

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

**CLASS: BCA
BRANCH: BCA**

**SEMESTER : VIth
SESSION : SP/2025**

SUBJECT: CA361 SYSTEM PROGRAMMING

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)	Briefly discuss loader and linker with its features.	[5] 2	2
Q.1(b)	Write the role of different language processors with examples.	[5] 1	1
Q.2(a)	How does Stack work in system programming? Explain it with the help of a suitable diagram.	[5] 3	4
Q.2(b)	How does instruction operands work ? Explain it with related steps.	[5] 4	4
Q.3(a)	What is conventional segment directive? Discuss it with using a suitable diagram.	[5] 4	3
Q.3(b)	Discuss different features of Assembly language with some examples.	[5] 2	2
Q.4(a)	Write about relocating loader and Direct linking loader with suitable diagrams.	[5] 4	3
Q.4(b)	What is conditional macro expansion? Write its application in system programming.	[5] 4	4
Q.5(a)	How does linkage editor work? Write its applications for any system.	[5] 4	5
Q.5(b)	Briefly discuss different software tools with some examples.	[5] 3	3

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