

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (ME) (Sem.-3)
AUTOMATION & ROBOTICS

Subject Code : MTME-206

M.Code : 74982

Date of Examination : 12-06-2024

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT question.
2. Each question carry TWENTY marks.

1. a) What do you mean by Automation in production system? (10)
b) Discuss basic elements of an automated system. (10)
2. Discuss the classification and types of automatic transfer machines used in manufacturing automation. (20)
3. Discuss the basic classification and application of industrial robot. (20)
4. Discuss the constructional details and applications of various transfer devices used for job orienting and picking operations. (20)
5. a) Give the differences between Mechanization and Automation. (10)
b) Discuss various types of Automations. (10)
6. Discuss Flexible Manufacturing Automation and explain significance of Automated Assembly System. (20)
7. a) Define degree of freedom in robot technology. (5)
b) Discuss various economical and social issues related to robot technology in manufacturing Industry. (15)
8. Discuss the features and requirements of having automated storage and retrieval system in manufacturing Industry. (20)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.