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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Ind. Engg. & Mgt.) (Spl. in TQM) (PT) (Sem.-7) SIX SIGMA

Subject Code : IEM-701

M.Code: 71695

Time: 3 Hrs.

Max. Marks: 40

INSTRUCTIONS TO CANDIDATES :

- 1. Attempt All EIGHT questions from SECTION-A carrying TWO marks each.
- 2. Attempt any SIX questions out of EIGHT from SECTION-B carrying FOUR marks each.

SECTION-A

1. Answer briefly :

- a. What do you understand by six sigma? How are six sigma quality levels different from conventional quality control norms applicable in Indian Industry?
- b. Show DMAIC improvement model used in six sigma implementation with a neat sketch.
- c. How do organizations determine critical parameters and opportunities for the defect to occur?
- d. Describe the procedure for conducting root cause analysis for detecting defects.
- e. How do organizations evolve parameters depicting statistical evidence of improvement in process parameters?
- f. How results of changes and improvements can be verified?
- g. What is DFSS Certification? How is it different from DMAIC methodology?
- h. How six sigma initiatives can become self-sustaining?



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SECTION-B

- 2. What do you understand by six sigma as metric? Discuss six themes of six sigma.
- 3. How do organizations develop problem statement and project charter? Also explain the role of team selection and guidelines for adopting implementation plan.
- 4. Discuss the procedure for calculating calculate baseline sigma levels for processes and establish capability indices for the processes.
- 5. What is the importance of finalizing the project charter for creating plan for improvement in analysis phase of six sigma implementation?
- 6. Discuss the steps involved in arriving at selecting a particular improvement solution for addressing a specific problem.
- 7. Describe the steps taken by organization in control phase of six sigma implementation process.
- www.FirstRanker.com 8. TRIZ: A Perfect Tool for Process Innovation by Tackling Engineering contradictions. Explain.
- 9. Describe best practices in six sigma.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.