R20 Regulation *Subject code: 3E7CC*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, October 2026

AUTOMATION IN MANUFACTURNG

(ME)

Maximum Marks: 70 Date: 30.10.2026 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 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What is production system?	2M	1	L1
2	Explain automation principles.	2M	1	L1
3	What is industrial control?	2M	2	L1
4	Explain barcode technology.	2M	2	L1
5	Elaborate mixed model assembly lines	2M	3	L1
6	Justify the importance of material handling.	2M	3	L1
7	Distinguish between Group technology and flexible manufacturing.	2M	4	L1
8	Discuss the reasons for Scheduling.	2M	4	L1
9	Identify any two duties of shop floor control.	2M	5	L1
10	Define concurrent engineering.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain hard ware components for automation and process control	10M	1	L2
	OR			
12	What is the difference between a closed loop control system and open loop control system?	10M	1	L2
13	Evaluate the importance of recirculating conveyor.	10M	2	L2
	OR			
14	Evaluate the importance of automated storage system.	10M	2	L2
15	Analyze the components of manufacturing system.	10M	3	L2
	OR			
16	Explain the automated production lines.	10M	3	L2
17	Explain automated assembly systems.	10M	4	L2
	OR			
18	Briefly explain the two basic types of inspections.	10M	4	L2
19	What is quality control testing as distinguished from inspection?	10M	5	L2
	OR			
20	What is the quality function deployment.	10M	5	L2