

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BCA
BRANCH: COMPUTER SCIENCE**

**SEMESTER : I
SESSION : MO/2025**

SUBJECT: CA25107 FUNDAMENTAL OF COMPUTER SCIENCE

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Discuss the utility of computers in your everyday life.?	[5] 1	1
Q.1(b)	What is application software. How does it differ from system software.?	[5] 1	2
Q.2(a)	Discuss the important functions of an operating systems.?	[5] 2	1
Q.2(b)	How does a flowchart differ from an algorithm. Explain.?	[5] 2	2
Q.3(a)	On the basis of base or radix, compare various number systems.?	[5] 3	1
Q.3(b)	What do you mean by a logic gate. Implement the expression using a logic gate. $Y = (\overline{A} \cdot B) + (C \cdot \overline{D})$	[5] 3	2
Q.4(a)	Give some examples of input devices and their purpose.?	[5] 4	1
Q.4(b)	List some of the output devices. Explain how is plotter different from printer.?	[5] 4	2
Q.5(a)	What is an instruction set. Compare CISC and RISC architectures.?	[5] 5	2
Q.5(b)	Discuss how various memories in the computer system are organized in the hierarchy.?	[5] 5	2

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