Sub Code: NCS-504 Printed pages: 02 Roll No. Paper Id: 1 0 3 9 B.TECH. (SEM V) THEORY EXAMINATION 2017-18 WEB TECHNOLOGY Total Marks: 100 Time: 3 Hours Attempt all Sections. If require any missing data; then choose suitably. Note: 1. Illustrate with program and comments if required. SECTION A  $2 \times 10 = 20$ Attempt all questions in brief. 1. a. Explain the anchor and table tag in HTML? b. What are forms and how they are created in HTML? c. Explain the difference between id and class selector in css? d. Explain well formed and valid xml? e. What is a web project? f. Explain client-server architecture with diagram? g. Write various types of drivers available in java for database handling? h. Why filters are used in PHP? i. What is EJB? Explain its types? j. What are jar files? Explain its advantage? Write the command for creating jar file? SECTION B  $10 \times 3 = 30$ Attempt any three of the following: 2. a. What is CSS? What are different ways to create them? Explain with example. b. What are Exceptions and how they are handled in java? Explain the keywords try, catch, throw, throws and finally with example? c. What are Packages in java? How a user defined package is created in java, explain with example? d. What is AJAX? Explain its advantage and its working? Explain with example? e. What is DTD? Also explain its differences with xml schema? SECTION C  $10 \times 1 = 10$ Attempt any one part of the following: 3. What are JSP directives? Explain various types of directives with example? (a) Explain implicit objects available in jsp with example? (b)  $10 \times 1 = 10$ Attempt any one part of the following: 4. What are standard actions in JSP? Illustrate with example (a) Explain the Life cycle of servlet? Also write a servlet for displaying a string (b) "HELLO WORLD!"  $5 \times 2 = 10$ Attempt any two parts of the following: 5. What are scripting languages and why java script is used? Write a JavaScript function for validating form data like Mandatory Fields and Email field? Define HTML DOM. (b) Explain filters in PHP? Why they are used? Explain with proper example? (c)  $5 \times 2 = 10$ Attempt any two parts of the following: 6. Explain various protocols governing web? Also explain Web Team? (a)

(b) What is PHP? Describe PHP session in detail? Explain the steps involved in connect PHP pageto MySQL database?

(c) Explain the role of DTD in xml and also describe its types with an example?

## 7. Attempt any one part of the following:

 $10 \times 1 = 10$ 

- (a) Create a Form in HTML taking Account Number from user as input then write a servlet program receiving this form data and connect it with Database by using JDBC. Then send the current account balance of user stored in specific database back to user as response. Also mention all the assumed required data like table name, database name and fields name etc.
- (b) What are java Beans? Why they are used? Write a JSP page and use an existing java bean in JSP page by using the standard action. Write the program with describing the output?