

(b) (i) What is JSON ? How is it different from XML ?

(ii) What is Ajax ? Write a small program to make an Ajax call to a server and insert the response web page. (CO1)

(c) (i) What is CMS ? What are its advantages and disadvantages ?

(ii) What is a sitemap and its use ? How to make a website look good on all resolutions ? (CO1)

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**B. TECH. (SIXTH SEMESTER)
END SEMESTER
EXAMINATION, 2022**

FULLSTACK WEB DEVELOPMENT

Time : Three Hours

Maximum Marks : 100

Note : (i) All questions are compulsory.

(ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.

(iii) Total marks in each main question are **twenty**.

(iv) Each question carries 10 marks.

1. (a) What is an image map in HTML ? Take an Indian map as an image and make three states clickable as follows :

(i) Uttarakhand (shape-circle, onclick of the state <https://uk.gov.in/> should open, title displayed on the state-UK)

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(2)

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- (ii) Uttar Pradesh (shape-polygon, onclick of the state <https://up.gov.in/en> should open, title displayed on the state-UP)
- (iii) Rajasthan (shape-rectangle, onclick of the state <https://rajasthan.gov.in/> should open, title displayed on the state-RJ)

Assume dummy coordinates of the states.

(CO2)

- (b) Divide the browser window using FRAMES as follows : (CO2)

Assume dummy name of files to be opened in each frame.

- (c) Write short notes on text area, placeholder attribute, radio buttons and checkboxes with suitable examples. (CO2)
2. (a) Develop and demonstrate the usage of inline, internal and external style sheet using CSS :
- (i) Use different font styles

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- (ii) Control the repetition of image with background-repeat and no-repeat property
- (iii) Define style for links as a : link, a : active, a : hover, a : visited
- (iv) Add customized cursors for links.

(CO3, CO4)

- (b) Explain different types of CSS with example. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed on the web page. Add CSS to style the capital using following properties : text color, bold, font size, italics, underline. (CO3, CO4)

- (c) (i) Write a program to create a Box Shadow and a text Shadow using CSS3. Also create Rounded Corners using css3.

- (ii) Create a web page to show fixed background image (this image will

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not scroll with the rest of the page). Take some dummy large text (after writing some text, you can show the rest of the text using dashes in the program) and a background image of height : 500px and width : 500px. The image will not scroll when we will scroll down through the text in the browser. (CO3, CO4)

- 3 (a) Develop and demonstrate JavaScript with POP-UP boxes and functions for the following problems :

(a) input : Click on Display Date button using onclick() function

Output : Display date in the textbox

(b) Input : A number “n” taken using prompt

Output : Factorial of number “n” using alert

(c) input : A number “n” taken using prompt

Output : A multiplication table of numbers from 1 to 10 of number “n” using alert

(d) Input : A number “n” taken using prompt and add another number using confirm

Output : Sum of the numbers using alert

(b) Write JavaScript to validate the following fields of the Registration page : (CO5)

(i) First Name (Name should contains alphabets only and the length should not be less than 6 characters).

(ii) Password (The first letter of the password should be capital. It should contain at least one number and one special character. Password should not be less than 6 characters length).

- (iii) E-mail id (should not contain any invalid email id and must follow the standard pattern : name@domain.com)
- (iv) Mobile Number (Phone number should contain 10 digits only).
- (v) A pdf file and Address (should not be Empty).
- (c) Explain Document Object Model (DOM) with example. Write code for a web application, which accepts the birth date from the user in a textbox and displays the day of the week in a message box on the click of a button. (CO5)
4. (a) Write a PHP program to accept values from a form (name, residential address, email address, and mobile number). Apply server-side validations on it and insert the data into appropriate table or show error to user (if validation fails). (CO6)

- (b) (i) What is PHP and explain the advantages and disadvantages of PHP.
- (ii) Explain what is an array and string in PHP ? Write a PHP program to accept the user's firstname and user's lastname, combine them together and output the result in an alert box to the user. (CO6)
- (c) (i) What are cookies and session in PHP ? Explain both with the help of a program.
- (ii) Write a PHP program to query a database and check if a table is empty or not. If it is empty, print "Table is empty", else print all the row values from the table. (CO6)
5. (i) Explain what is HTTP Protocol and what is HTTP Request and HTTP Response with a diagram.
- (ii) Explain the history of WWW. Also explain how WWW is different from Internet. (CO1)