Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 51338

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

Fifth/Sixth/Seventh/Eighth Semester

Aeronautical Engineering

MG 1301 — TOTAL QUALITY MANAGEMENT

(Common to all branches except Material Science and Engineering)

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Use of statistical tables are permitted.

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is CWQC?

2. What are the three important quality statements?

3. What is meant by cross functional team?

4. What are the types of supplier sourcing?

5. What is the use of $\overline{X}$ and R chart?

6. Write down the concept of FMEA.

7. What are the types of bench marking?

8. What is POKA YOKE?

9. List out the benefits of quality circles.

10. What are four stages of quality audit?

PART B — (5 × 16 = 80 marks)

11. (a) List and explain the Deming's fourteen points on route to quality. (16)

Or

(b) Select a product or service and describe how the dimensions of quality influence its acceptance. (16)

12. (a) How will you evaluate the customer satisfaction in a Hotel? Suggest a set of questionnaire for evaluation. (16)

Or

(b) What are the common problems with team work? Suggest the ways and means to overcome them. (16)

13. (a) A sub group of 5 items each are taken from a manufacturing process at a regular interval. A certain quality characteristic is measured and $\overline{X}$ and R values are computed. After 25 subgroups it is found that $\Sigma\overline{X} = 357.50$ and $\Sigma R = 8.80$. If the specification limits are 14.40 ± 0.40 and if the process is in statistical control, what conclusions can you draw about the ability of the process to produce items within specification? (16)

Or

(b) What is six sigma? Describe the stages of achieving six sigma status. (16)

14. (a) Explain the following terms. (i) KAIZEN, (ii) KANBAN and (iii) 5S with a suitable illustration. (16)

Or

(b) Discuss the step by step procedure to develop a TPM programme in a manufacturing organization. (16)

15. (a) What is an EMS model? Enumerate the procedure of achieving it. (16)

Or

(b) Explain the procedure involved in achieving ISO 9000 : 2000 quality system. How does it benefit an organization? (16)

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