

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION SP/2025)

CLASS: BCA
BRANCH: BCA

SEMESTER : VI
SESSION : SP/2025

SUBJECT: CA359 INTERNET OF THINGS

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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		CO	BL
Q.1(a)	Differentiate the term IoT with respect to Digitization	[2] 1	1
Q.1(b)	Explain the evolutionary phases of the internet.	[3] 2	2
Q.2(a)	List and explain the requirements driving specific architectural Changes for IoT.	[2] 2	1,3
Q.2(b)	Explain oneM2M IoT Standardized Architecture with a neat diagram.	[3] 2	3
Q.3(a)	What is smart object? Explain its characteristics.	[2] 1,3	1,2
Q.3(b)	List and explain different categories of sensors.	[3] 3	2
Q.4(a)	Explain the following key factors that contribute in connecting smart objects:1) Range 2) Frequency Bands.	[2] 2	2
Q.4(b)	What is ZigBee protocol stack? Explain 802.15.4 physical layer, MAC layer, and security.	[3] 3	2,3
Q.5(a)	List the advantages of Internet Protocol.	[2] 1	1
Q.5(b)	What are the differences between adaptation and adoption of the Internet Protocol?	[3] 2	2

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