

R20 Regulation

Subject code: 3E70C

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, May 2025

AUTOMATION IN MANUFACTURING

(ME)

Maximum Marks: 70

Date: 31.05.2025

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 8 questions. Answer any five full questions from this part.
 4. Each question carries 10 marks and can have a, b, c, d or sub-questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

Marks	CO	BTL
2M	1	L1
2M	1	L1
2M	2	L1
2M	2	L1
2M	3	L1
2M	3	L1
2M	4	L1
2M	4	L1
2M	5	L1
2M	5	L1

1. What is manufacturing?
2. Analyse various types of production systems.
3. What is industrial control?
4. Explain barcode technology.
5. Elaborate mixed model control lines.
6. Justify the importance of material handling.
7. Distinguish between Group technology and flexible manufacturing.
8. Discuss the reasons for Scheduling.
9. Identify any two duties of the floor control.
10. Define constant inventory.

Part-B

Answer All the following questions.

(5x10M=50Marks)

Marks	CO	BTL
10M	1	L2
10M	1	L2
10M	2	L2
10M	2	L2
10M	3	L2
10M	3	L2
10M	4	L2
10M	4	L2
10M	5	L2
10M	5	L2

11. What is lean production? Explain the objectives of flow line reduction.
OR
12. What is the difference between a closed loop control system and open loop control system?
13. Evaluate the importance of recirculating curves.
OR
14. Explain the automatic identification methods.
15. Analyse the components of manufacturing systems.
OR
16. Explain the automated production lines.
17. Explain automated assembly systems.
OR
18. Briefly explain the two basic types of inspection.
19. What is quality control testing? Explain related from inspection?
OR
20. What is the quality function deployment.