BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION MO/2023)

CLASS: BTECH SEMESTER: VII
BRANCH: ALL SESSION: MO/2023

SUBJECT: BE407 NANOBIOTECHNOLOGY (OE)

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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Q.1(a) Q.1(b)	What is Buckyball? Classify nanomaterials based on dimension with figure.	[2] [3]	CO 1 2	BL 1 3
Q.2(a) Q.2(b)	What are the techniques can be used in nanoparticle characterization? Describe with figure about chemical vapour deposition method.	[2] [3]	2 3	1
Q.3(a) Q.3(b)	What is lipid bilayer? Describe with figure about the liposome structure and function.	[2] [3]	1	1 2
Q.4(a) Q.4(b)	What are the applications of polysacharride peptides? With figure describe the forces required in self assembly.	[2] [3]	2 3	2 2
Q.5(a) Q.5(b)	What is metal nanoparticles? Compare bottom-up and top-down method.	[2] [3]	2 2	1

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