National Testing Agency

Quality Engineering and Management 25th March 2021 Shift 1

Subject Name: Quality Engineering and Management

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Quality Engineering and Management

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Quality Engineering and Management-1

Section Id: 864351554

Section Number :

Section type: Online
Mandatory or Optional: Mandatory

Number of Questions: 100

Number of Questions to be attempted:100Section Marks:100Mark As Answered Required?:YesSub-Section Number:1

Sub-Section Id: 864351600

Question Shuffling Allowed: Yes

Question Number: 1 Question Id: 86435111380 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The degree of excellence of a product is called:

- 1. Quantity
- 2. Quality
- 3. Variety
- 4. Validity

Options:

86435137403.1

86435137404. 2

86435137405.3

86435137406.4

Question Number: 2 Question Id: 86435111381 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

According to Juran, quality is defined as the degree of:

- 1. Significance of an item in its production chain
- 2. Availability of product in the market
- 3. Satisfying the wants of the customer or conformance to design/specifications
- 4. Fitness for the purpose

Options:

86435137407.1

86435137408. 2

86435137409.3

86435137410.4

Question Number: 3 Question Id: 86435111382 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

According to ISO 9000, " Quality is defined as the totality of features and characteristics of a product or service that can bear upon its ability to satisfy the ------ needs of the customer.

- 1. Online or Offline
- 2. Intended or Stated
- 3. Internal or External
- 4. National or International

Options:

86435137411.1

86435137412. 2

86435137413.3

86435137414. 4

Question Number: 4 Question Id: 86435111383 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Accuracy means:

- 1. Degree of closeness to the standard dimension
- 2. Repeatability of producing a dimension
- 3. Significance of the dimension in a design
- 4. Comparison of a dimension with a pilot product

Options:

86435137416. 2

86435137417.3

86435137418.4

Question Number: 5 Question Id: 86435111384 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

According to Japanese philosophy, quality is assessed in terms of:

- 1. Conformance to standards
- 2. Fitness for the purpose
- 3. Customer satisfaction
- 4. Durability

Options:

86435137419.1

86435137420. 2

86435137421.3

86435137422. 4

Question Number: 6 Question Id: 86435111385 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The method of inspection carried out by an inspector who goes on rounds at the area of work and inspects at the operation itself is known as:

- 1. Patrolling inspection
- 2. Outward inspection
- 3. Inward inspection
- 4. Routine inspection

Options:

86435137423.1

Question Number: 7 Question Id: 86435111386 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The method of inspection carried out by an inspector after all the operations are completed and just before delivery is known as:

- 1. Patrolling inspection
- 2. Outward Inspection
- 3. Inward inspection
- 4. Routine inspection

Options:

86435137427. 1

86435137428. 2

86435137429.3

86435137430.4

Question Number: 8 Question Id: 86435111387 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

_____ cost of quality decreases with increase in the number of quality control inspectors.

- 1. Defect prevention
- 2. Defect detection
- 3. Rejection
- 4. All of the above

Options:

86435137431.1

86435137432. 2

Question Number: 9 Question Id: 86435111388 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the cost of prevention of defects increases, cost of which of the following decreases?

- 1. Rejection
- 2. Detection
- 3. Warranty claims
- 4. All of the above

Options:

86435137435.1

86435137436. 2

86435137437.3

86435137438.4

Question Number: 10 Question Id: 86435111389 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The 14 points of management obligations of quality were given by:

- 1. Edward Deming
- 2. J.M. Juran
- 3. Taguchi
- 4. W. A. Shewhart

Options:

86435137439. 1

86435137440. 2

86435137441.3

Question Number: 11 Question Id: 86435111390 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The concept of zero defect was the contribution of :

- 1. Edward Deming
- 2. Philip Crosby
- 3. Taguchi
- 4. W. A. Shewhart

Options:

86435137443.1

86435137444. 2

86435137445.3

86435137446.4

Question Number: 12 Question Id: 86435111391 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The concept of Quality Maturity Grid was given by :

- 1. Edward Deming
- 2. Philip Crosby
- 3. Taguchi
- 4. W. A. Shewhart

Options:

86435137447. 1

86435137448. 2

86435137449.3

86435137450.4

Question Number: 13 Question Id: 86435111392 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The concept of TQM was first proposed by:

- 1. Edward Deming
- 2. J. M. Juran
- 3. Taguchi
- 4. W. A. Shewhart

Options:

86435137451. 1

86435137452. 2

86435137453.3

86435137454. 4

Question Number: 14 Question Id: 86435111393 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following concepts of quality is NOT a work of Edward Deming?

- 1. Common cause variation
- 2. P-D-C-A cycle
- 3. Zero defects
- 4. 14 points of management obligations

Options:

86435137455.1

86435137456. 2

86435137457. 3

86435137458.4

Question Number: 15 Question Id: 86435111394 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The father of SQC is:

- 1. Edward Deming
- 2. J. M. Juran
- 3. Taguchi
- 4. W. A. Shewhart

Options:

86435137459.1

86435137460. 2

86435137461.3

86435137462.4

Question Number: 16 Question Id: 86435111395 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The ability to achieve measurable results from a combination of machines, tools, methods, materials and people engaged in production is called:

- 1. Average Outgoing Quality Level
- 2. Statistical Quality
- 3. Process Capability
- 4. Control Limits

Options:

86435137463.1

86435137464. 2

86435137465.3

86435137466.4

Question Number: 17 Question Id: 86435111396 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The SQC charts and process capability curve are based on the

- 1. Normal Curve
- 2. Poisson Curve
- 3. Exponential Curve
- 4. Weibul Curve

Options:

86435137467.1

86435137468. 2

86435137469.3

86435137470.4

Question Number: 18 Question Id: 86435111397 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The limits specifying probability of acceptance of product parameter in a lot are called

- 1. Tolerence Limits
- 2. Control Limits
- 3. Warning Limits
- 4. Confidence Limits

Options:

86435137471.1

86435137472. 2

86435137473.3

86435137474. 4

Question Number: 19 Question Id: 86435111398 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The limits used to specify the quality of a process are called

- 1. Tolerence Limits
- 2. Control Limits
- 3. Warning Limits
- 4. Confidence Limits

Options:

86435137475.1

86435137476. 2

86435137477.3

86435137478.4

Question Number: 20 Question Id: 86435111399 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following is one of the seven SQC tools?

- 1. Molier Chart
- 2. Control Chart
- 3. Stratification Chart
- 4. Organisation Chart

Options:

86435137479. 1

86435137480. 2

86435137481.3

86435137482.4

Question Number: 21 Question Id: 86435111400 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The basic SQC tool used to identify and prioritize the problem is

- 1. Flow charts
- 2. Control Charts
- 3. Run Charts
- 4. Pareto Analysis

Options:

86435137483.1

86435137484. 2

86435137485.3

86435137486.4

 $Question\ Number: 22\ Question\ Id: 86435111401\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

Correct Marks: 1 Wrong Marks: 0

The basic SQC tools used to diagnose the problem is

- 1. Check lists
- 2. Cause and Effect Diagram
- 3. Run Charts
- 4. Control Charts

Options:

86435137487. 1

86435137488. 2

86435137489.3

86435137490.4

Question Number: 23 Question Id: 86435111402 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The histogram as a qualiy improvement technique is used to

- 1. Understand the situation or the problem
- 2. Collect the data and find the facts
- 3. Identify and prioritize the problem
- 4. Diagnose the problem

Options:

86435137491.1

86435137492. 2

86435137493.3

86435137494.4

Question Number: 24 Question Id: 86435111403 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The other name of pie diagram is

- 1. Scatter diagram
- 2. Fishbone diagram
- 3. Bathtub curve
- 4. Pareto Chart

Options:

86435137495.1

86435137496. 2

86435137497.3

86435137498.4

Question Number: 25 Question Id: 86435111404 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Pareto chart can be constructed with

- 1. Continuous data only
- 2. Discrete data only
- 3. Discrete and continuous data
- 4. Neither continuous nor discrete data

Options:

86435137499.1

86435137500.2

86435137501.3

86435137502.4

Question Number: 26 Question Id: 86435111405 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

"Vital few are found from trivial many". This statement can be derived from:

- 1. Juran's Quality Costs
- 2. Pareto's law
- 3. Taguchi's TQM
- 4. Deming's PDCA

Options:

86435137503.1

86435137504. 2

86435137505.3

86435137506.4

Question Number: 27 Question Id: 86435111406 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

According to Pareto, in any given lot of defectives _____ number of defects will be found on____ number of defectives.

- 1. Less, less
- 2. Less, more
- 3. More, more
- 4. Any, any

Options:

86435137507. 1

86435137508. 2

86435137509.3

86435137510.4

Question Number: 28 Question Id: 86435111407 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Identify the correct match.

- 1. Cause and effect diagram -- Ishikawa
- 2. Pie Chart -- Taguchi
- 3. Zero Defect -- Juran
- 4. Control Chart -- Pareto

Options:

86435137511.1

86435137512. 2

86435137513.3

86435137514.4

Question Number: 29 Question Id: 86435111408 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Identify the correct match.

- 1. Inventory Management -- Taguchi
- 2. Quality Managment-- Juran and Deming
- 3. Work Study-- Wilson and Harris
- 4. TQM-- Taylor and Gilbreth

Options:

86435137515. 1

86435137516. 2

86435137517. 3

86435137518.4

Question Number: 30 Question Id: 86435111409 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The Fishbone Diagram is used to

- 1. Understand the situation or the problem
- 2. Collect the data and find the facts
- 3. Identify and prioritize the problem
- 4. Diagnose the problem

Options:

86435137519.1

86435137520. 2

86435137521.3

86435137522. 4

Question Number: 31 Question Id: 86435111410 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The Scatter Diagram is used to

- 1. Develop the situation or the alternative solution to the problem
- 2. Identify and prioritize the problem
- 3. Collect the data and find the facts
- 4. Diagnose the problem

Options:

86435137523.1

86435137524. 2

86435137525.3

86435137526. 4

Question Number: 32 Question Id: 86435111411 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The Control Charts are used to

- 1. Understand the situation of the problem
- 2. Monitor the implementation
- 3. Develop the situation or the alternative solution to the problem
- 4. Identify and prioritize the problem

Options:

86435137527. 1

86435137528. 2

86435137529.3

86435137530.4

Question Number: 33 Question Id: 86435111412 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The Fishbone Diagram was introduced by

- 1. Juran
- 2. Ishikawa
- 3. Pareto
- 4. Taguchi

Options:

86435137531.1

86435137532. 2

86435137533.3

86435137534.4

Question Number: 34 Question Id: 86435111413 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The Cause and Effect Diagram is also known as

- 1. String Diagram
- 2. Ishikawa Diagram
- 3. Learning Curve
- 4. REL Sheets

Options:

86435137535.1

86435137536. 2

86435137537.3

86435137538.4

Question Number: 35 Question Id: 86435111414 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which of the following is NOT included in the seven basic tools of SQC?

- 1. Run Chart
- 2. Cause and Effect Diagram
- 3. Learning Curve
- 4. Check Sheets

Options:

86435137539.1

86435137540. 2

86435137541.3

86435137542. 4

Question Number: 36 Question Id: 86435111415 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which of the following Control Charts is used for controlling the quality of attributes?

- 1. Mean range chart
- 2. p-chart
- 3. c-chart
- 4. np-chart

Options:

86435137543.1

86435137544. 2

86435137545.3

86435137546.4

Question Number: 37 Question Id: 86435111416 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Range chart is used for controlling the quality of

- 1. Variables
- 2. Attributes
- 3. Variety
- 4. Any type of data

Options:

86435137547. 1

86435137548. 2

86435137549.3

86435137550.4

Question Number: 38 Question Id: 86435111417 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

c-Chart is used for controlling the quality of

- 1. Variables
- 2. Attributes
- 3. Variety
- 4. Any type of data

Options:

86435137551.1

86435137552. 2

86435137553.3

86435137554. 4

Question Number: 39 Question Id: 86435111418 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The risk of "rejecting an acceptable lot" is called

- 1. Producer's Risk
- 2. Consumer's Risk
- 3. Employee's Risk
- 4. Business Risk

Options:

86435137555. 1

86435137556. 2

86435137557.3

86435137558.4

Question Number: 40 Question Id: 86435111419 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The maximum limit of a good lot that makes the lot not to be rejected is called

- 1. Acceptance Quality Level (AQL)
- 2. Lot Tolerance percent defectives (LTPD)
- 3. Average outgoing quality level (AOQL)
- 4. Indifference Quality Level (IQL)

Options:

86435137559. 1

86435137560. 2

86435137561.3

86435137562.4

Question Number: 41 Question Id: 86435111420 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The maximum limit of a bad lot that makes the lot acceptable is called

- 1. Acceptance Quality Level(AQL)
- 2. Lot Tolerance Percent Defectives (LTPD)
- 3. Average Outgoing Quality Level (AOQL)
- 4. Indifference Quality Level (IQL)

Options:

86435137563.1

86435137564. 2

86435137565. 3

86435137566. 4

Question Number: 42 Question Id: 86435111421 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The maximum possible value of the average percentage defectives in the outgoing products after inspection and rectification is called

- 1. Acceptance Quality Level (AQL)
- 2. Lot Tolerance Percent Defectives (LTPD)
- 3. Average Outgoing Quality Level (AOQL)
- 4. Indifference Quality Level (IQL)

Options:

86435137567. 1

86435137568. 2

86435137569. 3

86435137570.4

Question Number: 43 Question Id: 86435111422 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The ISO series that specifies guidelines of testing and inspection of the product is

- 1. ISO 9001
- 2. ISO 9002
- 3. ISO 9003
- 4. ISO 9004

Options:

86435137571.1

86435137572. 2

86435137573.3

86435137574.4

Question Number: 44 Question Id: 86435111423 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The guidlines of quality standards in design, manufacture, installation and after sales and service of a product are described under

- 1. ISO 9001
- 2. ISO 9002
- 3. ISO 9003
- 4. ISO 9004

Options:

86435137575.1

86435137576. 2

86435137577.3

86435137578.4

Question Number: 45 Question Id: 86435111424 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

ISO 9001 certification is most suitable for which one of the following types of product?

- 1. A bath soap manufacturer
- 2. A motorbike manufacturer
- 3. A pathological laboratory
- 4. A charitable trust

Options:

86435137579.1

86435137580. 2

86435137581.3

86435137582. 4

Question Number: 46 Question Id: 86435111425 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

ISO 9003 certification is most suitable for which one of the following types of product?

- 1. A bath soap manufacturer
- 2. A motobike manufacturer
- 3. A pathological laboratory
- 4. A charitable trust

Options:

86435137583.1

86435137584. 2

86435137585.3

86435137586.4

Question Number: 47 Question Id: 86435111426 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

As per ISO series of guidelines, "an investigation of the level of quality being achieved" is termed as

- 1. Quality Assessment
- 2. Quality Assurance
- 3. Quality Control
- 4. Quality Circle

Options:

86435137587. 1

86435137588. 2

86435137589. 3

86435137590.4

Question Number: 48 Question Id: 86435111427 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Quality of Design is concerned with

- 1. Tightness of Specifications
- 2. Machine Specifications
- 3. Process Specifications
- 4. None of the above

Options:

86435137591.1

86435137592. 2

86435137593.3

86435137594.4

Question Number: 49 Question Id: 86435111428 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The purpose of quality assurance is

- 1. The conformance of quality
- 2. The inspection of a product quality
- 3. The customer satisfaction
- 4. The proof that product is fit for the use

Options:

86435137595. 1

86435137596. 2

86435137597.3

86435137598.4

Question Number: 50 Question Id: 86435111429 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

TQM stands for

- 1. Total Quality Manufacturing
- 2. Total Quality Measurement
- 3. Total Quality Management
- 4. None of the above

Options:

86435137599.1

86435137600.2

86435137601.3

86435137602.4

Question Number: 51 Question Id: 86435111430 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The concept Kaizen in TQM explains

- 1. Gradual and continuous improvement
- 2. Zero defect implementation
- 3. 100% Inspection
- 4. All of the above

Options:

86435137603.1

86435137604. 2

86435137605.3

86435137606.4

Question Number: 52 Question Id: 86435111431 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Kanban Just in Time system strives to

- 1. Improve production
- 2. Reduce costs
- 3. Eliminate Waste
- 4. None of the above

Options:

86435137607.1

86435137608. 2

86435137609.3

86435137610.4

Question Number: 53 Question Id: 86435111432 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The percentage of Cost of Poor Quality (COPQ) in most companies is

- 1.5-10%
- 2. 20-40%
- 3.50-60%
- 4. None of the above

Options:

86435137611.1

86435137612. 2

86435137613.3

86435137614.4

Question Number: 54 Question Id: 86435111433 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

PDPC stands for

- 1. Program Development Planning Chart
- 2. Program Direction Planning Chart
- 3. Process Development Program Chart
- 4. Process Decision Program Chart

Options:

86435137615.1

86435137616. 2

86435137617.3

86435137618.4

Question Number: 55 Question Id: 86435111434 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The abbrevation ISO stands for

- 1. Indian Standard of Organisation
- 2. Indian Organisation for Standards
- 3. International Organisation for Standardization
- 4. International Standards of Organisation

Options:

86435137619.1

86435137620. 2

86435137621.3

86435137622. 4

Question Number: 56 Question Id: 86435111435 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The ISO series of guidelines associated with environmental aspects is

- 1. ISO 14000
- 2. ISO 9000
- 3. ISO 9000-2015
- 4. QS 9000

Options:

86435137623.1

86435137624. 2

86435137625.3

86435137626.4

Question Number: 57 Question Id: 86435111436 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

ISO series that specifies guidelines of a product from the design to discard is

- 1. ISO 9001
- 2. ISO 9002
- 3. ISO 9003
- 4. ISO 9004

Options:

86435137627.1

86435137628. 2

86435137629.3

86435137630.4

Question Number: 58 Question Id: 86435111437 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A bag contains four white balls and a second bag contains three of each colour. A bag is selected at random and a ball is then drawn from the bag chosen. What is the probability that the ball is white?

- 1. 1/12
- 2. 5/12
- 3.7/12
- 4. 11/12

Options:

86435137631.1

86435137632. 2

86435137633.3

86435137634.4

 $Question\ Number: 59\ Question\ Id: 86435111438\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

A machine operator has obtained the following measurements:

SAMPLES

| 1 | 2 | 3 | 4 |
|-----|-----|-----|-----|
| 4.5 | 4.6 | 4.5 | 4.7 |
| 4.2 | 4.5 | 4.6 | 4.6 |
| 4.2 | 4.4 | 4.4 | 4.8 |
| 4.3 | 4.7 | 4.4 | 4.5 |
| 4.3 | 4.3 | 4.6 | 4.9 |

Using the limits 4.14 and 4.86, what are the sample means beyond the control limits?

- 1. Samples 1 and 3
- 2. Samples 2 and 4
- 3. Samples 3 and 2
- 4. None of the above

Options:

86435137635.1

86435137636. 2

86435137637. 3

86435137638.4

Question Number: 60 Question Id: 86435111439 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Fill in the blank

The____ techniques identify and control the parameters or variables, which have a potential influence on the output of a process.

- 1. Design of Experiments(DoE)
- 2. Probability Theory
- 3. Testing Hypothesis
- 4. Six Sigma

Options:

86435137639.1

86435137640. 2

86435137641.3

86435137642.4

Question Number: 61 Question Id: 86435111440 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In an experimental design, all combinations of the factors which are to be tested are considered and the best combination is found out in which method?

- 1. The full factorial method
- 2. One factor at a time method
- 3. The fractional factorial method
- 4. None of the methods

Options:

86435137643.1

86435137644. 2

86435137645.3

Question Number: 62 Question Id: 86435111441 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which one of the following is another quality improvement tool to improve the performance of the organisation by comparing it to the best practices of a successful organisation?

- 1. SQC
- 2. Acceptance Sampling
- 3. Benchmarking
- 4. Six Sigma

Options:

86435137647. 1

86435137648. 2

86435137649.3

86435137650.4

Question Number: 63 Question Id: 86435111442 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The QFD Team must answer which of the following?

- 1. WHO are the customers?
- 2. WHAT do the customers need?
- 3. HOW will the needs be satisfied?
- 4. All of the above.

Options:

86435137651.1

86435137652. 2

86435137653.3

86435137654.4

Question Number: 64 Question Id: 86435111443 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A set of powerful tools developed in Japan to transfer the concept of quality control from the manufacturing process into the new product dvelopment process is known as

- 1. Design of Experiments (DoE)
- 2. House of Quality (HoQ)
- 3. Quality Function Development (QFD)
- 4. None of the above

Options:

86435137655.1

86435137656. 2

86435137657.3

86435137658.4

 $Question\ Number: 65\ Question\ Id: 86435111444\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

Correct Marks: 1 Wrong Marks: 0

Fill in the blank

The objectives of FMECA is to identify all _____ modes in a system design.

- 1. Success
- 2. Rejection
- 3. Failure
- 4. Acceptance

Options:

86435137659. 1

86435137660. 2

86435137661.3

Question Number: 66 Question Id: 86435111445 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

What is the full form of RPN?

1. Risk Process Number

- 2. Risk Priority Number
- 3. Risk Project Number
- 4. Risk Prevention Number

Options:

86435137663.1

86435137664. 2

86435137665.3

86435137666. 4

Question Number: 67 Question Id: 86435111446 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Design FMEA should be initiated before or at the design concept finalisation at which level?

- 1. Component level
- 2. Sub-system level
- 3. System level
- 4. All of the above

Options:

86435137667. 1

86435137668. 2

86435137669.3

86435137670.4

Question Number: 68 Question Id: 86435111447 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Consider a system having 2 components a and b connected in Series and their reliabilities as 65% and 50%, respectively. What is the probability that the whole system would work?

1. 0.45

2. 0.42

3. 0.35

4. 0.32

Options:

86435137671.1

86435137672. 2

86435137673.3

86435137674.4

Question Number: 69 Question Id: 86435111448 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A system having three components A, B, and C are connected in Series and their reliabilities are 0.6, 0.9 and 0.7 respectively. Determine the overall reliability of the system.

1.0.57

2. 0.47

3. 0.37

4. 0.27

Options:

86435137675.1

86435137676. 2

86435137677.3

86435137678. 4

 $Question\ Number: 70\ Question\ Id: 86435111449\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

A system has a mean time between failures of 92 hours and a mean time to repair of 12 hours. What is the inherent availability?

1.78%

2.88%

3.90%

4.92%

Options:

86435137679.1

86435137680. 2

86435137681.3

86435137682.4

Question Number: 71 Question Id: 86435111450 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which one of the following are NOT the members of the company which is producing the products?

- 1. Internal Customers
- 2. External Customers
- 3. Both 1 and 2
- 4. Neither 1 nor 2

Options:

86435137683.1

86435137684. 2

86435137685.3

86435137686.4

 $Question\ Number: 72\ Question\ Id: 86435111451\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

Fill in the blank

A _____ of activities will greatly help in identifying the internal customers.

- 1. Control Charts
- 2. C-Charts
- 3. P-Charts
- 4. Flow Chart

Options:

86435137687. 1

86435137688. 2

86435137689.3

86435137690.4

Question Number: 73 Question Id: 86435111452 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which one of the following is known as an example of external failure costs?

- 1. Customer Service Costs
- 2. New Product Development Costs
- 3. Quality Planning Costs
- 4. Re-Inspection Costs

Options:

86435137691.1

86435137692. 2

86435137693.3

86435137694.4

Question Number: 74 Question Id: 86435111453 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Which one of the following options is correct?

- 1. Deming Prize for Individual Person
- 2. Deming Application Prize for Small Enterprise
- 3. Deming Application Prize to Oversees Industries
- 4. All of the above

Options:

86435137695.1

86435137696. 2

86435137697.3

86435137698.4

Question Number: 75 Question Id: 86435111454 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which one of the following is NOT a process tool for the TQM system?

- 1. Histogram
- 2. Process Flow Analysis
- 3. Plier
- 4. Control Charts

Options:

86435137699.1

86435137700.2

86435137701.3

86435137702.4

Question Number: 76 Question Id: 86435111455 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Process that operate with "Six Sigma Quality" over the short term are assumed to produce long term defect levels below what number of defects per million opportunities (DPMO)?

1.2

2.2.4

3.3

4.3.4

Options:

86435137703.1

86435137704. 2

86435137705.3

86435137706.4

Question Number: 77 Question Id: 86435111456 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Assured Quality is necessary for building customer confidence.

- 1. Correct
- 2. Wrong
- 3. Correct to great extent
- 4. Correct to some extent

Options:

86435137707.1

86435137708. 2

86435137709.3

86435137710.4

 $Question\ Number: 78\ Question\ Id: 86435111457\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

Supplying customers with what they want when they want is the concept of

- 1. JET
- 2. JUT
- 3. JAT
- 4. JIT

Options:

86435137711.1

86435137712. 2

86435137713.3

86435137714.4

 $Question\ Number: 79\ Question\ Id: 86435111458\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

Correct Marks: 1 Wrong Marks: 0

All of the following costs are likely to decrease as a result of better quality, except

- 1. Customer Dissatisfaction Costs
- 2. Inspection Costs
- 3. Maintenance Costs
- 4. Warranty and Service Costs

Options:

86435137715.1

86435137716. 2

86435137717.3

86435137718.4

Question Number: 80 Question Id: 86435111459 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

After E Deming, who is considered to have the greatest impact in quality management?

- 1. Kauro Ishikawa
- 2. Joseph M. Juran
- 3. Taguchi
- 4. Philip Crosby

Options:

86435137719.1

86435137720. 2

86435137721.3

86435137722.4

Question Number: 81 Question Id: 86435111460 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Deming's 4 step cycle for quality improvement is

- 1. Plan, Do, Check, Act
- 2. Schedule, Do, Act, Check
- 3. Do, Act, Check, Monitor
- 4. Plan, Control, Act, Sustain

Options:

86435137723.1

86435137724. 2

86435137725.3

86435137726.4

Question Number: 82 Question Id: 86435111461 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Quality Triology Includes

- 1. Quality Planning
- 2. Quality Improvement
- 3. Quality Control
- 4. All of the above

Options:

86435137727. 1

86435137728. 2

86435137729.3

86435137730.4

Question Number: 83 Question Id: 86435111462 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Fill in the blanks

Reliability is the degree to which a unit of equipment performs its intended functions under _____ for _____ of time.

- 1. specified condition, specified period
- 2. any condition, specified period
- 3. specified condition, all periods
- 4. Any condition, any period

Options:

86435137731.1

86435137732. 2

86435137733.3

86435137734.4

Question Number: 84 Question Id: 86435111463 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

According to Deming, most of the problems are related to systems and it is the responsibility of the management to improve the system.

- 1. Correct
- 2. Correct to a great extent
- 3. Correct to some extent
- 4. None of the above

Options:

86435137735.1

86435137736. 2

86435137737.3

86435137738.4

Question Number: 85 Question Id: 86435111464 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The weight of 13 students (in kg) are as follows: 38, 31, 50, 52, 47, 37, 33, 43, 51, 49, 39, 31 and 37. Find the average weight.

- 1. 40.3 kg
- 2. 41.3 kg
- 3. 42.3 kg
- 4. None of the above

Options:

86435137739. 1

86435137740. 2

86435137741.3

86435137742.4

Question Number: 86 Question Id: 86435111465 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Find the mean of the following data given in the table below:

| Frequency |
|-----------|
| 8 |
| 10 |
| 9 |
| 12 |
| 11 |
| |

1. 26.8

2. 26.6

3. 28.2

4. 28.6

Options:

86435137743.1

86435137744. 2

86435137745.3

86435137746.4

 $Question\ Number: 87\ Question\ Id: 86435111466\ Question\ Type: MCQ\ Option\ Shuffling: No\ Is\ Question\ Mandatory: No\ Shuffling: No\ Sh$

| The average score of boys in an examination of a school is 71 and that of girls is 73. The average of the school in that |
|--|
| examination is 71.8. Find the ratio of the number of boys to the number of girls who appeared in the examination. |

1.2:3

2.1:2

3.2:1

4.3:2

Options:

86435137747.1

86435137748. 2

86435137749.3

86435137750.4

Question Number: 88 Question Id: 86435111467 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Frequency of the Variate 30 of the series 42, 30, 31, 32, 30, 40, 30, 49, and 30 is

1.4

2.2

3.5

4.0

Options:

86435137751.1

86435137752. 2

86435137753.3

86435137754.4

Question Number: 89 Question Id: 86435111468 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

| The mean of the series 10, 12, 14, 16, 18, 20, 22, and 24 is |
|--|
| 1. 14.5 2. 17 3. 15.2 4. 15.6 |
| Options: 86435137755. 1 86435137756. 2 86435137757. 3 86435137758. 4 |
| Question Number: 90 Question Id: 86435111469 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0 |
| The median of the series 30, 14, 18, 16, 35, 25, 40, and 42 is |
| 1. 27.5 2. 25.5 3. 25 4. 23.5 |
| Options: 86435137759. 1 86435137760. 2 86435137761. 3 86435137762. 4 |
| |

Question Number: 91 Question Id: 86435111470 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

| The GM of the series | 3, | 9, | 27, | 81, | and | 243 | is |
|----------------------|----|----|-----|-----|-----|-----|----|
| 1. 9 | | | | | | | |
| 2. 27 | | | | | | | |
| 3. 81 | | | | | | | |
| 4. 3√3 | | | | | | | |
| Options : | | | | | | | |
| 86435137763. 1 | | | | | | | |
| 86435137764. 2 | | | | | | | |
| 86435137765. 3 | | | | | | | |
| 86435137766. 4 | | | | | | | |

Question Number: 92 Question Id: 86435111471 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If the mode of data is 18, and the mean is 24 then median is

1.18

2.24

3. 22

4.21

Options:

86435137767. 1

86435137768. 2

86435137769. 3

86435137770.4

Question Number: 93 Question Id: 86435111472 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The relationship between mean, median and mode for a moderately skewed distribution is

1. Mode = Median - 2 Mean

2. Mode = 2 Median - Mean

3. Mode = 3 Median - 2 Mean

4. Mode = 2Median - 3 Mean

Options:

86435137771.1

86435137772. 2

86435137773.3

86435137774.4

Question Number: 94 Question Id: 86435111473 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the mean of 1, 2, 3,, n is $\frac{6n}{11}$, then n is

- 1.10
- 2. 12
- 3.11
- 4.13

Options:

86435137775. 1

86435137776. 2

86435137777.3

86435137778.4

Question Number: 95 Question Id: 86435111474 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

| If the mean of numbers 27, 31, 89, 107 and 156 is 82, then the mean of 130, 126, 68, 50 and 1 is |
|--|
| 1. 75 |
| 2. 157 |
| 3. 82 |
| 4. 80 |
| Options: |
| 86435137779. 1 |
| 86435137780. 2 |
| 86435137781. 3 |
| 86435137782. 4 |
| Question Number: 96 Question Id: 86435111475 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No |
| Correct Marks: 1 Wrong Marks: 0 |
| Three identical dice are tossed. The probability that the same number will appear on each of them is |
| |

1. 1/6

2. 1/36

3. 1/18

4. 3/28

Options:

86435137783. 1

86435137784. 2

86435137785.3

86435137786. 4

Question Number: 97 Question Id: 86435111476 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

| Two dice are thrown simultaneously | . The probability | of getting | a pair of a | aces is |
|------------------------------------|-------------------|------------|-------------|---------|
| 7. 7323 | | | | |

1. 1/3

2.1/6

3. 1/36

4. None of the above

Options:

86435137787. 1

86435137788. 2

86435137789.3

86435137790.4

Question Number: 98 Question Id: 86435111477 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The odds in favour of drawing two red balls from a bag containing three red and two black balls are

1.3:10

2.7:3

3. 3:7

4. 10:3

Options:

86435137791.1

86435137792. 2

86435137793.3

86435137794.4

Question Number: 99 Question Id: 86435111478 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The probability of having at least one tail in 4 throws with a coin is

- 1. 15/16
- 2. 1/16
- 3. 1/4
- 4. 1

Options:

86435137795. 1

86435137796. 2

86435137797. 3

86435137798.4

Question Number: 100 Question Id: 86435111479 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A dice is thrown three times with getting a 5 or 6 considered as a success. Then, the probability of three successes will be

- 1. 2/9
- 2. 26/27
- 3. 1/27
- 4. None of the above

Options:

86435137799. 1

86435137800. 2

86435137801.3

86435137802.4