

MSc DEGREE EXAMINATION MAY 2026
(Second Semester)

Branch- **COMPUTER SCIENCE**

INTERNET OF THINGS - IOT

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	An actuator in IoT is used to _____. (i) Collect data (ii) Store data (iii) Perform actions (iv) Analyze data	K1	CO1
	2	The ability of IoT devices to work together is called _____. (i) Connectivity (ii) Interoperability (iii) Scalability (iv) Automation	K2	CO1
2	3	DDS stands for _____. (i) Data Distribution Service (ii) Device Data System (iii) Digital Delivery Service (iv) Distributed Device Software	K1	CO2
	4	_____ protocol is lightweight and web-friendly. (i) AMQP (ii) DDS (iii) CoAP (iv) SMTP	K2	CO2
3	5	_____ sensor is commonly used in smart lighting to detect human presence. (i) PIR motion sensor (ii) Ultrasonic sensor (iii) Infrared break-beam sensor (iv) Microwave motion sensor	K1	CO3
	6	Smart irrigation systems decide watering schedules based on _____. (i) Soil moisture (ii) Crop type (iii) Weather forecast (iv) Evaporation rate	K2	CO3
4	7	Process specification describes _____. (i) Physical device structure (ii) Database schema only (iii) User interface design (iv) Workflow of system operations	K1	CO4
	8	IoT level specification determines _____. (i) Organizational structure (ii) Appropriate system architecture level (iii) Device scheme (iv) Software licensing	K2	CO4
5	9	In Python _____ data type is immutable. (i) List (ii) Dictionary (iii) Tuple (iv) Set	K1	CO5
	10	In Python _____ mode opens a file for reading only. (i) 'w' (ii) 'a' (iii) 'r' (iv) 'x'	K2	CO5

Cont...

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 the characteristics of IoT.	K2	CO1
		(OR)		
	11.b.	Explain the benefits and implementation challenges of IoT with suitable examples.		
2	12.a.	Construct the architecture of MQTT and explain its characteristics.	K3	CO2
		(OR)		
	12.b.	Identify and explain the role of broker services in messaging protocols.		
3	13.a.	Analyse the use of IoT applications in home automation systems with neat diagram.	K4	CO3
		(OR)		
	13.b.	Examine about wearable electronics and health monitoring systems.		
4	14.a.	Explain the purpose and requirements specification in IoT design methodology.	K5	CO4
		(OR)		
	14.b.	Interpret the functional view specification of IoT architecture.		
5	15.a.	Explain Python data types with examples.	K5	CO5
		(OR)		
	15.b.	Explain the various file handling operations in Python with examples.		

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	Explain about various IoT enabling technologies.	K2	CO1
2	17	Examine the role of networking protocols and messaging models in IoT communication systems.	K4	CO2
3	18	Explain about agricultural IoT applications including smart irrigation and greenhouse automation.	K5	CO3
4	19	Explain process specification and domain model specification neatly with diagram.	K5	CO4
5	20	Explain the control flow structures in Python with examples.	K2	CO5

Z-Z-Z

END