

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

BTECH
(SEM V) THEORY EXAMINATION 2018-19
Web Technology

Time: 3 Hours**Total Marks: 100****Notes:** Assume any missing data.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

- a. Differentiate between Website and Web Portal.
- b. How to run an Applet?
- c. List the predefined MIME content types.
- d. How can you integrate CSS on a web page?
- e. Why doPut() method is preferred over doGet() method?
- f. What are the protocols used by AJAX?
- g. How GenericServlet different from HttpServlet?
- h. Explain printStackTrace().
- i. How to access package from another package?
- j. What is the purpose of PHP \$_REQUEST?

SECTION B**2. Attempt any three of the following:****10 x 3 = 30**

- a. Create and save an XML document at the server, which contains 10 users information. Write a program, which takes user ID as an input and returns user details by taking user information from the XML document.
- b. Write a Java program to create an Applet for calculator and also perform event handling on each button.
- c. What is a constructor? Give its properties. How do we declare/ define it? Can they be overloaded? Name and give an example of the types of constructors.
- d. What are access specifiers? Draw a table showing all the access specifiers and their accessibility in the class, package, subclasses and other packages.
- e. Create an HTML document that includes divide the browser screen into two frames. The frame on The left will be a menu consisting of hyperlinks. Clicking on any one of these links will lead to a new page open in the target frame, which is on the right hand side.

SECTION C**3. Attempt any one part of the following:****10 x 1 = 10**

- a) Define Custom Exception in java. Create your own exception, make the validate method that takes integer value as a parameter. If the age is less than 18, throw the Custom Exception otherwise print a message "Welcome to Vote".
- b) Explain how to use JavaScript to validate an HTML form. Write a program in JavaScript to check for the following validations:
 - o Checking all input fields for non-empty
 - o Length of first name and last name must be less than 20 characters
 - o Mobile number should be number and 10 digits length
 - o Email Validation
 - o Password Validation
 - o Date validation(Not equal to current date)

4. Attempt any *one* part of the following: 10 x 1 = 10

- c) What is multithreading? Define yield(), wait() and sleep()? Write a program to display the table of 5 and 7 with synchronization.
- d) What was the old name of PHP? What is the difference between "echo" and "print" in PHP? Write a PHP program to find sum of digits of a number.

5. Attempt any *one* part of the following: 10 x 1 = 10

- (a) Describe abstract class. Create an abstract class called Shape which has three subclasses say Triangle, Rectangle, Circle. Define one method area() in the abstract class and override this area() in these three subclasses to calculate for specific object i.e. area() of Triangle subclass should calculate area of triangle etc. Same for Rectangle and Circle.
- (b) Compare JSP and Servlet. Explain the lifecycle of a JSP page with a suitable diagram. Also list any five action tags used in JSP.

6. Attempt any *one* part of the following: 10 x 1 = 10

- (a) What is JDBC? Name and explain the Drivers used in JDBC. Write a JDBC Program for insert and display the record of employees using prepared statement.
- (b) What are the uses of BOM and DOM. Mention the use of history object and name different methods of history object.

7. Attempt any *one* part of the following: 10 x 1 = 10

- (a) What are XML Parsers? Give the name of parsers. Also mention their advantages and disadvantages.
- (b) What is difference between Cookies and HttpSession? Write a

Q. 7(b) What is difference between Cookies and HttpSession? Write the advantages and disadvantages of the same.