

Register Number: .....

**B.E DEGREE EXAMINATIONS: APRIL 2014**

(Regulation 2009)

Eighth Semester

**GSS103: TOTAL QUALITY MANAGEMENT**

(Common to AERO/MCE)

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Quality (Q) is quantified as-----  
where P- Performance; E-Expectations.
  - a)  $Q=E/P$
  - b)  $Q=P/E$
  - c)  $Q=1/EP$
  - d)  $Q=EP$
2. ----- refers to what an organization wishes to do and become within and beyond its mandate.
  - a) Vision Statement
  - b) Policy statement
  - c) Mission statement
  - d) Objective statement
3. Customer satisfaction is the sum of
  - a) Quality of product and Service quality
  - b) Employee satisfaction and Service quality
  - c) Employee satisfaction and Quality of product
  - d) Employer satisfaction and Service quality
4. In the 5S philosophy, the focus is to standardize the best practices in the workplace is-----
  - a) SHITSUKE
  - b) SEITON
  - c) SEISO
  - d) SEIKETSU
5. The quality tool which is used to segregate the 'vital few' from the 'trivial many' is
  - a) Cause & effect diagram
  - b) Check sheet
  - c) Scatter diagram
  - d) Pareto diagram
6. The control chart for variable is
  - a) p-chart
  - b) c-chart
  - c) X-R chart
  - d) u-chart
7. The tool which is used for planning, scheduling and control of activities of a project
  - a) Activity network diagram
  - b) Affinity diagram
  - c) Tree diagram
  - d) Relations diagram

8. PDPC stands for
  - a) Product Design Program Chart
  - b) Process Decision Program Chart
  - c) Program Decision Product Chart
  - d) Process Design Product Chart
9. Environmental Management System relates to
  - a) ISO 9000
  - b) ISO 14000
  - c) ISO9001
  - d) ISO9004
10. ISO-9003 Quality system is the model for
  - a) Quality assurance in production & installation
  - b) Quality assurance in Final Inspection & testing
  - c) Guidance in technical, administrative & human factors
  - d) External factors.

**PART B (10 x 2 = 20 Marks)**

11. List the steps in quality planning.
12. Define TQM.
13. Define Customer retention.
14. What do the 5 S' stand for the 5 S philosophy?
15. What is process capability?
16. List the seven tools of quality.
17. Define Bench Marking.
18. Define TPM.
19. State the three auditing techniques
20. What are the six parts of EMS standard?

**PART C (5 x 14 = 70 Marks)**

21. a) Explain the various quality costs with suitable examples.

**(OR)**

- b) Explain the 14 point program of Deming philosophy.

22. a) (i) What is motivation? (2)  
(ii) Explain the Maslow's theory of motivation. (12)

**(OR)**

- b) (i) List the conditions to be considered while selecting suppliers. (8)

(ii) List the objectives of performance measures. (6)

23. a) The following table gives the result of inspection of 50 items per day for 20 days. Construct the fraction defective or percent defective chart and give inference about the process.

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of defectives	4	0	3	2	3	5	1	2	2	0	3	4	2	5	1	0	4	4	5	2

(OR)

b) What are the seven new management tools and explain any four in detail.

24. a) (i) Write about the “House of Quality” in QFD. (12)

(ii) Mention the four phases of QFD process. (2)

(OR)

b) Explain the four stages of FMEA in detail.

25. a) Explain the details of documentation of a quality system.

(OR)

b) List the steps to be adopted in implementing a quality system.

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