**Total Marks:** 80 **Duration:** 03 Hrs

NB:	1. Question <b>No. 1</b> is <b>compulsory.</b>	
	2. Attempt <b>any three</b> questions from remaining <b>five</b> questions.	
	3. Indicate <b>question no.</b> properly.	
1.	a) Explain the role of leadership in improvement of quality of product	5
	b) What is DMAIC? Explain in brief	5 5
	c) Define Six Sigma and state goals of Six Sigma	
	d) Describe the term internal customer and external customer with respect to total quality	5
2.	a) Select any product or service & describe how the dimensions of quality influences its	10
	acceptance b) Efficiency has been defined as "doing things better" and effectiveness as "doing better things". Describe how benchmarking can be used to improve both efficiency and effectiveness.	10
3.	a) Describe the role of employee involvement in TQM by responding to the following: i) Why is employee involvement important to TQM?	10
	ii) Employee time is valuable. How will it pay reasonable dividends?	
	b) How Total Productive maintenance helps to Improve process quality?	10
4.	a) Briefly describe the purpose of an ISO 9000 quality system. Also describe four tires of quality documentation	10
	b) Explain Juran's Triology and its applicability in today's business scenario	10
5.	a) What is benchmarking? State basic steps of benchmarking and describe each in brief	10
	b) Mention seven Total Quality management tools and describe any two in detail	10
6.	a) Explain Deming's PDCA cycle, how it helps in continuous improvement?	10
	b) Elaborate on Process approach. How it is different from the product approach?	10

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