

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2024)**

**CLASS: BTECH
BRANCH: ECE**

**SEMESTER : VII
SESSION : MO/2024**

SUBJECT: EC409 WIRELESS COMMUNICATION

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)	Discuss the advantages of wired communication over wireless communication.	[2]	01 02
Q.1(b)	Draw a typical diagram to represent wireless communication system and explain its functioning.	[3]	01 03
Q.2(a)	Discuss the main features of GEO, MEO and LEO.	[2]	01 01
Q.2(b)	Draw a diagram to explain the functioning of satellite phone system.	[3]	01 02
Q.3(a)	With the help of a diagram explain the operation of Paging system.	[2]	01 02
Q.3(b)	Briefly discuss what is GPS and explain the mechanism used to measure the location and timing using GPS.	[3]	01 03
Q.4(a)	What do you mean by fractional frequency reuse? How is it realized?	[2]	02 03
Q.4(b)	Discuss the general architecture of a cellular system.	[3]	02 02
Q.5(a)	Explain the concept of Power control.	[2]	02 03
Q.5(b)	Explain the mechanism used for hand off in cellular system.	[3]	02 04

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