

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – APPLIED ELECTRONICS

IoT AND ITS APPLICATIONS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. In IoT systems, the level 3 is -----.
(i) data generation (ii) first analytics
(iii) autonomous (iv) deep learning
2. ----- is a short range wireless technology.
(i) AFC (ii) NFC (iii) QoS (iv) transistor
3. An actuator is a ----- component or system that moves or controls the mechanism of the system.
(i) Machine (ii) motor (iii) hydraulic (iv) controllers
4. An ----- is a software and hardware.
(i) capacitor (ii) ios (iii) kernel (iv) IoT
5. In Image processing, data analysis and ----- are the applications of clustering.
(i) groups (ii) patterns (iii) pattern recognition (iv) all

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. a. Explain the IoT design the methodology in detail.
(OR)
b. With a neat diagram, explain about cloud service.
7. a. Discuss about industrial and automotive networks.
(OR)
b. Justify the QoS in IoT systems.
8. a. Classify the various embedded hardware's in detail.
(OR)
b. Explain about controllers with diagrams.
9. a. Discuss about the operation systems of IoT applications.
(OR)
b. Illustrates the building IoT applications using CC32XX.

Cont...

- 10 a. List out the challenges in managing IoT data.
(OR)
b. Write a detailed note on forecasting.

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

11. a Explain the different levels of IoT systems.
(OR)
b Categorize the various design challenges with examples.
12. a Elucidate wireless sensors and its applications.
(OR)
b Categorize the layer protocol optimization with examples.
13. a Enumerate the embedded devices and its applications.
(OR)
b Analyze the architecture of CC32XX in detail.
14. a Enumerate the android applications with examples.
(OR)
b Elucidate about embedded Linux.
15. a Discuss in detail about data models and data acquisition in sensor networks.
(OR)
b Elucidate query processing and query optimization in detail.

Z-Z-Z END