

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

**CLASS: BE  
BRANCH: BIOTECHNOLOGY**

**SEMESTER: VII  
SESSION : MO/2019**

**SUBJECT : BT7029 PHARMACEUTICAL BIOTECHNOLOGY**

**TIME: 1.5 HOURS**

**FULL MARKS: 25**

**INSTRUCTIONS:**

1. The total marks of the questions are 30.
  2. Candidates may attempt for all 30 marks.
  3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. The missing data, if any, may be assumed suitably.
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- Q1 (a) What is Genomics? Enlist its different types? [2]  
(b) How genomics has revolutionized the medical field? [3]
- Q2 (a) What is Molecular Medicine? [2]  
(b) What is the difference between a transgenic and a knock-out mice? [3]
- Q3 (a) What does HGP stands for? Give a brief introduction about it. [2]  
(b) Write short note on different generation of DNA sequencing technique? [3]
- Q4 (a) What is a Pedigree Analysis? [2]  
(b) What is a Microarray Technology? Explain the procedure of DNA microarray. [3]
- Q5 (a) What is meant by Gene Therapy? How is it classified? [2]  
(b) What is Gene replacement technique? How is it achieved? [3]
- Q6 (a) What do you understand by the term Pharmacogenomics? [2]  
(b) What is a Suicide gene therapy? Explain the procedure with context to cancer treatment. [3]

**:::::: 30/09/2019 :::::M**