

(FOR THE CANDIDATES ADMITTED

22PCS311

DURING THE ACADEMIC YEAR 2022 ONLY)

REG.NO.

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

END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2023

M.Sc COMPUTER SCIENCE(SF)

MAXIMUM MARKS: 50

SEMESTER :III

TIME : 3 HOURS

PART - III

22PCS311-INTERNET OF THINGS

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)

MULTIPLE CHOICE QUESTIONS.

1. An IoT network is a collection of _____ devices.
a) Signal b) Machine to Machine c) Interconnected d) Network to Network
2. _____ provides a common mechanism for network devices to relay management information within single and multi-vendor LAN or WAN environments.
a) SNMP b) SMNP c) SMMP d) SNNP
3. _____ receives the data which is sent by the Radio nodes wirelessly, generally through the internet.
a) WLAN Access Point b) Radio nodes c) Sensors d) WLAN Hub
4. _____ is to route the processed data and transfer it to proper databases or network storage for proper utilization.
a) Gateways b) Processors c) Applications d) Sensors
5. _____ is a Synchronous Serial data protocol used for communicating with one or more peripheral devices.
a) Serial interface b) Serial Peripheral Interface c) I2C d) SCL

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. List any two domain specific IoTs.
7. State the importance of M2M system.
8. What is M2M and WSN protocols?
9. State building blocks of Raspberry PI.
10. Differentiate IoT and IIoT.

(CONT...2)

SECTION – B**(5 X 3 = 15 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Explain the features of domain specific IoTs. (OR)
b) Illustrate NFV for IoT
12. a) Explain the component of SNMP . (OR)
b) Assess M2M high level ETSI Architecture.
13. a) Explain the basis of Zigbee architecture. (OR)
b) Discuss IoT reference architecture in brief.
14. a) Examine Raspberry Pi interfaces. (OR)
b) Summarize the building blocks of Raspberry Pi.
15. a) Explain the functions of amazon web services for IoT. (OR)
b) How IIoT is implemented in home automation and agriculture? Explain

SECTION – C**(5 X 5 = 25 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 (Or) K5)**

16. a) Outline IoT architecture in detail (OR)
b) Summarize physical and logical design of IOT and IoT Enabling technologies
17. a) Analyse the IoT Platforms design methodology (OR)
b) Examine IETF Architecture for IoT in detail.
18. a) Compare SCADA and RFID Protocols in IoT. (OR)
b) What is CoAP? Explain CoAP Security issues in detail.
19. a) Analyze the various IoT platforms in detail. (OR)
b) Discuss how to Program Raspberry PI with python.
20. a) Classify various tools involved in IIoT (OR)
b) Discuss IIoT architecture , challenges and opportunities .
