

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

(5 Pages)

Reg. No:

Question. Code No : 25E01404

Sub Code : 24PECA24

PG Degree - End Semester Examinations, April 2025

Second Semester

M.C.A

Elective - Internet of Things

(For those who joined in July 2024 onwards)

Time : 3 Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

1. _____ is a short range wireless connectivity standard that uses magnetic field induction.

(a) Wireless Sensor Network (b) Zigbee

- (c) Near Field Communication (d) Bluetooth
2. Web Socket API is _____.
- (a) Unidirectional (b) Bidirectional
(c) Directionless (d) Multiple Directional
3. _____ is a software used to create and run virtual machines.
- (a) Hypervisor (b) Guest OS
(c) Host OS (d) Super user
4. _____ is a Python package for numerical calculations for AI.
- (a) Numpy (b) Pandas
(c) Scikit (d) Tensorflow
5. _____ is a common application of IoT in healthcare?
- (a) Wearable fitness trackers (b) Smart traffic lights
(c) Autonomous drones (d) Smart thermostats
6. A cloud deployment model designed for use by a single organization is called _____.
- (a) Public cloud (b) Private cloud
(c) Hybrid cloud (d) Community cloud
7. IoT is used in Smart Cities for _____
- (a) Smart Education (b) Smart energy
(c) Smart waste management (d) Smart industry
8. Expand IIoT?

(b) Explain any two approaches of virtualization for IoT Resource Management.

13. (a) Give your thoughts on IoT application in Politics.

(OR)

(b) What are the deployment models of Cloud Computing?

14. (a) Discuss in brief IoT application for Smart cities.

(OR)

(b) Explain IIoT.

15. (a) Explain on the security requirements of IoT and M2M Network Technologies.

(OR)

(b) Write short notes on CoAP.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Explain the Logical design of IoT.

(OR)

(b) Give a brief account of Bluetooth technology.

17. (a) Explain how Python Programming helps in IoT.

(OR)

(b) Elaborate on Hardware Virtualization.

18. (a) What are the applications of IoT in Military?

(OR)

(b) Describe the service models of Cloud Computing.

19. (a) Explain IoT applications in Smart Health Care.

(OR)

(b) Discuss on IoT applications in Smart Education.

20. (a) Give a brief account of the High level ETSI M2M Architecture with a diagram.

(OR)

(b) Discuss on the Security of IETF and M2M Network Technologies.