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Sem. 3rd Roboties
Sub : Automation & Roboties

Time : 3 Hrs. **M.M. : 60**

SECTION-A

Note : Multiple Choice Questions. All Questions are compulsory. (6x1=6)

Q.1 Robot word is devised from word (CO-1)

a) Robota b) Robata
c) Rebota d) Ribota

Q.2 Drives are also knows as (CO-3)

a) Actuator b) Controller
c) Senser d) Manipulator

Q.3 There are _____ laws of Raobotics. (CO-1)

a) 2 b) 3
c) 4 d) 5

Q.4 which drawing deals with robots (CO-1)

a) Computer b) Electrical
c) Mechanical d) All of above

Q.5 What are applications of robots (CO-1)

a) Welding b) Spray painting
c) Bottling d) all of above

Q.6 _____ is an example of simple Robot. (CO-1)

a) Drill machine

b) Lathe machine

c) Automatic washing machine

d) All of above

Section-B

Note: Objective / completion type questions. All questions are compulsory. (6x1=6)

Q.7 Expand LVDT_____. (CO-4)

Q.8 Joint of robot is _____. (CO-5)

Q.9 Expand CAD_____. (CO-5)

Q.10 Strain gange is _____ sensor Robot. (CO-3)

Q.11 First law of Robotics says_____. (CO-1)

Q.12 Define degrees of freedom. (CO-2)

Section-C

Note: Short answer type Question. Attempt any eight questions out of ten Questions. (8x4=32)

Q.13 Discuss Laws of Robotics. (CO-1)

Q.14 Explain Robot subsystems in brief. (CO-1)

Q.15 Explain concept of work volume/envelop. (CO-2)

Q.16 Discuss the salection of Robot and End-effector in brief. (CO-2)

Q.17 Explain working of stepper motor. (CO-3)

Q.18 How the selection of actuator is per formed? (CO-3)

Q.19 Write working of potentiometer. (CO-3)

Q.20 Explain operation is cartesian made ojrobots. (CO-5)

Q.21 How the selection of sensor takes place? (CO-4)

Q.22 Write & applications of Robots. (CO-1)

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)

Q.23 Explain the programming using Arduino micro controller. (CO-5)

Q.24 Discuss various internal sensors in brief. (CO-4)

Q.25 Discuss the classifications of Robots. (CO-1)