

SUBJECT CODE NO:- P-202
FACULTY OF ENGINEERING AND TECHNOLOGY
B.E.(Mech) Examination May/June 2017
Robotics and Industrial Automation [Elective-II]
(Revised)

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

N.B	Answer any three questions from each section.	
	Section A	
Q.1	a) Compare Hydraulic drive with Pneumatic drive. b) Write about robot application in spray painting.	07 06
Q.2	a) Explain forward and inverse kinematics. b) Give examples for 2R and 3R manipulator.	07 06
Q.3	a) What is RPY related to robot kinematics? Explain. b) Write about tools as robot end effectors.	07 06
Q.4	a) Write about the sensor characteristics. b) What is image conversion? Explain.	07 06
Q.5	Write short note on any two. a) Robot work envelope. b) Motion control methods. c) Frame buffer.	14
	Section B	
Q.6	a) What is flexible Automation? Explain. b) Write about designing for Automation.	07 06
Q.7	a) What is non- contact inspection method? Explain. b) Write about computer process control and its forms.	07 06
Q.8	a) Compare AS/RS system in detail. b) Write about different types of automated assembly system.	07 06
Q.9	a) What are Ladder logic diagram? Explain. b) Write about basic PLC programming. .	07 06
Q.10	Write short notes on any two a) Machine Centre b) Ethics in industrial automation. c) Industrial control application.	14