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Total Quality Management (TQM) Multiple Choice

Questions

- 1) A fundamental attribute of TQM is
 - a) Drawing control charts
 - b) Having team meetings
 - c) **Top management's direct involvement**
 - d) Meeting ISO 9000 audit
 - e) All of the above
- 2) Drawing control charts requires
 - a) **Calculation of statistics from data**
 - b) Adjusting the machines
 - c) Teamwork training of workers
 - d) Top management involvement
 - e) Meetings with suppliers
- 3) Inspection assures that
 - a) The process is in control
 - b) Workers are motivated
 - c) **Product meets specification**
 - d) Quality problems are solved
 - e) Supplier quality is acceptable
- 4) A control chart displays
 - a) Whether workers are motivated
 - b) Top management takes interest in quality
 - c) Inspectors are doing their job
 - d) **Process variability**
 - e) Process capability
- 5) Process capability =1 indicates that
 - a) Suppliers can be trusted
 - b) Workers are motivated
 - c) Process is in control
 - d) There are no random variations
 - e) **Some fraction of production is outside specs**
- 6) SPC helps determine



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- a) **If assignable causes are disturbing the process**
 - b) If vendor performance is falling
 - c) If customers are happy
 - d) If customers are motivated
 - e) If top management is involved
- 7) Vision states
- a) Where the workers want to go after work
 - b) Whether we should use SPC
 - c) Whether we should use inspection
 - d) **Where the company wants to be in the long run**
 - e) That customers are the boss
- 8) A stakeholder is generally
- a) Someone who manages the company
 - b) People who run the company's payroll
 - c) **Interested in the success of the enterprise**
 - d) Only the customer
 - e) Only the vendor
- 9) Systematic problem solving requires
- a) Motivating the worker
 - b) **Defining the problem to be solved**
 - c) Drawing control charts
 - d) Keeping management informed
 - e) Keeping tab on the environmental impact
- 10) ISO 9000 determines
- a) **If the company practices its written procedures**
 - b) If vendors are performing well
 - c) Process capability
 - d) The kind of control chart to be used
 - e) Random causes of variation
- 11) An example of a random cause is
- a) Absenteeism
 - b) Shortage of material supplies
 - c) Photocopy machine failure
 - d) **Small vibrations in the equipment**
 - e) Word Processor not having Spellchecker
- 12) An assignable cause is generally known to
- a) Vendors
 - b) Top management
 - c) Product designer
 - d) **Workers**
 - e) Customers
- 13) Flow charts indicate
- a) Causes of process variation



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b) The kind of forms to fill out



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- c) Who reports to whom?
 - d) **How inputs get processed into outputs**
 - e) How samples are rejected
- 14) A sampling plan helps in
- a) Keeping the process in control
 - b) Keeping workers motivated
 - c) Tuning the machines
 - d) Adjusting ovens in the kitchen
 - e) **Rejecting lots that are of unacceptable quality**
- 15) Process Diagnosis determines
- a) If the workers are doing their job
 - b) **The possible cause of a failure**
 - c) If control charts are in control
 - d) When top management should talk to vendors
 - e) If vendors are motivated
- 16) Team orientation means
- a) Workers having lunch with their families
 - b) Workers getting daily briefing
 - c) **Working collectively toward a common goal**
 - d) Cooperation with government regulators
 - e) ISO 9000 orientation meetings
- 17) Creativity requires
- a) Control charts
 - b) Complete knowledge of vendor's capability
 - c) Managing the quality of ideas generated
 - d) **Facilitation**
 - e) Physical exercise
- 18) Problem identification requires
- a) **Flow charting the process**
 - b) Monitoring customer complaints
 - c) Knowing how to draw control charts
 - d) Team meetings
 - e) Maintaining clean cafeterias
- 19) Problem solving begins with
- a) Team discussions
 - b) SPC
 - c) Design of experiments
 - d) **Problem identification**
 - e) Punching time clock
- 20) Benchmarking determines
- a) Customer requirements
 - b) Process capability
 - c) **How company is doing relative to others**



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d) Getting ISO 9000 audit done



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- e) If management is motivated
- 21) Control charts help in
 - a) Reaching six sigma
 - b) Rejecting parts supplied by vendors
 - c) Keeping workers motivated
 - d) **Deciding when to investigate the process**
 - e) Zero defect production
- 22) Seven tools include
 - a) Team meetings
 - b) Management meeting regularly with workers
 - c) Workers' toolkit
 - d) **Histogram**
 - e) All above
- 23) A Pareto chart shows
 - a) That the process is in control
 - b) **The vital few from the trivial many**
 - c) Process capability
 - d) A line drawn as production proceeds
 - e) Fraction defective
- 24) Individuals who have no role in quality management
 - a) Teachers in universities
 - b) **Government regulators**
 - c) Workers
 - d) ISO 9000 trainers
 - e) Vendors
- 25) Quality management requires
 - a) ISO 9000 certification
 - b) Workers not working overtime
 - c) Printing promotional brochures
 - d) **Keeping internal customers satisfied**
 - e) Keeping oil off the floor
- 26) A problem definition should include
 - a) A control chart
 - b) Names of members of the team
 - c) **What the problem is and what it is not**
 - d) Who was operating the machine that day
 - e) Ideas to solve the problem
- 27) The role of R&D is
 - a) To improve working conditions in the lab
 - b) To keep top management informed of competition
 - c) To regularly study control charts
 - d) **To determine how processes work**
 - e) To keep the company competitive



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- 28) Efficiency means
- a) There are no defects in the output
 - b) Process is capable
 - c) Cost of quality is low
 - d) **Resources are made the most of**
 - e) Workers arrive on time
- 29) The case of waiting too long at the elevator is
- a) A well-structured problem
 - b) A candidate for control charts
 - c) Indication of timely arrival at work
 - d) **Ignoring external customers**
 - e) None of the above
- 30) The difference between manufacturing and service is
- a) Nonexistent
 - b) Products cannot be inventoried
 - c) Service can't be backordered
 - d) Production is instantaneous
 - e) **Service is consumed as produced**
- 31) Service quality cannot be managed when
- a) No vendors are involved
 - b) **Customer expectations are not known**
 - c) Workers don't meet regularly with management
 - d) Consultants are not consulted
 - e) Histogram cannot be drawn
- 32) Accuracy can be improved by
- a) **Use of Xbar charts**
 - b) Team meetings
 - c) TQM principles
 - d) Management talking to workers
 - e) Customer visits
- 33) Design of Experiments implies
- a) Good instruments used in the lab
 - b) Team meetings in product trials
 - c) **A method to find factor effects**
 - d) Aesthetic quality of products
 - e) Careful recording of data
- 34) Cause-effect diagram is used in
- a) Problem identification
 - b) Field visits
 - c) Vendor surveys
 - d) **Problem analysis**
 - e) Negotiating with unions
- 35) Cost of quality is really



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a) **A way to prioritize actions**



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- b) Cost of production
 - c) Cost of sales
 - d) Cost of high-quality products
 - e) An accounting jargon
- 36) The Baldrige Award is
- a) A ISO 9000 requirement
 - b) An indication of SPC being used
 - c) Indication of no competition
 - d) **Indication that TQM programs are effective**
 - e) All of the above
- 37) TQM does not imply
- a) Strong external customer orientation
 - b) Partnership with vendors
 - c) **Meticulously re-stocking defective products**
 - d) Training
 - e) Team meetings
- 38) Precision in production means
- a) Workers are well-trained
 - b) Hi-tech equipment is used
 - c) Instruments are kept clean
 - d) **Parts produced have little or no variation**
 - e) Shop uses control charts
- 39) Accuracy implies
- a) We know customer targets
 - b) Computerized machines
 - c) **Average performance is on target**
 - d) All products are of same size
- 40) Six sigma is
- a) Latest Japanese Quality Theory
 - b) A BMW
 - c) **Cpk = 2.0**
 - d) French quality standards
- 41) The American model for TQM is
- a) ISO 9000
 - b) ISO 14000
 - c) **The Baldrige Award criteria**
 - d) Use of control charts
 - e) Use of quality circles in the shop
- 42) Six Sigma implies
- a) A statistical method
 - b) A trouble-shooting method
 - c) Teams are effective
 - d) **3 defects per million in output**



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e) All above



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- 43) A service cannot be
- a) **Stored**
 - b) Inspected
 - c) Targeted
 - d) Appraised
 - e) Flowcharted
- 44) SPC does not imply
- a) Statistical process control
 - b) Use of control charts
 - c) Fixing assignable causes
 - d) Sometimes leaving the process alone
 - e) **Human resource control**
- 45) A Stable Process has
- a) No defects in output
 - b) 3 ppm output
 - c) Good control on vendors
 - d) Motivated workers
 - e) **No variation with time in output**
- 46) Fishbone diagrams are drawn
- a) To find customer needs
 - b) To find the cost of quality
 - c) **To brainstorm causes of an effect**
 - d) To screen workers' suggestions
 - e) To explain what the process does
- 47) Process Flow Charts help explain
- a) **Process steps and their relationship**
 - b) Cost of quality
 - c) A clause in ISO 9000
 - d) Customer complaints
 - e) Assignable causes
- 48) Quality control does not apply to
- a) Drawing flow charts
 - b) Drawing control charts
 - c) Driving
 - d) **Idea generation**
 - e) PTA meetings
- 49) Strategy implies
- a) What level of quality the customers want
 - b) **What the company has to do to reach its vision**
 - c) How competitive we are
 - d) Practices on the shop floor
 - e) Workers can talk to management
- 50) QFD is the way to



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- a) Fix typing errors



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- b) Fix sampling plans
 - c) Conduct quality circle meetings
 - d) **Develop product specs**
- 51) A key reason for lost productivity is
- a) Not implementing TQM
 - b) Mgmt. not listening to workers
 - c) **The hidden factory**
 - d) Non-availability of finance
- 52) Most auto accidents are
- a) Correlated with fuel efficiency
 - b) Caused by chance
 - c) **Preventable**
 - d) At 6 sigma level
 - e) Caused by bad design
- 53) A process is predictable if
- a) **We can forecast its output**
 - b) It is always at the same level
 - c) It has no humans involved
 - d) The data can be plotted on a chart
 - e) The same workers stay employed
- 54) Range of 1, 2, 3, 4, 5 is
- a) 5
 - b) **4**
 - c) 3
 - d) 2
 - e) 0
- 55) The quantity sigma (σ) indicates
- a) Trend in the process
 - b) **Dispersion in the data**
 - c) Lack of attention by workers
 - d) Average
 - e) Range
- 56) When you have too many factors on a fish-bone chart, then
- a) Take top ten
 - b) Take top five
 - c) **Inquire to find which factors are suspected to be significant**
 - d) Conduct design of experiments
 - e) Talk to customers
- 57) The word Control implies
- a) Inspecting every item
 - b) Plotting charts
 - c) **Using a signal to adjust the process**



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d) Management by Objectives



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- e) Team control the shop
- 58) QFD is a method for
 - a) Controlling quality in production
 - b) Controlling quality in restaurants
 - c) Finding out what customer wants
 - d) **Translating customer needs to product specs**
 - e) Quality circles
- 59) A Capable Process
 - a) Is never outside control limits
 - b) **Meets or exceeds spec requirements**
 - c) Has no defects in output
 - d) Has good management support
 - e) Is ISO 9000 certified
- 60) DOE may fail because
 - a) Control charts are incorrectly drawn
 - b) No team involvement
 - c) **A key factor has been left out**
 - d) Top management not visible
 - e) Workers overzealous
- 61) TQM is part of
 - a) **Strategic management**
 - b) ISO 9000 certification
 - c) QS 9000 certification
 - d) Hospital management
 - e) Project reviews
- 62) The word target in quality means
 - a) The specification
 - b) The control limits
 - c) Xbar points on the chart
 - d) **The ideal quality requirement**
 - e) Six sigma production
- 63) Spec limits are used for
 - a) Talking to workers about quality
 - b) Adjusting control charts
 - c) **Finding process capability**
 - d) Drawing R charts
 - e) Troubleshooting
- 64) ISO 9002 requires
 - a) Constantly holding meetings with customers
 - b) Frequent vendor visits
 - c) **Getting production and inspection/installation methods certified**
 - d) Getting final inspection methods shipshape
 - e) Team deliberations for quality



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- 65) Quality is a problem because
- a) Modern processes are too complex
 - b) Workers don't do the job
 - c) It is expensive to control
 - d) **All processes have some variation**
 - e) Management do not fund projects
- 66) A Reaction Plan is
- a) A flow chart
 - b) An afterthought
 - c) A way to produce good products
 - d) **A checklist to use when things don't look right**
 - e) A way to check incoming parts
- 67) The best strategy in quality is
- a) To inspect the output before shipment
 - b) **To aim to produce on target**
 - c) To check machines every day
 - d) To keep workers relaxed
 - e) To hold training meetings every week
- 68) DOE identifies
- a) Causes of delayed shipments
 - b) **Factors that affect the output**
 - c) Traffic congestion points
 - d) Control limits
 - e) Why meetings are not running smoothly
- 69) Interaction implies
- a) **Effect of one factor depends on where some other factor is set**
 - b) Managers moving about
 - c) Team meetings
 - d) Xbar and R charts looking similar
 - e) Teamwork
- 70) Weather variation is difficult to explain because
- a) Atmosphere is too large a system
 - b) We cannot plot temperature on Xbar charts
 - c) **Don't understand the process behind it**
 - d) Experts have not taken trouble to explain weather
 - e) TV channels use graphics
- 71) Quality of education can be impacted by
- a) Surplus in federal budget
 - b) Sports programs
 - c) **Attention to details**
 - d) Parents meeting with city officials
 - e) Kids having friends
 - f) Closer tab on principals



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72) Study methods can be improved by

- a) **Benchmarking**
- b) Improved note taking
- c) Vacations
- d) Sitting in the front row
- e) Buying books