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| ait big letter head scan - Copy | **Dr. Ambedkar Institute of Technology, Bangalore-56**  **(An Autonomous Institution Affiliated to Visvesvarya Technological University, Belgaum)** |

Sub. Title : **ROBOTICS 18ME752**

**Assignment 1 :unit 1 and unit 2**

1. Explain the advantages and dis advantages of using robots in industries
2. Explain with a sketch hydraulic system of robot
3. Discuss the five common robot configurations with sketch
4. Explain the selection consideration of gripper
5. Explain actuators and discuss about hydraulic actuators with a neat sketch
6. Explain actuators and discuss about pneumatic actuators with a neat sketch
7. Explain electric drives with a neat sketch
8. Discuss the impact of robotics on direct labor
9. Explain performance parameters and with a figure describe repeatability resolution and accuracy
10. Describe the construction of stepper motor
11. Discuss force analysis of gripper mechanism in detail
12. Expain gripper design consideration
13. Problems page 54-63 from ganesh hedge text book
14. Short notes on

robot links

Joints in robots

Need for robots

Wrists & motions

Management & robotics