

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – COMPUTER TECHNOLOGY

INTERNET OF THINGS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

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

- 1 Which of the following layers provides end to end communication in IoT?
(i) Logical Layer (ii) Data link Layer
(iii) Physical Layer (iv) Transport Layer
- 2 Which of the following address belongs to class A?
(i) 121.12.12.248 (ii) 128.12.12.248
(iii) 130.12.12.248 (iv) 129.12.12.248
- 3 The Raspberry Pi is defined as the _____.
(i) Mini Computer (ii) Mega Computer
(iii) Micro Computer (iv) Nano computer
- 4 What does HDFS stands for?
(i) High Definition File System (ii) Hadoop Distributed File System
(iii) High Dynamic File System (iv) Hadoop Data File System
- 5 What does IoT collect?
(i) Device Data (ii) Human Generated Data
(iii) Machine Generated Data (iv) Sensor Data

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Describe the functional block of IoT ecosystem.
OR
b Prepare short notes on sensors.
- 7 a Explain about the IEEE 802.15.4.
OR
b Analyze the concepts of constrained networks.
- 8 a Show the importance of microcontroller.
OR
b Summarise the features of Raspberry Pi.
- 9 a Analyze the features of NoSQL database.
OR
b Explain in detail about the YANG.
- 10 a Show the importance of Cisco IoT system.
OR
b Narrate about smart traffic control.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Identify the importance of IoT World Forum.
OR
b Discuss the IoT architecture in detail.
- 12 a Analyze the Physical and MAC layers.
OR
b Express the significance of CoAP.
- 13 a Justify the importance of embedded computing logic.
OR
b Analyze the various functions of Arduino.
- 14 a Compare data in motion vs data in rest.
OR
b Classify the various role of machine learning.
- 15 a Discuss about the GridBlocks Reference model in detail.
OR
b Analyze the various functions of smart parking architecture.

Z-Z-Z

END