

BU-COMMUNITY COLLEGE CONSULTANCY CENTRE

**REVISED SYLLABUS – 2021-22
FOR
DIPLOMA IN WEB SERVER ADMINISTRATION**



**BHARATHIAR UNIVERSITY
COIMBATORE-641046**

BHARATHIAR UNIVERSITY: COIMBATORE.
DIPLOMA IN WEB SERVER ADMINISTRATION
(Community College)

(for the candidates admitted from the academic year 2021 onwards)

Minimum qualification for admission to Diploma in Web server administration
is a pass in standard X

SCHEME OF EXAMINATIONS

S.No	Title of the Course	Credits	Maximum Marks
1	Windows Server Administration	4	100
2	Web Server Administration	4	100
3	Web Technology	4	100
4	Content Management System	4	100
5	Windows Server Administration Lab	4	100
6	Linux Server Lab	4	100
7	Web Technology Lab	4	100
8	Project	4	100
	Total	32	800

Question paper Pattern: Theory

Section A: (10 x 2=20 Marks)

Answer ALL the questions

Section B: (5 x 6 = 30 Marks)

Answer ALL the questions either (a) or (b)

Section C: (5 x 10 = 50)

Answer ALL the questions either (a) or (b)

Duration of examinations for all papers is three hours.

*Minimum Pass Mark: 40 Marks

PAPER I

WINDOWS SERVER ADMINISTRATION

Unit:1	Deploying and updating windows server 2012	
Deploying and updating windows server 2012 – Configuring and servicing windows 2012 images – understanding windows images – configuring Windows images – Servicing Windows Images – Automated Deployment of Windows Server 2012 images – Automating Installation – Configuring Answer files – Windows Deployment Services – WDS Requirements– Managing Images – Configuring Transmissions.		
Unit:2	Managing account policies and service accounts	
Managing account policies and service accounts – Implementing domain password and lockout policies – domain user password policies – Account Management tasks – Using fine- grained password policies – Mastering group managed Service accounts – Configuring Name resolution – DNS Zones and Forwarders – WINS and global names zones – Advanced DNS options.		
Unit:3	Administering Active Directory	
Administering Active Directory – Domain Controller management – Domain Controller Maintenance – Active directory database optimization – Active directory Metadata cleanup – Active directory snapshots – Active directory Recovery - Active directory recycle bin - Active directory backup		
Unit:4	Managing Group policy application and Infrastructure	
Managing Group policy application and Infrastructure – Group Policy Maintenance – Managing Group Policy Objects – Migrate Group Policy Objects – Delegate GPO Management Managing Group Policy Application – Group policy settings and preferences – Administrative Templates – Group policy preferences		
Unit:5	Administering network policies	
Administering network policies – Network policy server policies – Network access protection enforcement methods – Network access protection infrastructure – Administering remote access.		
Text Book(s)		
1	Orin Thomas, “Windows server 2012 – Training Guide”, O’Reilly Media, Inc	

PAPER II

WEB SERVER ADMINISTRATION

Unit:1	Commands	
Commands - Basic Linux commands - Basic Windows server commands		
Unit:2	Basic Web server hardware requirements	
Basic Web server hardware requirements - Install and configure a Web server - Apache Internet information server		
Unit:3	Configure the Domain Name server	
Configure the Domain Name server - Manage Web server tasks such as: User authentication - Setup users and groups - Manage file system permissions - Share resources (such as folders for web publishing) - Secure a Web server		
Unit:4	Configuration of multiple Web sites on a Web server	
Configuration of multiple Web sites on a Web server		
Unit:5	Configuration and support of e-mail services	
Configuration and support of e-mail services		
Text Book(s)		
1	Charles Aulds, Linux Apache Web Server Administration, Wiley Publishers, 2012, ISBN: 978-0-7821-2734-8	

PAPER III
WEB TECHNOLOGY

Unit:1	Introduction	
<p>Introduction - The internet in Industry and research – HTML5, CSS3, JavaScript – Evolution of the Internet and WWW – Web Basics – Multitier Application Architecture – Client side vs Server side scripting – W3C – HTML5 – Headings – Linking – Images – special characters and Horizontal rules – Lists – Tables – Forms.</p>		
Unit:2	HTML Form Input types	
<p>HTML Form Input types – Color – Date – Date time – email – month – number – range – search – time – Input and Data list elements and auto complete attribute – Page structure elements – Header – Nav – section and footer element.</p>		
Unit:3	Introduction to Cascading style sheet	
<p>Introduction to Cascading style sheet – inline styles – embedded styles – Linking external style sheets – positioning elements – backgrounds – drop-down menus – Text shadows – rounded corners – color – box shadows – Multiple Background images – Animations – Transitions and Transformations</p>		
Unit:4	Introduction to Scripting	
<p>Introduction to Scripting - Your first script – obtaining user input with prompt dialogs – Arithmetic – Decision Making :Equality and Relational Operators – Control statements – if – if..else – while – increment and decrement operators – For Statement – switch – do...while – break and continue – logical operators.</p>		
Unit:5	JavaScript	
<p>JavaScript: Functions – Recursion – Arrays - JavaScript Event Handling. PHP: PHP Basics – String Processing and Regular Expressions – Form Processing and Business Logic – Connecting to Database – Using cookies – Dynamic Content – Operator Precedence chart.</p>		
Text Book(s)		
1	Paul Deitel, Harvey Deitel, and Abbey Deitel, “Internet and World Wide Web – How to Program”, 5 th Edition, Pearson Education, 2012	

PAPER IV
CONTENT MANAGEMENT SYSTEM

Unit:1	Introduction	
Introduction – What is Content – Content and Intellectual Property rights – CMS versus DAM-S and MAM-S – Application Domains – Content Management in Television, radio and media production, non-media organization, advanced media services		
Unit:2	Content Management	
Content Management: the problem illustrated – Media and essence handling requirement – Requirements for metadata creation and handling – user requirements example – Content related workflows – workflows in broadcast – workflows in e-commerce – content-related workflows in corporate and other organization		
Unit:3	Essence	
Essence – the different forms of essence – Encoding and compression basics – Video – Audio – image, web, text and other essence formats – essence processing		
Unit:4	Content Representation and Metadata	
Content Representation and Metadata – Metadata – Metadata access and exchange – Metadata description schemes – Standards for metadata transmission and exchange – File formats		
Unit:5	Content Management System Architecture	
Content Management System Architecture – Software design principles – Software architecture – CMS Component software architecture – the core – Content Management system Infrastructure		
Text Book(s)		
1	Dr Andreas Mauthe, Dr Peter Thomas, “Professional Content Management Systems Handling Digital Media Assets”, Wiley, 2004.	

PAPER V
PRACTICAL

Windows Server Administration Lab	
1	Configure Windows images.
2	Deploy and configure Windows Deployment Services
3	Configure password and account lockout policies
4	Create fine-grained password policies
5	Manage DNS zones
6	Configure and manage DNSSEC
7	Configuring Name resolution
8	Domain controller installation
9	RODC deployment
10	Perform several operations in Active Directory (Deleting and recovering)
11	Prepare GPOs, security groups, and OUs
12	Install the DHCP role

PAPER VI
PRACTICAL

Linux Server Lab	
Linux Commands	
1	Write a procedure to Logon and Logoff to linux in both Text mode and graphical mode
2	Write a syntax and usage the directory management commands with all options
3	Write a command with syntax and usage the file management commands
4	Write a command with syntax & usage and execute the general purpose commands
5	Write a command with syntax & usage and execute using simple filters
6	Write a command with syntax & usage and execute the advance filters such as grep, egrep, fgrep
7	Write a command with syntax & usage then execute the ps command, process management commands: &nohub, kill, nice
8	Write a command with syntax & usage then execute the communication commands
9	To execute device pattern using Meta character to match each of the following situation: i. All two character filenames. ii. All filenames consisting of two lowercase letters. iii. All filenames ending with c. iv. All filenames beginning with c and ending with a digit. v. All filenames beginning with p and having at somewhere
Shell Scripts	
1	To write a shell script that accepts a numerical value N. Then display the decrementing value of N till it reaches 0
2	To write a shell-script program that takes three command line arguments. The first argument is the name of the destination file and the other two arguments are names of files to be placed in the destination file
3	To Write a shell-script program to print content of the file from given line number to next given number of lines
4	Write a shell script program to say Good morning/ Afternoon /Evening as you log in to system
5	Write a shell script program that print out date information in this order: time, day of the week, day number, year-that is like this 13:55:00 IST sun 9 june1996
6	To Develop a basic math calculator using case statement

PAPER VII
PRACTICAL

Web Technology Lab	
1	Write an HTML code to display your education details in a tabular format.
2	Write an HTML code to display your CV on a web page.
3	Write an HTML code to create a Home page having three links: About Us, Our Services and Contact Us. Create separate web pages for the three links.
4	Write an HTML code to create a Registration Form. On submitting the form, the user should be asked to login with this new credentials.
5	Write an HTML code to create your Institute website, Department Website and Tutorial website for specific subject.
6	Write an HTML code to illustrate the usage of the following: a. Ordered List b. Unordered List c. Definition List
7	Write an HTML code to demonstrate the usage of inline CSS.
8	Write an HTML code to demonstrate the usage of internal CSS.
9	Write an HTML code to demonstrate the usage of external CSS.
10	Write a Java script to prompt for users name and display it on the screen.
11	Design HTML form for keeping student record and validate it using Java script.
12	Write programs using Java script for Web Page to display browsers information
13	Write a JavaScript program to demonstrate looping
14	Write a JavaScript program to find the factorial of given number.
15	Write a JavaScript program to find the given text is palindrome or not.
16	Write a JavaScript program to change the background of a browser.
17	Write a PHP program to print sum of digits.
18	Write a PHP script to display strings.