

BE SEM VII Scheme Summer 2025

ECS

(3 hrs)

04/06/2025

Maximum Marks = 80

NB:

1. Question No. 1 is compulsory and solve any THREE questions from remaining questions
2. Assume suitable data if necessary
3. Draw clean and neat diagrams

Q1	Attempt any four	Mark
a.	Compare IoT and M2M systems.	5
b.	Describe an example of IOT service that uses WebSocket-based communication	5
c.	Justify the statement: "IOT systems have to be self-adapting and self-configuring"	5
d.	Discuss IOT Layered Attacker model	5
e.	List Limitations of Cloud Computing.	5
Q2	a. List the steps involved in IOT system design methodology in proper sequence and draw and explain i) Process specification ii) Domain model specification for smart irrigation system.	10
	b. List and explain the working principle of any 5 sensors used in water pollution monitoring system	10
Q3	a. Describe the process of acquiring and storing IOT devices data for an application, service or business process	10
	b. How you will deploy the cloud service model for internet-connected RFID based system of supply-chain management.	10
Q4	a. Discuss the architecture and applications of CoAP	10
	b. Discuss various IOT enabling technologies with suitable examples.	10
Q5	a. Describe REST API, its features and applications.	10
	b. Discuss the security requirements during message exchanges between devices to applications / services.	10
Q6	a. Discuss different techniques for IOT cloud-based data collection and storage	10
	b. Describe the architecture of MQTT with appropriate figure. Describe its applications.	10
