

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

CLASS: BTECH/IMSC/BHMCT
BRANCH: BT/CIVIL/CHEMICAL/MECH/PIE/FT/PHYSICS/HMCT

SEMESTER : I
SESSION : MO/2023

SUBJECT: BE101 BIOLOGICAL SCIENCE FOR ENGINEERS

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

		CO	BL
Q.1(a) What are the various stages of biological organization? ✓	[2]	1	1
Q.1(b) Describe Miller Urey experiment with its significance. ✓	[3]	3	2
Q.2(a) Write the sources and disorder caused by vitamin A and vitamin B1. ✓	[2]	2	2
Q.2(b) Compare plant cell and animal cell with diagram. ✓	[3]	2	1
Q.3(a) Describe the classification of carbohydrates.	[2]	2	1
Q.3(b) Describe the stages of mitosis cell division. ✓	[3]	3	2
Q.4(a) What are the levels of protein structure? ✓	[2]	2	2
Q.4(b) Describe the steps of glycolysis pathway with diagram. ✓	[3]	3	3
Q.5(a) What is Gibbs Free Energy? ✓	[2]	2	2
Q.5(b) Write note on aerobic and anaerobic respiration and its location in cell. ✓	[3]	3	2

:::::19/10/2023:::::

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