

Reg. No. :

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

Question Paper Code:UD702

B.E./B.Tech. DEGREE EXAMINATION, NOV 2025

Professional Elective

21CBV702- APPLICATION DEVELOPMENT

Computer Science and Business Systems

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Explain the difference between HTML and CSS. CO1 U
2. Apply CSS styles to center-align text and set the background color of the page to light blue. CO2-App
3. Define a class in JavaScript and explain the purpose of a constructor. CO1 U
4. Create a simple JavaScript function that calculates the square of a number. CO2- App
5. Create a PHP script that stores an integer, a float, and a string in variables and displays their values using var_dump(). CO2- App
6. An e-commerce website offers free delivery if the order amount \geq ₹1000, otherwise adds ₹50 as delivery charge. Write a PHP program to calculate the final payable amount. CO2- App
7. Define a recursive function with an example. CO1 U
8. Define form handling in PHP CO1 U
9. Define a relational schema with an example. CO1 U
10. Apply normalization: Convert the following schema into 1NF –Order(ID, Customer Name, Items Purchased) where multiple items are stored in one field. CO2- App

PART – B (5 x 16= 80 Marks)

11. (a) Explain how CSS is used to style HTML elements. Describe the three types of CSS (inline, internal, and external) with examples. Illustrate how changing CSS properties like color, font-size, and background-color affects the web page output. CO1 U (16)

Or

- (b) Explain the role of Git in version control. Describe the purpose of the following Git commands with examples: git init, git add, git commit, and git status. Include sample outputs from the terminal. CO1 U (16)
12. (a) Design a simple webpage with a button and a paragraph. Use jQuery to toggle the visibility of the paragraph each time the button is clicked. Explain the working with code. CO2- App (16)
- Or
- (b) Design a JavaScript program using objects to store and display details of a car (make, model, year). Use object literals and methods to show the data on the webpage. CO2- App (16)
13. (a) Describe the different types of operators in PHP with syntax and examples. CO1- U (16)
- Or
- (b) Explain the operator precedence and associativity in PHP with examples. CO1- U (16)
14. (a) (i) Create a recursive PHP function that generates the Fibonacci series up to n terms. Accept input from the user and display the series. CO2- App (8)
- (ii) Develop a PHP program that checks whether a given string is a palindrome. CO2- App (8)
- Or
- (b) A university's placement cell is developing an online portal for resume submission. As a PHP developer, you are required to create a form where students can upload their resumes. The system should allow only PDF files. If the uploaded file is valid, display the message "Upload Successful"; otherwise, show "Invalid File Type". Write a PHP program to implement this functionality. CO2- App (16)
15. (a) Develop a Spring JDBC program that retrieves all customer details from a Customer table and displays them in the console. Include configuration and sample output. CO2- App (16)
- Or
- (b) Develop a Spring JDBC program that retrieves all customer details from a Customer table and displays them in the console. Include configuration and sample output. CO2- App (16)

