Hall Ticket Number:

Code No. : 16607 AS N/O

VASAVI COLLEGE OF ENGINEERING *(Autonomous)*, HYDERABAD
B.E. (CBCS) VI-Semester Advanced Supplementary Examinations, July-2019

Web Technologies

Time: 3 hours   Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

1.	Define a URL and explain about its components.	2
2.	State the advantage of using HTTP POST over HTTP GET method.	2
3.	Distinguish between a Jumbotron and Carousol in the context of Bootstrap.	2
4.	Basic event handling and dynamic modification of web page using DOM are achievable in Javascript. Why a framework such as Backbone.js is required over Javascript?	2
5.	What is the use of "finally" clause in exception handling using python?	2
6.	What is the output of the following piece of code in Python?	2

x=['ab','cd']

print(len(map(list,x)))

Explain the reason for the output.

7.	What are the uses of JSP directive.page element?	2
8.	Give three members of HTTP Request Header. How to access these three fields in a Servlet program?	2
9.	How can you make a variable accessible to all parts of a PHP program?	2
10.	List any four functions related to sorting of arrays in PHP.	2

Part-B (5 ×10 = 50 Marks)

11. a) Consider the following table of information about employees of a company (containing Name, JobType, Salary).   6

Harish	Manager	56000
Vinay	Clerk	30000
Krishna	Manager	50000
Karunya	Typist	20000

   1. Write Javascript code for storing the above information using one array variable "EmployeeData".

   2. Write a function managerSalary(EmployeeData) which takes the EmployeeData as argument and returns the average salary of Managers.

   b) Illustrate with example the concept of Frames in HTML.   4

12. a) What is the basic grid structure in Twitter Bootstrap? What are the uses of "responsive   6
       column resets" and "offset columns" in layout design using Bootstrap?

    b) What is MVC? Give an example for use of MVC in web application front end   4
       development.

13. a) Write a Python function for sorting of strings in lexicographical order. (Note: Any sorting   6
       functions available in library should not be used.)

    b) Give your comments on the suitability of Python language for Web Technologies based   4
       on the features of the language and run time efficiency.

14. a) What are the JSP life cycle methods? What is a scripting element in JSP?   6

    b) Write a Java Servlet program for maintaining number of visits by the user in a session   4
       maintained using cookies. The number of visits are displayed to user as part of response.

15. a) What is the role of associative arrays in server side scripting using PHP? Explain the   6
       importance of "explode" and "extract" methods in PHP.

    b) An username submitted to a PHP script has the following conditions.   4

       i.   Name should begin with a alphabetical character

       ii.   Name should contain atleast a single numeric character and a single special
             character (@, $, ^)

       iii. Length of the name should be between 5 to 8 characters

       Write a PHP script for doing validation of the user name submitted using regular
       expressions.

16. a) What is inheritance and specificity of style properties in the context of CSS? Give   6
       examples.

    b) What is the architecture of Backbone.js? Describe the important modules of the   4
       architecture.

17.   Answer any *two* of the following:

    a) How to perform serialization using JSON & Pickle in Python?   5

    b) What is the structure of a HTTP Servlet? Discuss the relationship between methods of   5
       HTTP Servlet and Servlet life cycle.

    c) How to read from and write to files in PHP? Assume a file contains in each line   5
       "Username: Description" for several users. Write a PHP script to read the file for
       searching and displaying the Description of a particular user.

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