JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
T1 EXAMINATIONS, SEPTEMBER-2019

PhD (Biotechnology)

Course Code: 13M11BT114   MAX. MARKS: 15

Course Name: High Throuput Technology

Course Credits: 03   MAX. TIME: 1 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Marks are indicated in square brackets against each question.

Q1. Write the associated estimated genes and genome size of the following organism; (4) COI

    a. E. coli

    b. S. cerevisiae

    d. Human genome

    d. Make a statement using these numbers among these organisms

Q2. Write explanatory notes the followings; COI

    a. Transcriptomics   (1)

    b. Epigenetics   (1)

    c. Highlight the differences between low throughput and high throughput Technologies (2)

Q3. Write the on the pyrosequencing with reaction steps? Discuss enzymes with source organism and their role? What are the different application of the pyrosequencing and discuss how it high throughput the sequencing analysis? (5) COI

Q4. Write the mechanism of Sanger's sequencing Technology and discuss its limitation in whole genome expression analysis? (2) COI