Second Semester M.Tech Degree Examination-October 2014

2013 Scheme

Branch: Mechanical Engineering

Stream: Computer Integrated Manufacturing

MCD 2001: PRINCIPLES OF ROBOTICS AND APPLICATION

Time: 3hrs **Max marks:60**

Instructions: Answer **Any Two** Questions from each module

All questions carry **equal** marks

MODULE-1

1**.**Write a short note on precision of movement of robotic systems and various factors according for the same.

2.Explain the different power transmission systems used in robotic drive system.

3.Briefly explain the different robotic configurations with fig and enumerate the applications of each type.

MODULE-2

4.Explain the various components of machine vision system.

5.Briefly explain about the leadthrough programming and motion interpolation in robot programming.

6.What are the different types of end effectors used in robotic manipulators? Explain each with applications and figure.

MODULE-3

7. Explain the application of Industrial Robots in Assembly and inspection.

8. Briefly explain the recent trends in robotics and intelligent robots.

9. Enumerate and explain the different elements in function in a robot language.