



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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End - Term Examinations – May / June 2026

Date: 23- 05- 2026

Time:09:30am – 12:30pm

School: SOC/SOD/SOIS/SOM-PG	Program: MCA	
Course Code: MEC3257	Course Name: Industry 4.0	
Semester: IV	Max Marks: 100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	C05	C06
Marks	6	6	22	22	22	22

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2 marks.

10Q x 2M=20M

1.	List any four key technologies that enable Industry 4.0.	2 Marks	L1	C01
2.	State the purpose of Dedicated Production Line.	2 Marks	L2	C01
3.	Name any two benefits of Industry 4.0 in manufacturing.	2 Marks	L1	C01
4.	Outline the objectives of Business 4.0.	2 Marks	L2	C02
5.	Mention any two innovations associated with Healthcare 4.0.	2 Marks	L2	C02
6.	Define Education 4.0.	2 Marks	L1	C02
7.	Mention any two technologies utilized in Healthcare 4.0.	2 Marks	L1	C03
8.	List the major benefits of Industry 4.0 for government functioning.	2 Marks	L1	C04
9.	Mention any two features of Curriculum 4.0.	2 Marks	L1	C05
10.	Mention any two key elements of a framework to achieve Industry 4.0 vision.	2 Marks	L1	C06

Part B

Answer the Questions.

Total Marks 80 M

11.a	An AI-based quality inspection system analyzed 3000 products: • True Positives = 500 • True Negatives = 2200 • False Positives = 150 • False Negatives = 150 Calculate: a) Accuracy b) Precision	5 Marks	L3	C03
11.b	Agriculture 4.0 will play a crucial role in ensuring global food security.” Justify this statement by discussing the role of big data analytics, IoT, drones, 3D printing, robotics, block chain, and AI in agriculture.	15 Marks	L2	C03
Or				
12.a	An automated warehouse robot picks 75 items per hour. It works 20 hours per day for 25 days per month. Calculate: a) Daily picking capacity b) Monthly picking capacity c) If demand increases by 15%, how many additional robots are required to meet demand?	5Marks	L3	C03
12.b	Explain the concept of Healthcare 4.0 and discuss how AI, Virtual Reality, Big Data Analytics, 3D printing, and wearable medical devices are revolutionizing the healthcare ecosystem.	15 Marks	L2	C03
13.	Analyze the impact of Industry 4.0 on people and society by evaluating its benefits and challenges.	20 Marks	L4	C04
Or				
14.	Analyze how Industry 4.0 contributes to economic growth, innovation, skill development, and entrepreneurship and also challenges such as unemployment, ethical issues in AI, and cybersecurity threats.	20 Marks	L4	C04
15.	Elaborate on the changing role and expectations from Faculty 4.0 in the Education 4.0 era and discuss how faculty needs to adopt digital tools, personalized learning approaches, and continuous professional upskilling to foster innovation and experiential learning in students.	20 Marks	L3	C05
Or				
16.	Identify and explain the essential skills required for the future workforce in Industry 4.0 such as digital literacy, critical thinking, complex problem solving, creativity, interdisciplinary knowledge, and emotional intelligence.	20 Marks	L3	C05
17.	Analyze digital maturity stages in Industry 4.0 and explain how industries assess readiness to select suitable technology strategies..	20 Marks	L4	C06
Or				
18.	Critically evaluate the major challenges and barriers faced by industries in adopting Industry 4.0 technologies.	20 Marks	L4	C06