

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2026
(Sixth Semester)**

Branch - COMPUTER SCIENCE WITH DATA ANALYTICS

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	What is the full form of IoT? (i) Internet of Technology (ii) Internet of Things (iii) Integration of Technology (iv) Integration of Things	K1	CO1
	2	Which of the following tends to convert electrical signal to physical action? (i) Sensor (ii) Compiler (iii) Actuator (iv) Motor	K2	CO1
2	3	Which layer is responsible for sensing, data collection, and physical object interaction? (i) Physical or sensor layer (ii) Application layer (iii) Network Layer (iv) Middle Layer	K1	CO2
	4	What is the primary purpose of LoRaWAN in IoT? (i) High-speed video streaming (ii) Short-range, high-bandwidth data transfer (iii) Low-power, long-range communication (iv) Wired industrial networking	K2	CO2
3	5	Which type of database is commonly used in IoT applications to handle high-velocity, high-volume sensor data? (i) SQL Database (ii) Relational Database (iii) Hierarchical Database (iv) NoSQL Database	K1	CO3
	6	Which of the following means large set of structured, unstructured and semi structured data? (i) cloud computing (ii) physical computing (iii) big data (iv) small data	K2	CO3
4	7	Which of the following is a common security threat in IoT systems? (i) DDoS attacks (ii) Increased battery life (iii) Improved user experience (iv) Data Compression	K1	CO4
	8	What is a major privacy concern in IoT? (i) Low cost of devices (ii) Unauthorized access to personal data (iii) Low cost of devices (iv) Faster processing speeds	K2	CO4
5	9	What is the primary benefit of implementing IoT in smart city infrastructure? (i) Increased energy consumption (ii) Decreased connectivity (iii) Real-time data processing and management (iv) Manual data entry	K1	CO5
	10	Which technology is frequently used in smart city logistics for asset tracking? (i) Paper tagging (ii) Local area networks (iii) Infrared (iv) RFID	K2	CO5

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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.	Describe the Genesis of IoT.	K2	CO1
		(OR)		
	11.b.	Explain the main elements of oneM2M IoT architecture.		
2	12.a.	Compare Mesh-Under routing and Mesh-Over routing.	K3	CO2
		(OR)		
	12.b.	Describe the protocols used in transport layer.		
3	13.a.	Classify the types of data analysis results.	K3	CO3
		(OR)		
	13.b.	Summarize NoSQL databases.		
4	14.a.	Explain about security priorities and security focus.	K4	CO4
		(OR)		
	14.b.	Illustrate the purdue model for control hierarchy.		
5	15.a.	Describe the CPwE wireless network architecture.	K3	CO5
		(OR)		
	15.b.	Explain the smart traffic control architecture.		

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	Summarize the IoT impact.	K3	CO1
2	17	List out the RPL routing metrics.	K3	CO2
3	18	Describe the edge analytics core functions.	K4	CO3
4	19	Explain the formal risk analysis structures of OCTAVE and FAIR.	K4	CO4
5	20	Analyze the industrial automation and control systems (IACS) reference model.	K4	CO5

Z-Z-Z END