

National Testing Agency

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Quality Engineering and Management

Group Number :	1
Group Id :	94091867
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Is this Group for Examiner? :	No

Quality Engineering and Management-1

Section Id :	940918103
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 :	940918146
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 9409184368 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Purpose of Product Auditing

1. Estimating the overall quality level of the services
2. Estimating the quality level as received from the supplier
3. Estimating the quality level as delivered to customers
4. All of these

Options :

94091816165. 1

94091816166. 2

94091816167. 3

94091816168. 4

Question Number : 2 Question Id : 9409184369 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The purpose of Quality Assurance

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

Options :

94091816169. 1

94091816170. 2

94091816171. 3

94091816172. 4

Question Number : 3 Question Id : 9409184370 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Good Quality Product Means

1. Fitness for Purpose
2. Conformance to requirements
3. Degree of Excellence
4. All of these

Options :

94091816173. 1

94091816174. 2

94091816175. 3

94091816176. 4

Question Number : 4 Question Id : 9409184371 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Quality of Performance depends on

1. Quality of Planning and Control
2. Quality of Design and Conformance
3. Quality Methods and Inspection
4. None of these

Options :

94091816177. 1

94091816178. 2

94091816179. 3

94091816180. 4

Question Number : 5 Question Id : 9409184372 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is not a Seven New QC Tool?

1. Affinity Diagram
2. Prioritization Matrices
3. Control Chart
4. Tree Diagram

Options :

94091816181. 1

94091816182. 2

94091816183. 3

94091816184. 4

Question Number : 6 Question Id : 9409184373 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Concept of Kaizen in TQM explains about:

1. Gradual and continuous improvement
2. Zero defect implementation
3. 100% inspection
4. All of these

Options :

94091816185. 1

94091816186. 2

94091816187. 3

94091816188. 4

Question Number : 7 Question Id : 9409184374 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

"Zero Defect Concept" is the most important contribution of the:

1. Joseph Juran
2. Philip B. Crosby
3. Edward Deming
4. William A. Shewart

Options :

94091816189. 1

94091816190. 2

94091816191. 3

94091816192. 4

Question Number : 8 Question Id : 9409184375 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Kanban Just-in-time system strives to:

1. Improve production
2. Reduce costs
3. Eliminate waste
4. None of these

Options :

94091816193. 1

94091816194. 2

94091816195. 3

94091816196. 4

Question Number : 9 Question Id : 9409184376 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

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

1. 5 -10%
2. 20 - 40%
3. 50 - 60%
4. None of these

Options :

94091816197. 1

94091816198. 2

94091816199. 3

94091816200. 4

Question Number : 10 Question Id : 9409184377 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which Quality tool or chart says that, 80% of the problems can be traced to 20% of the causes?

1. Flow Chart
2. Control Chart
3. Pareto Chart
4. None of these

Options :

94091816201. 1

94091816202. 2

94091816203. 3

94091816204. 4

Question Number : 11 Question Id : 9409184378 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The PDPC stands for:

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

Options :

94091816205. 1

94091816206. 2

94091816207. 3

94091816208. 4

Question Number : 12 Question Id : 9409184379 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Who play an important role in implementing TQM within their departments?

1. Supervisors
2. Managers
3. Senior Managers
4. None of these

Options :

94091816209. 1

94091816210. 2

94091816211. 3

94091816212. 4

Question Number : 13 Question Id : 9409184380 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The abbreviation ISO stands for:

1. Indian Standards of Organization
2. Indian Organization for Standards
3. International Organization for Standardization
4. International Standards of Organization

Options :

94091816213. 1

94091816214. 2

94091816215. 3

94091816216. 4

Question Number : 14 Question Id : 9409184381 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The ISO series that specifies guidelines of a product in its manufacturing and installation is?

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

Options :

94091816217. 1

94091816218. 2

94091816219. 3

94091816220. 4

Question Number : 15 Question Id : 9409184382 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The maximum proportion or percent of defectives at which the customer finds high probability of acceptance is:

1. Acceptance Quality Level (AQL)
2. Rejection Quality Level (RQL)
3. Average Outgoing Quality Level (AOQL)
4. Indifference Quality Level (IQL)

Options :

94091816221. 1

94091816222. 2

94091816223. 3

94091816224. 4

Question Number : 16 Question Id : 9409184383 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The 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 :

94091816225. 1

94091816226. 2

94091816227. 3

94091816228. 4

Question Number : 17 Question Id : 9409184384 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 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 at random 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 :

94091816229. 1

94091816230. 2

94091816231. 3

94091816232. 4

Question Number : 18 Question Id : 9409184385 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

An anti-aircraft gun can take a maximum of four shots on enemy's plane moving away from it. The probabilities of hitting the plane at first, second, third and fourth shots are 0.4, 0.3, 0.2 and 0.1 respectively. Find the probability that the gun hits the plane.

1. 0.6976
2. 0.3024
3. 0.5976
4. 0.4024

Options :

94091816233. 1

94091816234. 2

94091816235. 3

94091816236. 4

Question Number : 19 Question Id : 9409184386 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

ISO series of guidelines associated with environmental aspects?

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

Options :

94091816237. 1

94091816238. 2

94091816239. 3

94091816240. 4

Question Number : 20 Question Id : 9409184387 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Thetechniques 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 :

94091816241. 1

94091816242. 2

94091816243. 3

94091816244. 4

Question Number : 21 Question Id : 9409184388 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

According to Taguchi, the behavior of a product or a process is characterized in terms of two factors- Signal Factors andFactors

1. Controllable Factors
2. Design Factors
3. Cost Factors
4. Noise Factors

Options :

- 94091816245. 1
- 94091816246. 2
- 94091816247. 3
- 94091816248. 4

Question Number : 22 Question Id : 9409184389 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

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

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

Options :

- 94091816249. 1
- 94091816250. 2
- 94091816251. 3
- 94091816252. 4

Question Number : 23 Question Id : 9409184390 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Through Market Research, the consumer's product needs and preferences are defined and broken down into categories called

1. Technical Requirements
2. Customer Requirements
3. Supplier Requirements
4. Process Requirements

Options :

94091816253. 1

94091816254. 2

94091816255. 3

94091816256. 4

Question Number : 24 Question Id : 9409184391 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

..... is another quality improvement tool to improve the performance of the organization by comparing the best practices of a successful organization.

1. SQC
2. Acceptance sampling
3. Benchmarking
4. Six Sigma

Options :

94091816257. 1

94091816258. 2

94091816259. 3

94091816260. 4

Question Number : 25 Question Id : 9409184392 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Quality Function Deployment (QFD) translates the into the appropriate technical requirements for each stage.

1. Design Requirements
2. Manufacturing Requirements
3. Customer Requirements
4. Supplier Requirements

Options :

94091816261. 1

94091816262. 2

94091816263. 3

94091816264. 4

Question Number : 26 Question Id : 9409184393 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

A comprehensive matrix for documenting information, perceptions and decisions is known as.....

1. Quality Function Deployment
2. House of Quality
3. Both the options mentioned
4. None of these

Options :

94091816265. 1

94091816266. 2

94091816267. 3

94091816268. 4

Question Number : 27 Question Id : 9409184394 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

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

1. Design of Experiments (DoE)
2. House of Quality(HoQ)
3. Quality Function Deployment(QFD)
4. None of these

Options :

94091816269. 1

94091816270. 2

94091816271. 3

94091816272. 4

Question Number : 28 Question Id : 9409184395 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

.....is a measure of quality that strives for near perfection.

1. Design of Experiments (DoE)
2. Six Sigma
3. Benchmarking
4. Control Charts

Options :

94091816273. 1

94091816274. 2

94091816275. 3

94091816276. 4

Question Number : 29 Question Id : 9409184396 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The objective of an FMECA is to identify allmodes in a system design.

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

Options :

94091816277. 1

94091816278. 2

94091816279. 3

94091816280. 4

Question Number : 30 Question Id : 9409184397 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

In FMECA methodology 'C' stands for.....

1. Capacity
2. Control
3. Corrective
4. None of these

Options :

94091816281. 1

94091816282. 2

94091816283. 3

94091816284. 4

Question Number : 31 Question Id : 9409184398 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

.....is an approach to pinpointing problems through the identification and separation of the vital few causes from the trivial many.

1. Check Sheet
2. Pareto Analysis
3. Flow Charting
4. None of these

Options :

- 94091816285. 1
- 94091816286. 2
- 94091816287. 3
- 94091816288. 4

Question Number : 32 Question Id : 9409184399 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

.....is defined as the probability that a product will perform its intended function satisfactorily for a stated period of time under specific operating conditions.

1. Maintainability
2. Availability
3. Reliability
4. All of these

Options :

- 94091816289. 1
- 94091816290. 2
- 94091816291. 3
- 94091816292. 4

Question Number : 33 Question Id : 9409184400 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Design FMEA should be initiated before or at the design concept finalization at.....

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

Options :

94091816293. 1

94091816294. 2

94091816295. 3

94091816296. 4

Question Number : 34 Question Id : 9409184401 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The philosophy that seeks to improve all factors related to the process of converting inputs into output on an ongoing basis is called

1. Continuous Improvement
2. TQM
3. SPC
4. Acceptance Sampling

Options :

94091816297. 1

94091816298. 2

94091816299. 3

94091816300. 4

Question Number : 35 Question Id : 9409184402 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 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 :

94091816301. 1

94091816302. 2

94091816303. 3

94091816304. 4

Question Number : 36 Question Id : 9409184403 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Cause and Effect Diagram is also known as.....

1. Fishbone Diagram
2. Ishikawa Diagram
3. Both the options mentioned
4. None of these

Options :

94091816305. 1

94091816306. 2

94091816307. 3

94091816308. 4

Question Number : 37 Question Id : 9409184404 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The Histogram as quality improvement technique is used to.....

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

Options :

94091816309. 1

94091816310. 2

94091816311. 3

94091816312. 4

Question Number : 38 Question Id : 9409184405 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

A system having three components X, Y, and Z are connected in parallel and their reliabilities are 0.4, 0.8, and 0.5 respectively. Determine the overall reliability of the system.

1. 0.94
2. 0.90
3. 0.84
4. 0.80

Options :

94091816313. 1

94091816314. 2

94091816315. 3

94091816316. 4

Question Number : 39 Question Id : 9409184406 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Consider a system having 2 components a and b connected in series and having 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 :

94091816317. 1

94091816318. 2

94091816319. 3

94091816320. 4

Question Number : 40 Question Id : 9409184407 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Consider a system having 2 components c and d connected in parallel and having their reliabilities as 70% and 30% respectively. What is the probability that the whole system would work?

1. 0.69
2. 0.79
3. 0.65
4. 0.75

Options :

94091816321. 1

94091816322. 2

94091816323. 3

94091816324. 4

Question Number : 41 Question Id : 9409184408 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 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 :

- 94091816325. 1
- 94091816326. 2
- 94091816327. 3
- 94091816328. 4

Question Number : 42 Question Id : 9409184409 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Flow Chart is used to.....

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

Options :

- 94091816329. 1
- 94091816330. 2
- 94091816331. 3
- 94091816332. 4

Question Number : 43 Question Id : 9409184410 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

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

1. 78%
2. 88%
3. 90%
4. 92%

Options :

- 94091816333. 1
- 94091816334. 2
- 94091816335. 3
- 94091816336. 4

Question Number : 44 Question Id : 9409184411 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

A....., therefore, is the one in which such features have been incorporated which fully satisfy the needs of a customer.

1. Quality Design
2. Quality Process
3. Quality Method
4. Quality Product

Options :

- 94091816337. 1
- 94091816338. 2
- 94091816339. 3
- 94091816340. 4

Question Number : 45 Question Id : 9409184412 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Who described quality as fitness for use as perceived by the customer?

1. Joseph Juran
2. Edward Deming
3. Philip Crossbe
4. Kauru Ishikava

Options :

94091816341. 1

94091816342. 2

94091816343. 3

94091816344. 4

Question Number : 46 Question Id : 9409184413 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

In long term supplier relationships, the customer helps the supplier company to:

1. Improve the quality of products
2. Improve the production
3. Reduce the costs
4. None of these

Options :

94091816345. 1

94091816346. 2

94091816347. 3

94091816348. 4

Question Number : 47 Question Id : 9409184414 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which one is known as an example of an External failure costs?

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

Options :

94091816349. 1

94091816350. 2

94091816351. 3

94091816352. 4

Question Number : 48 Question Id : 9409184415 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Identify the Indirect Quality Costs from the below:

1. Customer-incurred Quality Costs
2. Loss of Reputation Costs
3. Both the options mentioned
4. None of these

Options :

94091816353. 1

94091816354. 2

94091816355. 3

94091816356. 4

Question Number : 49 Question Id : 9409184416 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

Which one of the following is correct?

1. Deming Prize for Individual Person
2. Deming Application Prize for Small Enterprise
3. Deming Application Prize to Overseas Industries
4. All of these

Options :

94091816357. 1

94091816358. 2

94091816359. 3

94091816360. 4

Question Number : 50 Question Id : 9409184417 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 2 Wrong Marks : 0

The manager of the machine centre who receives the forging from store becomes the

1. Internal customer
2. External customer
3. Both the options mentioned
4. None of these

Options :

94091816361. 1

94091816362. 2

94091816363. 3

94091816364. 4