

(FOR THE CANDIDATES ADMITTED

23UIT6E8

DURING THE ACADEMIC YEAR 2023-2024 ONLY)

REG.NO.:

N.G.M. COLLEGE (AUTONOMOUS): POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY 2026

BSC IT

MAXIMUM MARKS: 75

SEMESTER: VI

TIME: 3 HOURS

PART-III

INTERNET OF THINGS

SECTION - A

(10 x 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

1. M2M communication in IoT refers to _____
 - a) Man to Man communication
 - b) Machine to Machine communication
 - c) Media to Media communication
 - d) Manual to Machine communication
2. Which device acts as an interface between sensors and cloud?
 - a) Gateway
 - b) Router
 - c) Switch
 - d) Server
3. What is the role of data analytics in IoT?
 - a) To acquire data
 - b) To transmit data
 - c) To extract useful insights from data
 - d) To power devices
4. RFID technology is mainly used for _____
 - a) Detecting environmental changes
 - b) Identifying and tracking objects
 - c) Processing big data
 - d) Controlling actuators
5. Which of the following is a major IoT security threat?
 - a) Limited battery life
 - b) Network latency
 - c) Device interoperability
 - d) Unauthorized access and data breaches

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

6. Which component collects data in the IoT conceptual framework?
7. Which communication technologies are commonly used in IoT?
8. What is the primary purpose of data acquisition in IoT?
9. What is participatory sensing in IoT?
10. State the main purpose of prototyping in IoT software development.

SECTION – B

(5 x 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

11. a) Describe about M2M Communication?
(OR)
b) Write short notes on sources of IoT.

12. a) Describe about IoT communication technologies.
(OR)
b) How device management done at Gateway?
13. a) How will you get IoT data and store it?
(OR)
b) How will you organizing the data collected via IoT?
14. a) What is sensor technology?
(OR)
b) Write short notes on Industrial and Automotive IoT.
15. a) Describe about prototyping embedded device software.
(OR)
b) What are security models?

SECTION - C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

16. a) Discuss about the conceptual framework of IoT.
(OR)
b) Explain architectural view of IoT in detail.
17. a) Explain M2M systems layers and design standardization in detail.
(OR)
b) What is data enrichment and consolidation in IoT?
18. a) Discuss about transactions, business processes and integration in detail.
(OR)
b) Explain the knowledge acquiring, managing and storing processes in detail.
19. a) Explain sensor data communication protocols in detail.
(OR)
b) Discuss about Radio Frequency Identification Technology in detail.
20. a) Discuss about Internet and Web/Cloud services software development.
(OR)
b) Explain the vulnerabilities, security requirements and threat analysis.
