BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (END SEMESTER EXAMINATION)

CLASS: **IMSC SEMESTER: I** BRANCH: FT SESSION: MO/19 SUBJECT: BE203 MICROBIOLOGY TIME: 3.00Hrs. **FULL MARKS: 50 INSTRUCTIONS:** 1. The question paper contains 5 questions each of 10 marks and total 50 marks. 2. Attempt all questions. 3. The missing data, if any, may be assumed suitably. 4. Before attempting the question paper, be sure that you have got the correct question paper. 5. Explain with sketches, wherever required. _____ Q.1(a) Define staining of microbes. Discuss different types of staining along with examples. [5] What do you mean by microscopy? Give the difference between compound and electron microscopy. [5] Q.1(b) Discuss with a neat diagram the structure of bacteria. What are archaebacteria? Give examples [5] Q.2(b) Define batch, synchronous and continuous culture. What do you understand by generation time of [5] bacteria? Q.3(a) Discuss the role of microbes in paper and pulp industry. [5] Q.3(b) Summarize the role of microbes in metal recovery. [5] Q.4(a) Give detailed account of the types of plant-microbial interactions along with examples. [5] Q.4(b) What are bioinoculants? Discuss the different types of bioinoculants. [5] Q.5(a) Discuss any two diseases in detail caused by bacteria. [5]

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[5]

Q.5(b) Write a short note on the different types of microbial flora of healthy human host.