

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2023

B.Tech-V Semester (BI/BT)

COURSE CODE (CREDITS): 18B11BI512 (3)

MAX. MARKS: 25

COURSE NAME: Scripting Languages for Bioinformatics

COURSE INSTRUCTOR: Dr. Tiratha Raj Singh

MAX. TIME: 1 Hour 30 Minutes

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

**Q1.** What will be the exact output of the following JS code:

[CO:3; Marks: 3]

```
<script language="javascript">
function x(){
var s= "Good 100%";
var t = "Quality 100%!!{!!!";
var pattern1 = /\d/g;
var pattern2 = /\w/g;
var output1= s.match(pattern1);
var output2 = t.match(pattern2);
document.write(output1);
document.write(output2);}</script>
```

**Q.2.** Draw a DOM model for a document with a form inside. Assume that form is also having atleast 5 important unique input elements.

[CO:2-4; Marks: 4]

**Q.3.** A GUI was developed for a Biotechnology firm where Data analysis was made. Customers were asked to enter their data and its details through the GUI. Plan and develop a GUI for the same purpose where computational analysis has to be requested by the customers for the genomic analysis of their data. Design the GUI keeping in mind the parameters required for the data submission and analysis.

[CO:3-4;Marks: 5]

**Q.4.** Incorporate three different technologies you studied this semester so far, to generate dynamic web contents. Try to incorporate almost equal contribution of these three technologies for the same while implementing the code.

[CO:1-4; Marks: 4]

**Q.5.** Discuss which features make JavaScript a contented language at the global level? Also discuss few parameters on which we can reject JavaScript as a robust programming language?

[CO: 3; Marks: 3]

**Q.6.** Differentiate between slice(), split() and splice() functions through example code(s) in JS. Compare their input and output through the same example.

[CO:3; Marks: 6]