COMPUTER AIDED MANUFACTURING AND ROBOTICS LAB

II Semester

Course Code: 19ME2108	L	P	C
	0	3	1.5

Course Outcomes: At the end of the course, the student will be able to
CO1: Create the part model and simulate drilling operations using CAM software.
CO2:Generate the tool path and NC part program for milling and turning operations using CAM software.
CO3: Demonstrate facing, turning and threading operations on CNC lathe.
CO4: Demonstrate drilling and contouring operations on PKM.
CO5: Develop programs on robotic arms.

List of Experiments:

Note: Any ten exercises from the following.

1. Creating a 2D part model using CAM software
2. Tool path simulation and NC code generation for drilling operations using CAM software
3. Tool path simulation and NC code generation for milling operations using CAM software
4. Tool path simulation and NC code generation for turning operations using CAM software
5. Mode selection and tool offsetting on CNC lathe
6. CNC part program for facing and step turning on CNC lathe machine
7. CNC part program for taper and circular turning on CNC lathe machine
8. CNC part program for threading on CNC lathe machine
9. CNC part program on milling machine
10. Design and build a simple solid model using 3D printing
11. Drilling on 2-DOF PKM
12. Contouring on 3-DOF PKM
13. Programming on 4-DOF SCARA robot
14. Programming on 6-DOF Articulated robot