## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -3 EXAMINATIONS-2023

## B.Tech-V Semester (BI/BT)

COURSE CODE (CREDITS): 18B11BI512 (3)

MAX. MARKS: 35

COURSE NAME: Scripting Languages for Bioinformatics

COURSE INSTRUCTOR: Dr. Tiratha Raj Singh

MAX. TIME: 2 Hours

Note: All questions are compulsory. Marks are indicated against each question in squar brackets.

- Q.1. Implement the usage of CSS in the dynamic content generation implement important featutres of CSS-P to demonstrate its functionalty for creativity in web development. (CO: 2) [4]
- Q.2. Design a web form through HTML and JS to ask the user to enter alpha-numeric data for various fields. Check the input data for each field for its contents along with type and length of the data entered.

  (CO: 1-3) [5]
- Q.3. WAP in PHP to implement server side programming through various kind of logics. Here the major reflection should be for Bioinformatics applications demonstration through the users input for various diseases. Plan data input accordingly. (CO: 3-5) [5]
- Q.4. How we can generate various kind of images in PHP? Implement a required set of image functions to generate a circle shape. Once the circle is generated, can it be modified into an oval shape without changing the functions? (CO: 4, 5) [5]
- Q.5. Which functions can be utilized to connect a recently made database in MySQL through PHP to a GUI designed in HVML and JS? Provide all implementation details along with all the functions and their resective usage.

  (CO: 3-5) [5]
- Q.6. Demonstrate PHP's functions for File, String and Array handling. (CO: 4) [3]
- Q.7. Write program in JS to implement substr(), match(), and floor() functions. (CO: 3) [3]
- Q.8. WAP to generate a web based GUI for DNA sequence analysis. Keep crucial parameters in the analysis as per the requirements. (CO: 5) [5]