



MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

A Constituent Institute of MAHE, Manipal

IV SEMESTER B.TECH. END SEMESTER EXAMINATIONS, APRIL 2018

SUBJECT: OPEN ELECTIVE I - DESIGN AND DEVELOPMENT OF WEB APPLICATIONS [ICT 3282]

REVISED CREDIT SYSTEM
(30/04/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer ALL the questions.
- ❖ Missing data may be suitably assumed.

- 1A. Accept a phone number from the user in the format ###-###-#### (for eg. 345-678-1290 is a valid phone number). If the user entered phone number is not in required format, then display message to the user "Invalid phone number". If the user entered phone number is in required format then display "Valid phone number" and break the numbers into three based on hyphen and display the three numbers in separate fields on the web page. 5
- 1B. Write HTML5 code to implement this scenario: On click of an image in file1.htm, the page should be redirected to a particular paragraph in file2.htm (Assume HTML5 elements suitably and write code for both the .htm files). 3
- 1C. Explain Javascript Slice and splice methods with examples. 2
- 2A. Use HTML5, Javascript and CSS to write the following code:
Create a text field and a button on the web page. The text field should accept a number from the user. On hit of the button, generate a table below the button. The table should have two columns with header columns "Number" and "Cube". The table rows should display the cube of the numbers starting from 1 till the number entered by the user. If the number is divisible by 3, then the background color of that entire row should be in green. Background color of other rows should be in yellow. 5
- 2B. What is transition? List out any four transition effects.
Design a HTML5 page which displays the sentence "Hello World". When the mouse is moved over each word in the sentence the color of that word should change and when the mouse is not on the word, the word should get back its original color. 3
- 2C. 2
- 3A. Describe the methods to resolve DNS names in detail with diagrams. 5
- 3B. What is Window object? Explain and also mention one property and method with example. 3
- 3C. Explain the usage of for each loop in PHP with example. 2
- 4A. Design a web page containing two text fields (so that the user can enter firstname and lastname) and a submit button. On hitting the submit button, the PHP script should move to a new web page and perform the following operations: 5
 - i. Should validate for empty fields and display appropriate messages if empty.
 - ii. If the fields are not empty, then should greet the user based on the time of the web page

using the full name (for eg. “Good Morning John Doe” where John is the firstname and Doe is the lastname).

4B. Explain any three string handling functions in PHP with examples. 3

4C. Distinguish between GET and POST methods of form submission. 2

5A. Design a working Quiz form as shown in the Fig Q.5A using HTML5 and Javascript:

Quiz	
A. Select the state capitals of India:	<input checked="" type="checkbox"/> Bengaluru <input checked="" type="checkbox"/> Mumbai <input type="checkbox"/> Manipal
B. Select the capital of : <input checked="" type="radio"/> India <input type="radio"/> USA	Delhi <input type="button" value="v"/>
<input type="button" value="Take Quiz"/>	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> A: Correct B: Correct </div>	

Fig Q.5A: Quiz Form

- For the question A, multiple answers can be selected (“Bengaluru” and “Mumbai” are the correct options). (Refer Fig Q.5A)
- For the question B, user can either choose “India” or “USA” in the question and accordingly two city options (one correct and one wrong option) should be populated for the dropdown. Say if user chooses “India”, then dropdown should be populated with “Delhi” (correct option) and “Mumbai” (wrong option). If user chooses “USA”, then “Washington” (correct option) and “California” (wrong option) should be populated. This enables the user to select one city option as answer depending on the country selected. (Refer Fig Q.5A)
- On click of the “Take Quiz” button, the user entries against questions A and B should be validated and should display correct or wrong in the field below the button as shown. (Refer Fig Q.5A) 5

5B. Explain any three text formatting properties in CSS with examples. 3

5C. How are “Matching” and “Formatting” operations performed on strings in PHP? 2