Roll No……..….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [11]

M. Tech ME (Semester – 2nd)
ADVANCED CAD/CAM
Subject Code: MMEE2207
Paper ID: [191009]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. Discuss with suitable diagram design process in general and using computers?
Q2. Discuss the parametric representation of synthetic curve using suitable example?
Q3. Discuss various types and applications of various types of 3D transformations?
Q4. Discuss the basic concept of visual realization in CAD and explain hidden line removal method?

Section – B **(8 marks each)**

Q5. Discuss the role of hardware and software in CAD applications?
Q6. Discuss the characteristics and equation of Bezier and B spline curves?
Q7. Taking suitable 2D example explain concatenation of transformations?
Q8. Write a short note on application of CAD/CAM integration in Manufacturing Industry?

Section – C **(10 marks each)**

Q9. Discuss the cubic spline interpolation method taking suitable example?
Q10. Discuss in brief constructive solid geometry?
Q11. Write a short note on Reverse Engineering and Rapid Prototyping?