Question Paper Code: 70650

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Sixth/Seventh/Eighth Semester

Civil Engineering

GE 6757 — TOTAL QUALITY MANAGEMENT

(Common to Aeronautical Engineering/Automobile Engineering/Biomedical Engineering/Civil Engineering/Computer Science and Engineering/Electrical and Electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Environmental Engineering/Industrial Engineering/Industrial Engineering and Management/Instrumentation and Control Engineering/Manufacturing Engineering/Materials Science and Engineering/Mechanical Engineering/Mechanical and Automation Engineering/ Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/Production Engineering/Chemical Engineering/ Fashion Technology/Food Technology/Information Technology/ Petrochemical Technology/Petroleum Engineering/Pharmaceutical Technology/ Plastic Technology/B.Tech. Polymer Technology)

(Regulations 2013)

Time: Three hours Maximum: 100 marks

Answer ALL questions.

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

- 1. Elucidate Kaizen.
- 2. What do you mean by cost of quality?
- 3. Write the requirements of reliable supplier rating.
- 4. How employee involvement can be improved in an organization?
- 5. Give the seven tools of quality.
- 6. What is Six Sigma Problem Solving Method?
- 7. Give note on Process Capabilities.

8.	What are Control Charts?				
9.	What are the important requirements of QS9000?				
10.	Mention the different types of quality audits.				
PART B — $(5 \times 13 = 65 \text{ marks})$					
11.	(a) Explain the basic concepts of TQM.				
Or					
	(b)	What are the barriers to "TQM Implementation"?			
12.	(a)	(i)	Enumerate the duties of quality council. (7)	
		(ii)	Explain McGregor's theory X and theory Y.	6)	
Or					
	(b)	What do you understand by the term quality statements? Elaborate them with examples.			
13.	(a)	(i)	List out the seven new management tools. Explain them briefly. (6)	
		(ii)	Discuss about the various stages in failure mode and effe analysis.	ct 7)	
Or					
	(b)	(i)	Compare six sigma and TQM concepts.		
		(ii)	What benefits have been achieved by the organizations that have successfully completed their benchmarking programs? Name are four selected best practiced companies.		
14.	(a) Explain the concept of six sigma in detail.				
	Or				
	(b) Describe the objective and benefits of QFD.				
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15. (a) What are the need for ISO certification in Quality System?

Or

(b) What are the challenges of TQM implementation in Service sector?

PART C —
$$(1 \times 15 = 15 \text{ marks})$$

16. (a) Explain how you will create Quality culture with organisation of your choice.

Or

(b) "TQM is an Expense in Business Organisation" — Comment.

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