

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

**CLASS: BCA**  
**BRANCH: BCA**

**SEMESTER : 1<sup>ST</sup>**  
**SESSION : MO/2024**

**SUBJECT: CN107 FUNDAMENTALS OF COMPUTER SCIENCE**

**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)	Explain the characteristics of computer.	[2]	1 2
Q.1(b)	Describe classification of computer in brief.	[3]	1 2
Q.2 (a)	Identify the relation between Software and Hardware.	[2]	1 1
Q.2(b)	Describe System Software and its types.	[3]	1 2
Q.3 (a)	Differentiate Compiler and Interpreter.	[2]	2 4
Q.3(b)	Define Operating System. Explain the functions of Operating System in a computer.	[3]	2 5
Q.4(a)	Define any two different pseudo code structures with illustrations.	[2]	2 2
Q.4(b)	Describe Development life cycle of a program.	[3]	2 2
Q.5(a)	Summarize base of Number System with examples.	[2]	3 2
Q.5(b)	Convert :	[3]	3 3
	i. $(A1E)_{16}$ into decimal form		
	ii. $(567)_8$ into hexadecimal form		

:23/10/2024:E