

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN
FEDERATION

«National University of Science and Technology MISiS»

<i>MAJOR</i>	Informatics and Computer Science
<i>PROFILE</i>	Data Science
<i>GROUPE</i>	МИБТ-23-6А

ASSIGNMENT

Course: Quality Management

Subject: Questions on Quality Management

Student: Hazim H. A. Al-Haidari

Professor: Dr. Svetlana A. Mitrofanova

Moscow, 2023

1. The part of quality management focused on fulfilling quality requirements (in accordance with ISO 9000:2015).

Quality Control.

2. The coordinated activities that directed on establishing quality policies and quality objectives, and processes to achieve these quality objectives through quality planning, quality assurance, quality control, and quality improvement.

Quality Management.

3. A set of interrelated or interacting activities that use inputs to deliver an intended result.

Process.

4. A part of a management system with regard to quality.

Quality management.

5. Relationship between the result achieved and the resources used.

Efficiency.

6. Extent to which planned activities are realized and planned results are achieved.

Effectiveness.

7. Management that contains planning and implementation the actions to address risks and opportunities.

Risk management.

8. A system for instilling order and cleanliness in the workplace.

Can be achieved through the implementation of a quality management system (QMS).

9. The Basic QC tools.

1. **Check Sheets.**
2. **Histograms.**
3. **Pareto Analysis.**
4. **Cause-and-Effect Diagrams.**

5. **Scatter Diagrams.**
6. **Control Charts.**
7. **Flowcharts.**
8. **Checklists.**
9. **Scatter Diagrams.**

10. The Wastes of Lean.

These wastes are also known as Muda in Japanese.

1. **Transportation Waste.**
2. **Inventory Waste.**
3. **Motion Waste.**
4. **Waiting Waste**
5. **Overproduction Waste.**
6. **Overprocessing Waste.**
7. **Defects Waste.**

11. Graphical or statistical tool that visually or mathematically compares actual process performance to the performance standards established by the customer.

Control Chart.

12. A visual tool used for logical organization of possible causes for a specific problem or effect by graphically displaying them in increasing detail for understanding of the causes.

Concept diagrams (The graphical representation of an associative relation in a concept diagram)

13. Form for capturing real-time quantitative or qualitative data for a variety of purposes.

Data Collection Form or Data Capture Form.

14. Adopting new activities and eliminating those which are found to add little or no value. The goal is to increase effectiveness by reducing inefficiencies, frustrations, and waste (rework, time, effort, material, etc).

Continuous Improvement or Kaizen.

15. A graphical tool for monitoring changes that occur within a process, by distinguishing variation that is inherent in the process (common cause) from variation that yield a change to the process (special cause). This change may be a single point or a series of points in time – each is a signal that something is different from what was previously observed and measured.

Control Chart.

16. Action to eliminate the cause of a detected nonconformity.

Corrective action.

17. The concept that the customer is the only person qualified to specify what Quality means.

Customer-Defined Quality.

18. A continuous quality improvement model consisting out of a logical sequence of four repetitive steps for continuous improvement and learning: Plan, Do, Study (Check) and Act.

The Deming cycle.

19. A procedure and tools that help to identify every possible failure mode of a process or product and to determine the effect of the failure modes on other sub-items and on the required function of the product or process.

Failure Mode and Effects Analysis (FMEA).

20. A graphical representation of a process, depicting inputs, outputs and units of activity.

Flowchart.

21. Japanese term that means workplace where day to day activities are performed.

Gemba.

22. A bar graph of a frequency distribution in which the widths of the bars are proportional to the classes into which the variable has been divided and the heights of the bars are proportional to the class frequencies.

Histogram.

23. A step-by-step strategic planning process that ensures that everyone in the organization knows the strategic direction for the company.

Cascade Strategic Planning Process.

24. A planning system for manufacturing processes that optimizes availability of material inventories at the manufacturing site to only what, when & how much is necessary.

Just-in-Time (JIT) System.

25. Japanese term that means a rapid change event as opposed to Kaizen which is smaller incremental changes.

Kaikaku.

26. Japanese term that means continuous improvement

Kaizen.

27. A Japanese term. The actual term means “signal”. It is one of the primary tools of a Just in Time (JIT) manufacturing system. It signals a cycle of replenishment for production and materials. This can be considered as a “demand” for product from one step in the manufacturing or delivery process to the next. It maintains an orderly and efficient flow of materials throughout the entire manufacturing process with low inventory and work in process. It is usually a printed card that contains specific information such as part name, description, quantity, etc.

Kanban.

28. Initiative focused on eliminating all waste in manufacturing processes.

Lean Six Sigma.

29. A chart was suggested by J.M. Juran for identifying if the Pareto principle is evident in the data. If the Pareto principle is evident, about 20% of the categories on the far left will have about 80% of the impact on the problem.

Pareto chart.

30. A systematic process of understanding what the customer wants, how important these benefits are, and how well different providers of products that address these benefits are perceived to perform.

Customer value analysis.