



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
 Approved by AICTE, New Delhi, (Reference to AICTE University, Chennai)
 Accredited by NAAC, Coimbatore, with 'A' Grade & with (B) &
 Approved by APMRA, (17/11/2014) under a license no. (17/11/2014)
 COIMBATORE-641 019, TAMIL NADU



Reg. No:

R/E/Tech- Internal Assessment – III
Academic Year 2024-2025 (Even Semester)

Mechanical Engineering
Fourth Semester

A

23ME1207- INTERNET OF THINGS FOR PRODUCTION SYSTEM
Time: 1 1/2 Hours

Answer All Questions

Maximum Marks: 50

- | | | |
|---|-----|--------|
| 1. Define AGV | CO1 | blooms |
| 2. Define Automation (Semester 2023) | CO4 | END |
| 3. Mention the purpose of Amplification in DNS | CO4 | RRM |
| 4. Smart Metering using IoT Define | CO5 | END |
| 5. Mention purpose of Factors degradation (Semester 2023) | CO5 | APP |

PART - B (2*11=26 Marks) A (1*14=14 Marks)

- | | | |
|--|-----|--------|
| 6. (a) Enumerate types of AGVs used in Production system (10) | CO1 | blooms |
| (b) (i) Smart Energy Management (Hurdle) (10) | CO4 | RRM |
| (ii) Mention the challenges in implementing edge-computing in IoT devices and suggest practical solutions to overcome these challenges. (10) | CO5 | APP |
| 7. (a) Industrial Automation using Robots Case study (11) | CO1 | blooms |
| (b) Define Predictive Maintenance and Analyze the responses of Predictive Maintenance in production system (General Exam 2022) (10) | CO4 | ANA |
| (c) Let Smart Inventory Management. How it is useful in decrease the cost during manufacturing Case study (10) (Amazon Robotics 2021) | CO5 | ANA |

Bloom's Taxonomy:
RRM Remember **END** Understand **APP** Apply **ANA** Analyze **COA** Evaluate

Praveen Kumar
 Professor of IT

Praveen Kumar
 Teaching Coordinator

Praveen Kumar
 HOD-Mech



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
 Approved by AICTE, New Delhi, (Reference to AICTE University, Chennai)
 Accredited by NAAC, Coimbatore, with 'A' Grade & with (B) &
 Approved by APMRA, (17/11/2014) under a license no. (17/11/2014)
 COIMBATORE-641 019, TAMIL NADU



Reg. No:

R/E/Tech- Internal Assessment – III
Academic Year 2024-2025 (Even Semester)

Mechanical Engineering
Fourth Semester

B

23ME1207- INTERNET OF THINGS FOR PRODUCTION SYSTEM
Time: 1 1/2 Hours

Answer All Questions

Maximum Marks: 50

- | | | |
|---|-----|--------|
| 1. Mention advantages of AGV in production system | CO1 | blooms |
| 2. (i) Modbus & Modbus+ (2022) | CO4 | END |
| (ii) For the importance of edge-computing in Industry 4.0 (Hurdle 2023) | CO4 | END |
| 3. Mention the importance of Signal Conditioning in DNS | CO5 | RRM |
| 4. Discuss the role of automation in enhancing quality of parts | CO5 | ANA |
| 5. Analyze how predictive maintenance is useful to reduce the cost of manufacturing | CO5 | ANA |

PART - B (2*11=26 Marks) & (1*14=14 Marks)

- | | | |
|---|-----|--------|
| 6. (a) Impact of Things for Plant Automation Case study (11) | CO1 | blooms |
| (b) Analyze the major cybersecurity threats in the Internet of Things (IoT) ecosystem. How can these threats be mitigated? (10) | CO4 | ANA |
| 7. (a) Smart Tracking of Components in Production line using IoT (10) | CO5 | ANA |
| (b) Illustrate Sensor Data Acquisition with Block diagram (11) | CO5 | END |
| 8. (a) Create a control using IoT Case study with real time Examples (Hurdle 2023) (10) | CO4 | APP |
| (b) Let Smart Energy Management (Hurdle of Semester Exam 2023) (10) | CO5 | APP |

Bloom's Taxonomy:
RRM Remember **END** Understand **APP** Apply **ANA** Analyze **COA** Evaluate

Praveen Kumar
 Professor of IT

Praveen Kumar
 Teaching Coordinator

Praveen Kumar
 HOD-Mech