

(FOR THE CANDIDATES ADMITTED

23PCS311

DURING THE ACADEMIC YEAR 2024 ONLY)

REG.NO. :

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

END-OF-SEMESTER EXAMINATIONS : NOVEMBER- 2024

MSC COMPUTER SCIENCE

MAXIMUM MARKS: 75

SEMESTER : III

TIME : 3 HOURS

23PCS311-INTERNET OF THINGS

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. MQTT is mainly used for _____
 - a) M2M communication
 - b) Device communication
 - c) Internet communication
 - d) Wireless communication
2. Simple Network Management Protocol (SNMP) uses _____ layer for carrying out its operation.
 - a) physical
 - b) data link layer
 - c) application
 - d) network layer
3. Which layer is CoAP?
 - a) Control layer
 - b) Transport layer
 - c) Service layer
 - d) Application layer
4. Arduino shields are also called as _____
 - a) Extra peripherals
 - b) Add on modules
 - c) Connectivity modules
 - d) Another Arduinos
5. Who will use their own IoT business models?
 - a) PaaS
 - b) SaaS
 - c) IaaS
 - d) Service provider

(CONT...2)

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Define IoT.
7. What is SNMP?
8. Define CoAP .
9. What to Arduino?
10. Define IIoT.

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Sketch the Functional Blocks of IoT .
(OR)
b) Compare between SDN and NFV.
12. a) Describe the Need for IoT Systems Management.
(OR)
b) Examine the Network Operator Requirements.
13. a) Write about IoT Reference model.
(OR)
b) Examine the M2M and WSN Protocols.
14. a) Describe the Logical Design using Python.
(OR)
b) Examine the Linux on Raspberry Pi.
15. a) Describe the IIoT Connectivity.
(OR)
b) Interpret the Standardization of IIoT.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 (Or) K5)

16. a) Discuss the IoT Enabling Technologies.
(OR)
b) Compare between IoT and M2M.
17. a) Justify the IoT Design Methodology.
(OR)
b) Outline the IETF Architecture for IoT.
18. a) Discuss the Protocol Standardization for IoT.
(OR)
b) Determine the SCADA and RFID Protocols.
19. a) Outline the Building Block of Raspberry Pi.
(OR)
b) Discuss the Programming Raspberry Pi with Python.
20. a) Outline the IIoT architecture.
(OR)
b) Summarize the Opportunities and Challenges of IIoT.
