Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 16

B.Tech. (Ind. Engg. Spl. in TQM)   (Sem.–7)
ADVANCED QUALITY TOOLS
Subject Code : IEM-751
M.Code : 71698

Time : 3 Hrs.   Max. Marks : 40

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A

Answer briefly :

Q1. Write the advantages of relation diagram.

Q2. List the type of matrix diagram.

Q3. What is the application of Chi-square test?

Q4. Write the difference between one factor and several factor experiments.

Q5. How to count the degree of freedom?

Q6. Define signal to noise ratio.

Q7. List the different noise factors.

Q8. Write the worksheet operations in MINITAB.

Q9. What is the use of control charts?

Q10. How to create single and multiple variables graphs in MINITAB?

SECTION-B

Q11. Elaborate the method of constructing the Affinity diagram with suitable example.

Q12. Discuss the concept of process decision program chart and write its application.

Q13. Discuss the statistical procedure for two-way ANOVA.

Q14. Explain the three phases of Design of Experiment (DOE) process by taking a suitable example.

Q15. With a suitable example discuss the procedure of selecting and using the orthogonal array.

Q16. Differentiate between one-way and two-way ANOVA.

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.