

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

**CLASS: BCA
BRANCH: BCA**

**SEMESTER : 1ST
SESSION : MO/2025**

SUBJECT: CA25105 BASICS OF OPERATING SYSTEMS

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 purpose of Operating System.	[2] 1	I
Q.1(b)	What are the different types of components of an operating Systems. Explain.	[3] 1	II
Q.2(a)	Write the Objective of operating system.	[2] 1	II
Q.2(b)	Explain different types of services provided by an operating system.	[3] 1	IV
Q.3(a)	How the process executing? Explain.	[2] 2	II
Q.3(b)	Discuss the different process states and process state Diagram.	[3] 2	II
Q.4(a)	Write need of Process Control Block (PCB).	[2] 2	II
Q.4(b)	Explain the purpose of scheduling and there types.	[3] 2	III
Q.5(a)	Explain any two necessary conditions for Deadlock.	[2] 3	I
Q.5(b)	How can we Avoid the situation of deadlock. Explain.	[3] 3	II

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