
Answer any FIVE Questions All Questions carry equal marks

1. Classify Robots illustrating their characteristics and applications.
2. (a) What are the advantages of off line programming languages of robots over other teaching methods.
(b) Explain the significance of Dynamic stabilization of Robot.
3. Explain the double axis rotation method to find out trajectory of end effect.
4. (a) Enumerate the differences between tactile and non tactile sensors.
(b) What are position sensors? What are the different types of position sensors? What are the conditions that determine the choice of a particular type of position sensor.
5. Draw the block diagram of hybrid control system and explain briefly.
6. What is the function of gripper? Discuss various types of Grippers used in industrial Robots.
7. Explain the different techniques for finding the inverse kinematics for any manipulator.
8. State characteristics of work which promote application of robots. Discuss robot application in painting.

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