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Reg. No.:			:				

Question Paper Code: 21459

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Eighth Semester

Automobile Engineering

GE 2022/GE 607/GE 71/10177 GE 004 — TOTAL QUALITY MANAGEMENT

(Common to Seventh Semester Aeronautical Engineering, Production Engineering, Mechanical Engineering, Biomedical Engineering, Biotechnology, Computer Science and Engineering, Marine Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and Sixth Semester – Civil Engineering)

(Also common to Eighth Semester, Electronics and Instrumentation Engineering, Instrumentation and Control Engineering Information Technology and Polymer Technology)

(Regulation 2008 / 2010)

(Common to PTGE 2022 — Total Quality Management for B.E. (Part-Time) Mechanical Engineering – Fifth Semester – Regulation 2009)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What are the elements of TQM?
- 2. What do you mean by service quality?
- 3. List the characteristics of successful quality leaders.
- 4. List out any four benefits of Employee involvement.
- 5. What are the types of check sheets commonly used?
- 6. What is bench marking? Give an example.
- 7. What are the functions of quality circles?
- 8. List the objectives of TPM programme.
- 9. What are organization standards and product standards?
- 10. What is the concept of environmental management system?

PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	(i)	Explain the characteristics of TQM derived from its definitions.	(8)
		(ii)	Explain the Juran's views of TQM.	(8)
			Or	
	(b)	(i)	"Various difficulties can be anticipated in the implementation TQM programme". Validate the statement.	of (8)
•		(ii)	Discuss in detail the dimensions of Quality in the context 'Service'.	of (8)
12.	(a)	(i)	What is meant by strategic planning? Narrate the seven strategic planning cycle.	eps (8)
	•	(ii)	Explain the characteristics of successful team.	(8)
	•	•	\mathbf{Or}	
	(b)	(i)	Explain the phases of PDSA cycle with suitable illustration.	(8)
		(ii)	Write about Quality statement and Customer orientation.	(8)
13.	(a)	(i)	Explain how benchmarking improves product/process quality.	(8)
		(ii)	Describe the various stages in FMEA.	(8)
	·		Or	
	(b)	(i)	Listout the New seven management tools and explain any two detail.	in (8)
		(ii)	What is Six Sigma Concept? How can it be effective in a serve organization.	rice (8)
l 4 .	(a)		suitable example, explain various stages of building a House ity matrix.	of 16)
			\mathbf{Or}	
	(b)	(i)	Explain the different types of cost contributing to the cost of quali	ity. (8)
		(ii)	Explain the Taguchi's quadratic quality loss function. How it different traditional approach of quality loss cost?	ers (8)

	(ii) Discuss the benefits of ISO 9000 certification. Or	(8)	
(b)	List and explain the elements of ISO 9000 quality system.	(16)	