

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2026
(Fourth Semester)
Branch- COMPUTER TECHNOLOGY

INTERNET OF THINGS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following is NOT considered an enabling technology for the Internet of Things (IoT)? a) Sensors and Actuators b) Cloud Computing c) Blockchain d) Compiler Optimization	K1	CO1
	2	Which of the following is an enabling technology for IoT? a) Sensors and actuators b) Quantum entanglement c) Desktop compilers d) Analog clocks	K2	CO1
2	3	Which IEEE standard is specifically designed for low-power wireless personal area networks in IoT? a) IEEE 802.11ah b) IEEE 802.15.4 c) IEEE 1901.2a d) IEEE 802.3	K1	CO2
	4	What is the primary advantage of CoAP in IoT applications? a) It uses TCP for reliability b) It is lightweight and suitable for constrained devices c) It requires high bandwidth d) It replaces MQTT entirely	K2	CO2
3	5	What is the main purpose of a design methodology in IoT system development? a) To increase the number of sensors b) To provide a structured approach for building IoT systems c) To reduce memory size d) To replace programming entirely	K1	CO3
	6	Which language is primarily used to program Arduino boards via the Arduino IDE? a) Python b) C/C++ c) JavaScript d) Java	K2	CO3
4	7	What is the primary purpose of Hadoop in IoT data analytics? a) Real-time sensor control b) Distributed storage and processing of large datasets c) Replacing Python programming d) Reducing the number of IoT devices	K1	CO4
	8	Why is Django used in IoT applications? a) To interface with sensors directly b) To develop scalable web applications for IoT data visualization and management c) To replace MQTT protocol d) To encrypt network traffic only	K2	CO4

Cont...

5	9	What is the primary function of the Cisco IoT system? a) To provide cloud storage only b) To connect, manage, and secure IoT devices and networks c) To manufacture sensors d) To develop Python applications	K1	CO5
	10	Which IoT technology is commonly used in smart parking systems? a) Sensors to detect vehicle presence and guide parking availability b) High-speed video streaming only c) Blockchain for parking tickets d) SQL databases for real-time sensor programming	K2	CO5

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain about the Evolution of Internet of Things.	K3	CO1
	(OR)			
	11.b.	Construct Simplified IoT architecture and Core IoT Functional Stack.		
2	12.a.	Identify the Physical and MAC Layers.	K3	CO2
	(OR)			
	12.b.	Develop Routing over Low Power Lossy Networks in IoT		
3	13.a.	Analyze Embedded Computing Logic.	K4	CO3
	(OR)			
	13.b.	Examine IoT system Building Blocks.		
4	14.a.	Discover Hadoop Ecosystem.	K4	CO4
	(OR)			
	14.b.	Construct AWS for IoT.		
5	15.a.	Explain Cisco IoT system.	K5	CO5
	(OR)			
	15.b.	Evaluate Converged Plantwide Ethernet Model (CPwE).		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Classify Functional blocks of an IoT ecosystems.	K4	CO1
2	17	Discover Application transport Methods.	K4	CO2
3	18	Examine Interfaces and Raspberry Pi with Python Programming.	K4	CO3
4	19	Estimate Role of Machine Learning.	K5	CO4
5	20	Conclude Smart Parking Architecture and Smart Traffic Control.	K5	CO5

Z-Z-Z END