

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

**CLASS: BTECH  
BRANCH: CSE**

**SEMESTER : V  
SESSION : MO/2025**

**SUBJECT: CS343 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)	What is system software? List out and explain all important system software.	[5] 01	01
Q.1(b)	Define the CISC and RISC Machine with characteristics and calculate the CPU Time.	[5] 01	01
Q.2(a)	Define Assembly Language Format with suitable example? Comparison in between single pass Assembler and Two pass Assembler	[5] 02	04
Q.2(b)	How many elements are existing in Assembly Language Programming? Differentiate between Assembly Language and Machine language.	[5] 02	05
Q.3(a)	Define the Loader and basic function of loader? How relocation is resolved by loader.	[5] 03	01
Q.3(b)	Explain about the Bootstrap Loader and the boot sequence on a standard PC? Differentiate between RL and DLL?	[5] 03	02
Q.4(a)	Define the Macro & Macro Processor? How does the macro differ from Subroutine?	[5] 04	01
Q.4(b)	State with example the facilities of macro like, macro with arguments, conditional macro and macro within macro facility.	[5] 04	02
Q.5(a)	Explain the different steps of software development process?	[5] 05	02
Q.5(b)	Explain about the Types of Text Editor and Debug Monitors.	[5] 05	05

:::25/11/2025:::M