SUBJECT: UNDERGRADUATE COURSE CURRICULUM 2023-24

PART-A: Introduction

Program: *Diploma Course*		Class: B. Sc. Semester-IV	Year:2023	Session:2023-2024
1	Course Code	CSSE-2T		
2	Course Title	Internet Technologies		
3	Course Type	Discipline Elective Course (DSE)		
4	Pre-requisite (if, any)	As per Government norms / Institutional scheme		
5	Course Learning. Outcomes (CLO)	*After completion of this course, the students will be able to:* ➤ To understand the terms related to the internet and how the internet is changing the world. ➤ To understand how computers are connected to the internet and demonstrate the ability to use the world wide web. ➤ Demonstrate an understanding of and the ability to use electronic mail and other internet-based services. ➤ Understand the design principles of web pages and how they are created. ➤ To develop an ability to create basic web pages with HTML.		
6	Credit Value	04 (03 Theory & 01 Practical)		
7	Total Marks	Max. Marks: 100		Min Passing Marks: 40

PART -B: Content of the Course

Total No. of Teaching–learning - Hours– 45

Unit	Topics (Course contents)	No. of Hours
I	**Introduction:** Overview, Network of Networks, www, History on internet and www, Intranet, Extranet and Internet. Domain and Sub domain, Address Resolution, DNS, firewalls, web servers and browsers. **Search Engine and Web Crawler:** Definition, Meta data, Web Crawler, Indexing , Page rank, search engines, Bot. H/w and s/w requirements of internet.	11
II	**Internet and Routing Protocols:** IP Datagram, IPv4 and IPv6. IP Subnetting and addressing: Classful and Classless Addressing. Internet Routing Protocol Routing, Intra and Inter Domain Routing, Unicast and Multicast Routing, Broadcast. Electronic Mail: POP3, SMTP.	12
III	**HTML:** Introduction, Editors, Elements, Attributes, Heading, Paragraph. Formatting, Link, Head, Table, List, Block, Layout, CSS. Form, Frame, Colors, Image. Introduction to Extensible Markup Language (XML) and CGI.	12
IV	**PERL:** Introduction, Variable, conditional statements, Looping, Basics of JavaScript. **Threats:** Malicious- code, viruses, Trojan horses, worms; eavesdropping, spoofing, modification, denial of service attacks. Network security techniques: Password and Authentication; VPN, IP Security, security in electronic transaction.	10
keywords	HTTP, TCP/IP, PERL	

PART–C (CSSE -2T)

Learning Resources: Text Books, Reference Books and Others

Text Books:
- Internet and Internet Engineering, Daniel Minoli, TMH (Latest Edition)
- HTML The Definite Guide, Chuckmusiano & Bill Kenndy, O Reilly (Latest Edition)

Reference Books:
- Computer Networking – A top-down approach featuring the internet, Kurose and Rose, Pearson Education.
- Internetworking with TCP/IP, vol. 1,2,3 Douglas E. Croner, 4th Edition Pearson Education (PHI).

E-RESOURCES:
- https://faculty.ksu.edu.sa/sites/default/files/computer_networks_-_a_tanenbaum_-_5th_edition.pdf
- https://csc-knu.github.io/sys-prog/books/Andrew%20S.%20Tanenbaum%20-%20Computer%20Networks.pdf

PART - D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks:	100 Marks
Continuous Comprehensive Evaluation (CCE):	20 Marks
Semester End Exam (SEE):	80 Marks

Internal Assessment: Continuous Comprehensive Evaluation (CCE)	Class Test : 02 of 10 Marks each Assignment : 01 of 10 Marks	Average of the marks obtained in both test (out of 10) and marks obtained in assignment (out of 10) shall be considered against 20 Marks of Internal assessment
Semester End Exam (SEE):	Paper (Two section – A & B) Section A: Objective and Short answer type questions : 10 + 10 = 20 Marks Section B: Descriptive answer type questions unit wise : 15 x 04 = 60 Marks	