

An Autonomous college within the jurisdiction of Krishna University A.P, India.

(With Effect from Academic Year 2018-'19)

COMPUTER SCIENCE	CSC-601(GE)	2018-'19	B.Sc.(MPCs)
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SEMESTER – VI

PAPER – VII

Max. Marks 75

Syllabus

WEB TECHNOLOGIES

NO Of Hours: 4

No of Credits: 3

Pass Marks 30

Course Objectives:

1. To provide knowledge on web architecture, web services, client side and server side scripting technologies to focus on the development of web-based information systems and web services.
2. To provide skills to design interactive and dynamic web sites.

Unit -I Introduction to XHTML:

12 Hrs

Introduction to HTML, Basic html, Document body text, Hyper links, Adding more formatting Lists, Tables, Images, Multimedia Objects, Frames, Forms and XHTML.

Unit- II: CSS:

12 Hrs

Cascading Style Sheets: Introduction, Defining your own styles, properties and values in styles, Formatting blocks of information, Layers.

Java Script: java Script, the basics, Variables, String Manipulations, Mathematical functions, Statements, Operators, Arrays, Functions.

Unit –III: Objects in Java Script & Dynamic HTML with Java Script

12 Hrs

Objects in Java Script: Data and objects in java script, Regular expressions, Exception Handling, Built in objects, Events.

Dynamic HTML with Java Script: Data validation, Opening a new window, Messages and Confirmations, The status bar, Writing to a different frame, Rollover buttons, Moving images, Multiple pages in a single download, A text-only menu system, Floating logos.

Unit –IV: XML Defining Data for Web Applications

12 Hrs

XML: Introduction to XML, Basic XML, document type definition, XML Schema, Document object model, presenting XML, Using XML parser.

UNIT-V: JSP: JSP Lifecycle, Basic Syntax, EL (Expression Language), EL Syntax, Using EL Variables

Prescribed Books:

1. Chris Bates, Web Programming Building Internet Application, Second Edition, Wiley (2007)
2. Head First Servlets and JSP 2nd Edition, Bryan Basham, Kathy Sierra
3. Uttam Kumar Roy, Web Technologies from Oxford University Press

Student Activities:

1. Prepare a web site for your college
2. Prepare your personal website

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SEMESTER – VI

PAPER – VII

Max. Marks 75

Model Paper

WEB TECHNOLOGIES

No Of Hours: 4

No of Credits: 3

Pass Marks 30

Section -A

Answer **FIVE** Questions. Each Question carries **FIVE** Marks.

5 X 5=25M

1. Write about structure of HTML Document with an example
2. Explain about lists in HTML
3. Write about properties used in Style Sheet
4. Write about arrays in Java Script
5. Describe Data Object
6. Write about Rollover buttons
7. Describe XML Elements
8. Write the syntax of EL and EL variables

Section- B

Answer **FIVE** the Questions. Each Question carries **TEN** Marks

5 X 10=50M

9. Explain about hyper links? Write about how to link another pages
10. What is Form? Explain about forms with examples
11. What is CSS? How to design Cascading style sheet
12. Explain about Mathematical Functions
13. Explain about Regular Expressions
14. Write about Data validations in DHTML
15. Explain about Document Object Model
16. Explain about JSP Lifecycle with neat diagram

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SEMESTER – VI	PAPER – VII	Max. Marks 75	Pass Marks 30

Guidelines for paper setting '**WEB TECHNOLOGIES**'

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (essay questions)
Unit-1	2	2
Unit-2	2	2
Unit-3	2	2
Unit-4	1	1
Unit-5	1	1

- Each Short answer question carries 5 marks in Section –A
- Each Essay question carries 10 marks in Section –B
- The Question papers setters are requested to cover all the topics in the syllabus stipulated as per the weightage given by us

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SEMESTER – VI	PAPER – VI		Max. Marks 50

Lab List	WEB TECHNOLOGIES	Pass Marks 25
No. of Hours per week: 2	External: 25	Internal: 25 Credits: 2

1. Write an HTML program to demonstrate text formatting, working with images and hyper links
2. Write an HTML program to create Student Marks sheet preparation.
3. Write an HTML program to explain String manipulation-using functions.
4. Write an HTML program to explain <form> events
5. Write an HTML program to perform all arithmetic operations using java script.
6. Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluates the expression and Displays the result.
7. Create a form for Student information. Write JavaScript code to find Total, Average, Result and Grade.
8. Create a form for Employee information. Write JavaScript code to find DA, HRA, PF, TAX, Gross pay, Deduction and Net pay.
9. Create a form consists of a Multiple choice questions that validates the answer dynamically and displaying result using java script.
10. Write a java script to work with following
 - a. Date display
 - b. Calendar
 - c. Copy Selected Text
 - b. IP Address

COMPUTER SCIENCE	CSC-602CE	2018-'19	B.Sc.(MPCs)
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SEMESTER – VI

PAPER – VIII

Max. Marks 75

Syllabus

PHP, MySql & Word Press

NO Of Hours:4

Credits: 3

Pass Marks 30

Course Objective: To introduce the concept of PHP and to give basic Knowledge of PHP. Learn about PHP Syntax., Arrays, PHP Loops, PHP and MySQL connectivity, PHP form validation, PHP form handling. Overview of MySQL and PHPMyAdmin, Understand basic concepts of how a database stores information via tables, Understanding of SQL syntax used with MySQL, Learn how to retrieve and manipulate data from one or more tables, Know how to filter data based upon multiple conditions, Updating and inserting data into existing tables, Learning how the relationships between tables will affect the SQL, The advantages of store procedures with storing data using variables and functions, How SQL can be used with programming languages like PHP to create dynamic websites for visitors, Review of some sample PHP projects interacting with MySQL.

UNIT-1: Installing and Configuring MySQL: 10 Hrs

Current and Future Versions of MySQL, How to Get MySQL, Installing MySQL on Windows, Trouble Shooting your Installation, Basic Security Guidelines, Introducing MySQL Privilege System, Working with User Privileges. Installing and Configuring Apache: Current and future versions of Apache, Choosing the Appropriate Installation Method, Installing Apache on Windows, Apache Configuration File Structure, Apache Log Files, Apache Related Commands, Trouble Shooting. Installing and Configuring PHP: Building PHP with Apache on Windows, php.ini.Basics, The Basics of PHP scripts. The Building blocks of PHP: Variables, Data Types, Operators and Expressions, Constants. Flow Control Functions in PHP: Switching Flow, Loops, Code Blocks and Browser Output.

Unit – II: Working with Functions: 10 Hrs

What is function?, Calling functions, Defining Functions, Returning the values from User-Defined Functions, Variable Scope, Saving state between Function calls with the static statement, more about arguments. Working with Arrays: What are Arrays? Creating Arrays, Some Array-Related Functions. Working with Objects: Creating Objects, Object Instance Working with Strings, Dates and Time: Formatting strings with PHP, Investigating Strings with PHP, Manipulating Strings with PHP, Using Date and Time Functions in PHP.

Unit – III: Working with Forms: 15 Hrs

Creating Forms, Accessing Form Input with User defined Arrays, Combining HTML and PHP code on a single Page, Using Hidden Fields to save state, Redirecting the user, Sending Mail on Form Submission, Working with File Uploads. Working with Cookies and User Sessions: Introducing Cookies, Setting a Cookie with PHP, Session Function Overview, Starting a Session, Working with session variables, passing session IDs in the Query String, Destroying Sessions and Unsetting Variables, Using Sessions in an Environment with Registered Users. Working with Files and Directories: Including Files with include(), Validating Files, Creating and Deleting Files, Opening a File for Writing,

Reading or Appending, Reading from Files, Writing or Appending to a File, Working with Directories.

Unit – IV: Introduction to MySQL

15Hrs

Introduction to MySQL and Interfacing with Databases through PHP Understanding the database design process: The Importance of Good Database Design, Types of Table Relationships, Understanding Normalization. Learning basic SQL Commands: Learning the MySQL Data types, Learning the Table Creation Syntax, Using Insert Command, Using SELECT Command, Using WHERE in your Queries, Selecting from Multiple Tables, Using the UPDATE command to modify records, Using REPLACE Command, Using the DELETE Command, Frequently used string functions in MySQL, Using Date and Time Functions in MySQL. Interacting with MySQL using PHP: MySQL Versus MySQLi Functions, Connecting to MySQL with PHP, Working with MySQL Data.

Unit – V: Word press

10Hrs

Word press: Introduction to word press, servers like wamp, bitnami e.tc, installing and configuring word press, understanding admin panel, working with posts and pages, using editor, text formatting with shortcuts, working with media-Adding, editing, deleting media elements, working with widgets, menus. Working with themes-parent and child themes, using featured images, configuring settings.

References:

1. Julie C. Meloni, PHP MySQL and Apache, SAMS Teach yourself, Pearson Education (2007).
2. Xue Bai Michael Ekedahl, The web warrior guide to Web Programming, Thomson (2006).

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SEMESTER – VI

PAPER – VIII

Max. Marks 75

Model Paper

PHP, MySql & Word Press

NO Of Hours:3

No Of Credits: 3

Pass Marks 30

Section- A

Answer **FIVE** Questions. Each Question carries **FIVE** Marks.

5*5=25M

- 1 .Define variable and list the standard data types in PHP.
2. What is Break and Continue statements in PHP.
3. Define Function and write a program for Function?
4. Write programs to pass an argument to function by Value and Reference in PHP.
5. Explain how to create a simple form in PHP.
6. What is Cookie and explain how to accessing cookie in PHP.
7. Describe Update Command in MySQL with Example.
8. Write a short notes on Word Press.

Section- B

Answer **FIVE** Questions. Each Question carries **TEN** Marks

5*10=50M

9. Explain about Operators and Expressions available in PHP with examples.
10. Explain about Loops and switching statements in PHP with examples.
11. Explain about Arrays and related functions to arrays in PHP with examples.
12. Explain the following Strings functions with examples
 - a. strlen() b. strstr() c. strpos() d. substr() e. strtok()
13. Explain how to send Mail on form submission in PHP.
14. Explain how to work with Sessions in PHP.
15. Explain how to insert & retrieve data with MySql in PHP.
16. Explain how to work with Themes and also featured images in Word Press.

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SEMESTER – VI	PAPER – VIII	Max. Marks 75	Pass Marks 30

Guidelines for paper setting ' PHP, MySql & Word Press '

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (Essay questions)
Unit-1	2	2
Unit-2	2	2
Unit-3	2	2
Unit-4	1	1
Unit-5	1	1

- Each Short answer question carries 5 marks in Section –A
- Each Essay question carries 10 marks in Section –B
- The Question papers setters are requested to cover all the topics in the syllabus stipulated as per the weightage given by us.

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SEMESTER – VI	PAPER – VIII		Max. Marks 50
Lab List	PHP, MySQL & Word Press Lab		Pass Marks 25
No. of Hours per week: 3	External: 25	Internal: 25	Credits: 2

MySQL Lab Cycle

Cycle -1

An Enterprise wishes to maintain the details about his suppliers and other corresponding details. For that he uses the following details.

Suppliers (sid: Integer, sname: string, address: string)

Parts (pid: Integer, pname: string, color: string)

Catalog (sid: integer, pid: integer, cost: real)

The catalog relation lists the prices charged for parts by suppliers.

Write the following queries in SQL:

1. Find the pnames of parts for which there is some supplier.
2. Find the snames of suppliers who supply every part.
3. Find the snames of supplier who supply every red part.
4. Find the pnames of parts supplied by London Supplier and by no one else.
5. Find the sid's of suppliers who charge more for some part than the average cost of that part.
6. For each part, find the sname of the supplier who charges the most for that part.
7. Find the sid's of suppliers who supply only red parts.
8. Find the sid's of suppliers who supply a red and a green part.
9. Find the sid's of suppliers who supply a red or green part.
10. Find the total amount has to pay for that supplier by part located from London.

Cycle – 2

An organisation wishes to maintain the status about the working hours made by his employees. For that he uses the following tables.

Emp (eid: integer, ename: string, age: integer, salary: real)

Works (eid: integer, did: integer, pct_time: integer)

Dept (did: integer, budget: real, managerid: integer)

An employee can work in more than one department; the pct_time field of the works relation shows the percentage of time that a given employee works in a given department.

Resolve the following queries.

1. Print the names and ages of each employee who works in both Hardware and Software departments.

2. For each department with more than 20 full time equivalent employees (i.e., where the part-time and full-time employees add up to at least that many full-time employees), print the did's together with the number of employees that work in that department.

3. Print the name of each employee whose salary exceeds the budget of all of the departments that he or she work in.
4. Find the managerid's of managers who manage only departments with budgets greater than 1,000,000.
5. Find the enames of managers who manage the departments with largest budget.
6. If a manager manages more than one department, he or she controls the sum of all the budgets for those departments. Find the managerid's of managers who control more than 5,000,000.
7. Find the managerid's of managers who control the highest amount.
8. Find the average manager salary.

PHP Lab Cycle

1. Write a PHP program to Display "Hello"
2. Write a PHP Program to display the today's date.
3. Write a PHP Program to read the employee details.
4. Write a PHP Program to display the
5. Write a PHP program to prepare the student marks list.
6. Write a PHP program to generate the multiplication of two matrices.
7. Write a PHP Application to perform demonstrate the college website.
8. Write a PHP application to add new Rows in a Table.
9. Write a PHP application to modify the Rows in a Table.
10. Write a PHP application to delete the Rows from a Table.
11. Write a PHP application to fetch the Rows in a Table.
12. Develop an PHP application to make following Operations
 - i. Registration of Users.
 - ii. Insert the details of the Users.
 - iii. Modify the Details.
 - iv. Transaction Maintenance.
 - a) No of times Logged in
 - b) Time Spent on each login.
 - c) Restrict the user for three trials only.
 - d) Delete the user if he spent more than 100 Hrs of transaction.

Wordpress Lab

1. Installation and configuration of word press.
2. Create a site and add a theme to it.

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SEMESTER – VI

PAPER – VIII

Max. Marks 75

Syllabus **Advanced java Script: JQUERY/AJAX/JSON/ANGULAR JS**

NO Of Hours:4

Credits: 3

Pass Marks 30

Course Objective: To impart knowledge in designing a webpage in a structured way by using advanced java script ie., using different scripting languages

UNIT-1: JQuery – Basics: **10 Hrs**

String, Numbers, Boolean, Objects, Arrays, Functions, Arguments, Scope, Built-in Functions. jQuerySelectors: CSS Element Selector, CSS Element ID Selector, CSS Element Class Selector, CSS Universal Selector, Multiple Elements E, F, G Selector, Callback Functions. jQuery – DOM Attributes: Get Attribute Value, Set Attribute Value. jQuery – DOM Traversing : Find Elements by index, Filtering out Elements, Locating Descendent Elements, JQuery DOM Traversing Methods.

Unit – II: jQuery – CSS Methods : **10 Hrs**

Apply CSS Properties, Apply Multiple CSS Properties, Setting Element Width & Height, JQuery CSS Methods. jQuery – DOM Manipulation Methods: Content Manipulation, DOM Element Replacement, Removing DOM Elements, Inserting DOM elements, DOM Manipulation Methods. jQuery – Events Handling: Binding event handlers, Removing event handlers, Event Types, The Event Object, The Event Attributes. jQuery – Effects: JQuery Effect Methods, jQuery Hide and Show, jQuery Toggle, jQuery Slide – slideDown, slideUp, slideToggle, jQuery Fade – fadeIn, fadeOut, fadeTo, jQuery Custom Animations

Unit – III: Intro to jQuery UI **15 Hrs**

, Need of jQuery UI in real web sites, Downloading jQuery UI, Importing jQuery UI, Draggable, Droppable, Resizable, Selectable, Sortable, Accordion, Auto Complete, Button Set, Date Picker, Dialog, Menu, Progress Bar, Slider, Spinner, Tabs, Tooltip, Color Animation, Easing Effects, addClass, removeClass, Effects, jQuery UI themes, Customizing jQuery UI widgets / plug-ins, jQuery UI with CDN, Consuming jQuery Plug-ins from 3rd party web sites jQuery Validations, Intro to jQuery validation plug-in, Using jQuery validation plug-in, Regular expressions.

Unit – IV: Intro to AJAX **15 Hrs**

Need of AJAX in real web sites, Getting database data using jQueryAJAX, Inserting, Updating, Deleting database data using jQuery-AJAX Grid Development using jQuery-AJAX Intro to JSON JSON syntax, Need of JSON in real web sites, JSON object, JSON array, Complex JSON objects, Reading JSON objects using jQuery.

Unit – V: Intro to AngularJS **15 Hrs**

Need of AngularJS in real web sites, Downloading AngularJS, AngularJS first example, AngularJS built-in directives, AngularJS expressions, AngularJS modules, AngularJS controllers, AngularJS scope AngularJS dependency injection AngularJS, bootstrapping AngularJS data bindings, AngularJS \$watch, AngularJS filters, AngularJS events, AngularJS AJAX, Ng-repeat, AngularJS with json arrays, AngularJS registration form and login form, AngularJS CRUD operations, AngularJS Animations, AngularJS validations AngularJS \$q, AngularJS custom values, AngularJS custom factories, AngularJS custom services, AngularJS custom directives, AngularJS custom providers, AngularJS Routing, AngularUI Routing.

References:

1. jQuery UI 1.8: The User Interface Library for jQuery by Dan Wellman
2. jQuery Fundamentals by Rebecca Murphey
3. Ajax: The Complete Reference by Thomas A. Powell

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

SEMESTER – VI**PAPER – VIII****Max. Marks 75****Model Paper Advanced java Script: JQUERY/AJAX/JSON/ANGULAR JS****NO Of Hours:3****No Of Credits: 3****Pass Marks 30****Section- A**Answer **FIVE** Questions. Each Question carries **FIVE** Marks.**5*5=25M**

1. What is jquery? Write a simple program to display welcome message.
2. Write a jquery-dom attributes.
3. How we can apply css properties in j query?
4. Write a program for jquery fade In, fade Out.
5. Discuss in detail about jquery UI categorization.
6. Write a need of AJAX in real websites.
7. What is JSON? Write a syntax & need of JSON in real websites.
8. Write a short notes angularJS built-in directives.

Section- BAnswer **FIVE** Questions. Each Question carries **TEN** Marks**5*10=50M**

9. Explain in detail about DOM traversing methods.
10. Explain detail about jquery-dom manipulation methods.
11. Explain detail about jquery event handling methods.
12. Write a program for draggable , resizable using jquery UI.
13. How can we manipulate the data in a database using jquery-AJAX.
14. What is JSON object ? Discuss in detail about complex JSON objects.
15. What is angular JS ? Need of angular JS in real websites & write any example program.
16. Write a program for registration form and login form using Angular JS.

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SEMESTER – VI	PAPER – VIII	Max. Marks 75	Pass Marks 30

Guidelines for paper setting – **Advanced java Script: JQUERY/AJAX/JSON/ANGULAR JS'**

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (Essay questions)
Unit-1	2	1
Unit-2	2	2
Unit-3	1	1
Unit-4	2	2
Unit-5	1	2

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SEMESTER – VI	PAPER – VIII	Max. Marks 50	

Lab List Advanced java Script: JQUERY/AJAX/JSON/ANGULAR JS Pass Marks 25

No. of Hours per week: 3

External: 25

Internal: 25 Credits: 2

1. Using jQuery find all textareas, and makes a border. Then adds all paragraphs to the jQuery object to set their borders red.
2. Using jQuery add the class "w3r_font_color" and w3r_background to the last paragraph element.
3. Using jQuery add a new class to an element that already has a class.
4. Using jQuery insert some HTML after all paragraphs.
5. Using jQuery insert a DOM element after all paragraphs.
6. Convert three headers and content panels into an accordion. Initialize the accordion
And specify the animate option
7. Convert three headers and content panels into an accordion. Initialize the accordion and specify the height.
8. Create a pre-populated list of values and delay in milliseconds between a keystroke occurs and a search is performed.
9. Initialize the button and specify the disable option.
10. Initialize the button and specify an icon on the button.
11. Initialize the button and do not show the label.
12. Create a simple jQuery UI Datepicker. Now pick a date and store it in a textbox.
13. Initialize the date picker and specify a text to display for the week of the year column heading.

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COMPUTER SCIENCE	CSC PROJ-602 P	2018-'19	B.Sc.(MPCs)
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SEMESTER – VI

PROJECT (PHP & MYSQL)

Max. Marks 100

OBJECTIVE

The objective of the Project Course is to help the students to study, analyze and design software or utility for different problems or applications. This will improve the skills of software development of the students.

MARKS FOR PROJECT EVALUATION

The project course will be evaluated for **100** Marks, of which **75** marks are meant for the practical evaluation of a project and **25** marks are allotted for attending viva-voce examination. The passing minimum in the project work will be 50% of the total mark. i.e. the student should get minimum 50% marks in the project evaluation and the viva-voce examination. Thus, the minimum mark the student is required to obtain is 50 out of 100 marks.