Welcome!

Happy World Quality Day 2012
Quality Quiz Role Players

Quiz Master
Neelakanta Ratnam
Special Thanks

For providing the Audience Response System for Quality Quiz
4th Continual Improvement & Innovation Symposium
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Quality Quiz Competition 2012
Rules

- **40 multiple choice** questions (Choices : 1, 2, 3, 4)
- Each question addressed to **all teams**
- **15 seconds** to answer
- Teams answer by **pressing the correct button on their clickers**
- Screen will show which team(s) **answered correctly**
- **+ 10 points for each correct** answer
- **No negative marking**
- In case of a tie, each team in the tie will be asked one question. Team not answering or answering wrong will be out.
- This may be repeated until only one team is left at that place.
Test Question 1
What is the day today?

1. Sunday
2. Monday
3. Thursday
4. Wednesday

Correct Answer: 4. Wednesday
4) Wednesday
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Test Question 2
Some months have 31 days: how many have 28?

1. 1
2. 2
3. 9
4. 12

Correct answer: 4. 12
4) 12

- All the months are having 28 days
Test Question 3

1. 5000
2. 5100
3. 4100
4. 6000
3) 4100
Test Question 4
Mary’s father has five daughters; 1. Nana, 2. Nene, 3. Nini, 4. Nono. What is the name of the fifth daughter?

1. Neno
2. Nunu
3. Mary
4. Nino

Correct answer: 3. Mary

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Improvement Subgroup: 64%
3) Mary
Test Question 5
In which year DQG was established?

1. 1992
2. 1993
3. 1994
4. 1995

Correct answer: 3. 1994
3) 1994
Resetting Session
Are you ready?
Q1. What is Andon Board?

1. Visual control for First In First Out
2. Visual control for inventory level
3. Visual control for process map
4. Visual control device on production line for defect warning
4) Visual control device on production line for defect warning

- Andon Board displays production and defect rate
Q2. “No U Turn” sign board comes under which S of the 5S?

1. Seiri
2. Seiton
3. Seiso
4. Seiketsu
4) Seiketsu

- Seiketsu is the 4\textsuperscript{th} of the 5S. It means Standardization.

- A “No U Turn” sign is a standard sign, hence it comes under “Seiketsu” or standardization.
Q3. In order to get Deming Application Prize, an organisation must independently score….% marks in Leadership, Management Systems and Unique Practice…

1. 50%
2. 60%
3. 70%
4. 90%
3) 70%

- In order to get Deming Application Prize an organisation has to independently score minimum 70% marks in each of the three main criteria, viz. Leadership, Management System, Unique Practice.
Q4. What is “Triple Bottom Line”? 

1. Gross Profit, Net Profit and Profit After Tax
2. People, Planet, Profit
3. Sales, Income, Profit
4. None of the above
2) People, Planet, Profit

- The **triple bottom line** (abbreviated as **TBL** or **3BL**, and also known as **people, planet, profit** or **the three pillars**) captures an expanded spectrum of values and criteria for measuring organizational (and societal) success: economic, ecological, and social.
Q.5 Who popularised the concept of “Reverse Innovation”?

1. Norton and Kaplan
2. Edward D Bono & Tony Buzan
3. Vijay Govindrajan and Chris Trimble
4. Steve Jobs
3) Vijay Govindrajan and Chris Trimble

- They are professors in Dartmouth College and have authored the bestseller “Reverse Innovation – Create far from home, win everywhere”.
- Reverse Innovation refers to flow of innovation from developing to developed countries.
Q6. Is part of technique in TOC (Theory of Constraints)?

1. Drum Buffer Rope (DBR)
2. PDPC
3. Brainstorming
4. EVOP
1) Drum Buffer Rope (DBR)

- Drum Buffer Rope (DBR) is a planning and scheduling solution derived from the Theory of Constraints (ToC)
- The fundamental assumption of DBR is that within any plant there is one or a limited number of scarce resources which control the overall output of the plant
- This is the “drum” which sets the pace for all other resources
Q7. .. Is diagram that shows all possible logical relations between a finite collection of sets.

1. Fishbone diagram
2. Affinity diagram
3. VENN diagram
4. Cause & Effect diagram
1) VENN diagram

- Venn diagram or set diagram – shows all possible logical relations between a finite collection of sets.
- This was conceived around 1880 by John Venn.
- They are used to teach elementary set theory, as well as illustrate simple set relationships in probability, logic, statistics.
Q 8. What is called TAKT time

1. Mean time to recovery
2. Mean time between the failures
3. Rate of supplier demand
4. Rate of customer demand
4) Rate of customer demand

• TAKT is the heartbeat of lean system
• It is the rate of customer demand
• It is the tool to link production to the customer by matching the pace of production to the pace of actual final sales.
• It defines the rate which material and product flow through the value stream
Q 9. Who is called the “Founder of Quality in Healthcare and Medical Outcomes Research”?

1. Deming
2. Avedis Donabedian
3. Quaker
4. Kurt Lewin

Correct answer: 2. Avedis Donabedian
2) Avedis Donabedian

- He was a physician and founder of the study of quality in health care and medical outcomes research.
- He was born in Beirut. He collated the growing literature of health services research.
- Much of his work was detailed exposition of the concepts and methods required to examine these fundamental aspects of health care.
Q10. The following is one of the newly added concepts to the “8 Fundamental Concepts of Excellence” by EFQM:

1. Ethics
2. Managing with Agility
3. People participation
4. Leading with values
2) Managing with Agility
Q11. Identify the person.. “Father of Scientific Management”?

1. F.W. Taylor
2. F.F. Taylor
3. Karl Pearson
4. Bill Smith
1) F.W. Taylor

- He was an American mechanical engineer who sought to improve industrial efficiency.

- He is regarded as the **father of scientific management** and was one of the first management consultants.

- He was one of the intellectual leaders of the Efficiency Movement and his ideas, broadly conceived, were highly influential in the Progressive
Q12. Identify the person:

• In 1911 he founded the world's first university statistics department at University College London.

• He is known for chi-square test and correlation coefficient in statistics

1. Karl Peterson
2. Karl Marxson
3. Karl Pearson
4. None of the above.
3) Karl Pearson.
Q13. Identify the person .. “Father of Six Sigma”?

1. Jamie Lynn Smith
2. Bill Smith
3. James Lynn Smith
4. Karl Peterson
2) Bill Smith

- He is the "Father of Six Sigma".

- He was working with Motorola, served as vice president and senior quality assurance manager for the Land Mobile Products Sector.

- Six Sigma is the TQM spin-off that has generated billions of dollars for Motorola.

- He was especially proud of his role in Motorola's winning the prestigious Malcolm Baldrige National Quality Award. The Baldrige Award came in 1988, two years after Motorola implemented his Six Sigma principles.
Q14. What is “biomimicry”?:

1. Learning to solve technical problems from nature
2. Use of biotechnological methods
3. Using computers in biology
4. Total Procurement Management
1) Learning to solve technical problems from nature

• Biomimetics or Biomimicry is not a new idea. Humans have been looking at nature for answers to both complex and simple problems throughout our existence.

• Nature has solved many of today’s engineering problems such as hydrophobicity, wind resistance, self-assembly and harnessing solar energy through the evolutionary mechanics of selective advantages.
Q 15. When is the world environment day?

1. March 8
2. June 5
3. May 22
4. October 8

The correct answer is 2. June 5.
2) June 5

- On this day in 1972, the Stockholm conference on Human Environment was held in Sweden.
- Since then the world environment day is celebrated on this day
Q 16. Which is the National Standardization body in UAE?

1. Emirates Standards bureau
2. Emirates Standards Institution
3. Emirates Authority for standardization and Metrology
4. None of the above

100%
3) Emirates Authority for Standardization and Metrology
Q17. Who said it?
“You can’t let your failures define you. You have to let your failures teach you”

1. Jack Welch
2. Kichiro Toyoda
3. Joseph M. Juran
4. Barak Obama
4) Barak Obama
Q18. Heinrich Law is applied to the following...

1. Accident Analysis
2. Occupational Health Analysis
3. Cash Flow Analysis
4. Autonomous Maintenance
1) Accident Analysis

- Herbert William Heinrich, was an American industrial safety pioneer introduced this concept in 1931.
- Heinrich’s work is the basis for the theory of behavior-based safety, which holds that as many as 95% of all workplace accidents are caused by unsafe acts.
Q 19. Father of management by objectives (MBO)?

1. Frederic Taylor
2. Peter Drucker
3. Henri Fayol
4. Max weber

[Bar chart showing: 86% for Peter Drucker, 7% for Frederic Taylor, 7% for Max weber, and 0% for Henri Fayol]
2) Peter Drucker
Q20. Who popularised Policy Function Deployment (or Hoshin Kanri)?

1. Kaoru Ishikawa
2. Yoji Akao
3. W.E. Deming
4. Peter Drucker

Correct answer: Yoji Akao
2) Yoji Akao

- He is a Japanese planning specialist

- He developed **Quality Function Deployment** (a group decision making technique).

- He won the Deming Prize in 1978. He is also two times winner of Quality Control Literature Prize in year 1960 and 1978

Q21. The ISO 50001:2011 standard pertains to ..... 

1. Equipment Management System
2. Environment Management System
3. Ecological Management Systems
4. Energy Management System
4) Energy Management System
Q22. The ISO 31000:2009 standard pertains to ….

1. Sustainable Development
2. Social Reasonability
3. Disaster Management
4. Risk Management
4) Risk Management
Q 23. A Total Quality Management (TQM) strategy developed by Motorola company in 1986:

1. Plan-Do-Check-Act
2. Six Sigma
3. MBO
4. PERT
2) Six Sigma
Q 24. Who said it?
“Be a yardstick of Quality”

1. Barak Obama
2. Steve Jobs ✔
3. Jerry Yang
4. Akio Morita

Percentage:
- Barak Obama: 7%
- Steve Jobs: 79%
- Jerry Yang: 7%
- Akio Morita: 7%
2) Steve Jobs
Q 25. Which one does NOT fall in Maslow’s Hierarchy of needs

1. Security needs
2. Social needs
3. Existing needs
4. Self Actualization needs

Correct Answer: 3. Existing needs
3) Existing needs
Q26. The square root of the variance of a distribution is called:

1. Standard deviation
2. Mean
3. Range
4. None of these
1) Standard Deviation
Q27. Which kind of variation can be seen in a control chart?

1. Inherent variation
2. Special cause variation
3. Random variation
4. All of the above
4) All of the above.

1. Inherent variation
2. Special cause variation
3. Random variation
Q28. Which of the following statements describes discrete data?

1. It takes 3 hours 48 minutes to fly from LA to New York
2. Of 225 people on the airplane, 85 had connecting flights
3. The flight arrived at 9:08 PM
4. There were 5,923 gallons of fuel consumed on the flight
2) Of 225 people on the airplane, 85 had connecting flights.
Q29. The factor D4 in X-bar and R control charts is used to:

1. Determine the upper control limit of the range chart
2. Establish the control limit of a range chart
3. Correct the bias in estimating the population
4. Determine the lower control limit of a range chart
1) Determine the upper control limit of the range chart

Upper Control Limit = D4 x R-bar

Sub-group Numbers
Q 30. Cusum chart is best used for.....

1. Understanding cyclic variability
2. Understanding assignable causes
3. Nothing, it’s a hoax.
4. Detecting and estimating process shift
4) Detecting and estimating process shift

- CUSUM chart stands for “Cumulative Sum” of deviation from the target and puts equal weight on the current and recent past data.