorating with time.

1. Positive Trend
2. High Trend
3. No Trend
4. Negative Trend

Options :

9409188717. 1

9409188718. 2

9409188719. 3

9409188720. 4

Question Number : 20 Question Id : 9409182439 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Replacement of Tube Lights in the industry is considered as.....

1. Group Replacement Policy
2. Individual Replacement Policy
3. Both group replacement policy and individual replacement policy
4. None of these

Options :

9409188721. 1

9409188722. 2

9409188723. 3

9409188724. 4

Question Number : 21 Question Id : 9409182440 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The reliability of four components connected in a parallel set up are given as $R_1 = 0.6$, $R_2 = 0.7$, $R_3 = 0.8$ and $R_4 = 0.9$. Over all reliability of the system is

1. 0.99
2. 0.96
3. 0.94
4. None of the above

Options :

9409188725. 1

9409188726. 2

9409188727. 3

9409188728. 4

Question Number : 22 Question Id : 9409182441 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Find the reliability of the following combination of the components whose reliabilities are shown in the following Figure 1.

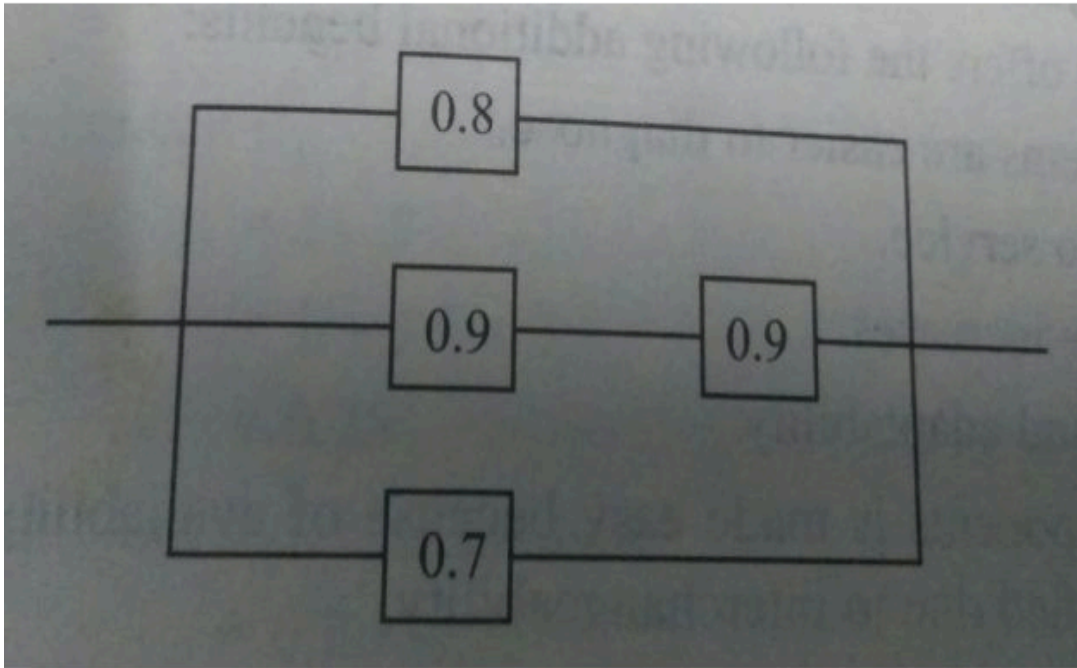


Figure 1: Combined System

1. 0.87
2. 0.88
3. 0.97
4. 0.98

Options :

- 9409188729. 1
- 9409188730. 2
- 9409188731. 3
- 9409188732. 4

Question Number : 23 Question Id : 9409182442 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Consider a system with the combined system as shown in Figure 2. The reliabilities of each of the element is given in the figure 2 itself. Find the overall reliability of the system.

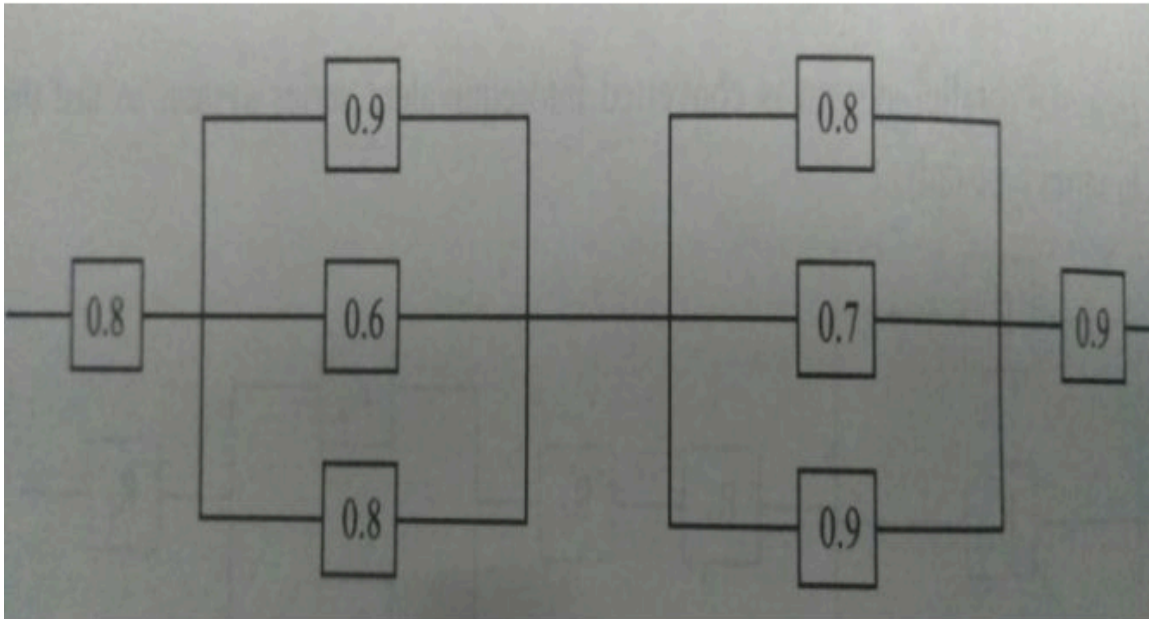


Figure 2: Combined System

1. 0.701
2. 0.709
3. 0.803
4. 0.806

Options :

9409188733. 1
9409188734. 2
9409188735. 3
9409188736. 4

Question Number : 24 Question Id : 9409182443 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The cumulative operating time is found to be 50 hours in a system consisting of 100 components each having mean time between failures (MTBF) of 5000 hours. Find the reliability of the system.

1. 0. 701
2. 0. 803
3. 0. 905
4. 0. 908

Options :

9409188737. 1

9409188738. 2

9409188739. 3

9409188740. 4

Question Number : 25 Question Id : 9409182444 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

A complex system have various components has mean time between failure(MTBF) 100 hours and mean time to repair (MTTR) is of 120 minutes. Find the availability system.

1. 0. 9202
2. 0. 9421
3. 0. 9610
4. 0. 9804

Options :

9409188741. 1

9409188742. 2

9409188743. 3

9409188744. 4

Question Number : 26 Question Id : 9409182445 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statement is/are correct about ABC Analysis?

1. A- Class Inventory are most valuable and require more attention
2. B- Class Inventory are intermediate and requires moderate care
3. C- Class Inventory are least valuable and does not need much attention
4. All of these

Options :

9409188745. 1

9409188746. 2

9409188747. 3

9409188748. 4

Question Number : 27 Question Id : 9409182446 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The costs of the A-Class items are about

1. 70%
2. 10%
3. 20%
4. None of these

Options :

9409188749. 1

9409188750. 2

9409188751. 3

9409188752. 4

Question Number : 28 Question Id : 9409182447 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

In X-Y-Z Analysis, Z indicates.....

1. Low value items
2. High value items
3. Medium value items
4. All of these

Options :

9409188753. 1

9409188754. 2

9409188755. 3

9409188756. 4

Question Number : 29 Question Id : 9409182448 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The abbreviation of ISO is..... .

1. International Organisation for Standardisation
2. Indian Organisation for Standardisation
3. International Standards Organisation
4. Indian Standards Organisation

Options :

9409188757. 1

9409188758. 2

9409188759. 3

9409188760. 4

Question Number : 30 Question Id : 9409182449 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

C.I.N Analysis is mainly used for

1. Spare Parts Classification
2. Products Classification
3. Machinery Classification
4. All of these

Options :

9409188761. 1

9409188762. 2

9409188763. 3

9409188764. 4

Question Number : 31 Question Id : 9409182450 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Some mediocre agencies provide the repair and a maintenance services is known as.....?

1. Time based maintenance
2. Contractual maintenance
3. Reliability centered maintenance
4. None of these

Options :

9409188765. 1

9409188766. 2

9409188767. 3

9409188768. 4

Question Number : 32 Question Id : 9409182451 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The maintenance philosophy which uses statistics and probability concepts is known as

1. Reliability Centered Maintenance (RCM)
2. Condition Based Maintenance (CBM)
3. Time Based Maintenance
4. None of these

Options :

9409188769. 1

9409188770. 2

9409188771. 3

9409188772. 4

Question Number : 33 Question Id : 9409182452 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

A preventive maintenance carried out at irregular intervals based on the actual condition of the machine is

1. Time based maintenance
2. Failure based maintenance
3. Contractual maintenance
4. Condition based maintenance

Options :

9409188773. 1

9409188774. 2

9409188775. 3

9409188776. 4

Question Number : 34 Question Id : 9409182453 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The are designed to measure ability of the equipment to withstand shock loads.

1. Creep Tests
2. Impact Tests
3. Static Tests
4. Cyclic Tests

Options :

9409188777. 1

9409188778. 2

9409188779. 3

9409188780. 4

Question Number : 35 Question Id : 9409182454 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which one of the following is/are belongs to Non Destructive Tests (NDT)

1. Magnetic particle testing
2. Eddy current inspection
3. Ultrasonic Inspection
4. All of these

Options :

9409188781. 1

9409188782. 2

9409188783. 3

9409188784. 4

Question Number : 36 Question Id : 9409182455 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is/are known as pillars of condition monitoring?

1. Diagnosis
2. Prognosis
3. Detection
4. All of these

Options :

9409188785. 1

9409188786. 2

9409188787. 3

9409188788. 4

Question Number : 37 Question Id : 9409182456 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

MIS in condition based maintenance system is known as

1. Manager Input System
2. Maintenance Information System
3. Manpower Information System
4. None of the above

Options :

9409188789. 1

9409188790. 2

9409188791. 3

9409188792. 4

Question Number : 38 Question Id : 9409182457 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following method is used to check the functional behavior of the machine parts?

1. Visual Monitoring
2. Wear Debris Monitoring
3. Performance Monitoring
4. Programme Monitoring

Options :

9409188793. 1

9409188794. 2

9409188795. 3

9409188796. 4

Question Number : 39 Question Id : 9409182458 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following condition monitoring pillar concentrates on knowing "What" of the origin of the faults?

1. Diagnosis
2. Detection
3. Prognosis
4. Programme

Options :

9409188797. 1

9409188798. 2

9409188799. 3

9409188800. 4

Question Number : 40 Question Id : 9409182459 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which one of the following is/are belongs to Trend Monitoring levels

1. Failure Level
2. Shutdown Level
3. Alarm Level
4. All of these

Options :

9409188801. 1

9409188802. 2

9409188803. 3

9409188804. 4

Question Number : 41 Question Id : 9409182460 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Full form of TPM is.....

1. Total Production Management
2. Total Preventive Maintenance
3. Total Productive Maintenance
4. All of these

Options :

9409188805. 1

9409188806. 2

9409188807. 3

9409188808. 4

Question Number : 42 Question Id : 9409182461 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Full form of OEE is.....

1. Original Equipment Efficiency
2. Overall Equipment Effectiveness
3. Organized Equipment Energy
4. None of these

Options :

9409188809. 1

9409188810. 2

9409188811. 3

9409188812. 4

Question Number : 43 Question Id : 9409182462 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The objectives of planned maintenance is/are

1. To achieve zero equipment breakdown
2. To maximize maintenance cost
3. To minimize the equipment performance
4. All of these

Options :

9409188813. 1

9409188814. 2

9409188815. 3

9409188816. 4

Question Number : 44 Question Id : 9409182463 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

KAIZEN means.....

1. Zero Maintenance
2. Zero defect
3. Continuous Improvement
4. All of these

Options :

9409188817. 1

9409188818. 2

9409188819. 3

9409188820. 4

Question Number : 45 Question Id : 9409182464 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

5S Kaizen SHITSUKE means.....

1. Sort
2. Scrub
3. Systematize
4. Standardize

Options :

9409188821. 1

9409188822. 2

9409188823. 3

9409188824. 4

Question Number : 46 Question Id : 9409182465 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Theare the theoretical minimum and maximum values of RPN in a FEMCA study.

1. 1 and 1000
2. 2 and 1000
3. 1 and 2000
4. 2 and 2000

Options :

9409188825. 1

9409188826. 2

9409188827. 3

9409188828. 4

Question Number : 47 Question Id : 9409182466 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is/are the machinery maintenance technique?

1. Preventive
2. Predictive
3. Reactive
4. All of these

Options :

9409188829. 1

9409188830. 2

9409188831. 3

9409188832. 4

Question Number : 48 Question Id : 9409182467 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Condition Monitoring is done in.....

1. Routine Maintenance
2. Preventive Maintenance
3. Predictive Maintenance
4. Breakdown Maintenance

Options :

9409188833. 1

9409188834. 2

9409188835. 3

9409188836. 4

Question Number : 49 Question Id : 9409182468 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Type of fault developed in electrical machines is

1. Magnetic Fault
2. Mechanical Fault
3. Electrical Fault
4. All of these

Options :

9409188837. 1

9409188838. 2

9409188839. 3

9409188840. 4

Question Number : 50 Question Id : 9409182469 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Causes of failure of Electrical Machines are

1. External Causes
2. Internal Causes
3. External causes and Internal causes
4. None of these

Options :

9409188841. 1

9409188842. 2

9409188843. 3

9409188844. 4