2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	End Semester Examination
CO 1	✓	-	✓
CO 2	✓	✓	✓
CO 3	✓	✓	✓
CO 4	✓	-	✓

6. INTERNET TECHNOLOGY

Discipline	Computer Science				
Course Code	UK1DSCCSC105				
Course Title	INTERNET TECHNOLOGY				
Type of Course	DSC				
Semester	I				
Academic Level	1				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week

	4	4 hours	-	-	4 hours
Pre-requisites	Knowledge of the basics of computers is necessary.				
Course Summary	This course provides an introduction about the components of the Internet, its working and the way in which web pages are designed.				

Detailed Syllabus:

Module	Unit	Content	Hrs (L)
I		**Network Technology**	12
	1	Introduction to Computer Networks- Advantages of Networks, Goals of Networks	
	2	Types of Networks- LAN, MAN, WAN, Internet, Public Networks	
	3	LAN topologies- Bus, Star, Ring, Mesh	
	4	Interconnecting Issues, Types, Connectivity Devices, Hubs, Switch, Bridges, Routers	
II		**Web Pages**	12
	5	Introduction to WWW-WWW and HTTP, Webpage	
	6	Introduction to Web Browser- BookMarks- Comparison, Directories	
	7	Search Engines-Working and features-Search Strategies – Search Generalization-Search Specialization-Working.	
	8	Uniform Resource Locator (URL), Email-Working with Email-Sending Mail-Reading Mail-Replying to Mail-Deleting Mail-Advantages and Disadvantages of Email	
III		**Internet Protocol**	12

	9	Introduction to Internet -Meaning of Internet	
	10	WWW- History, Working of Internet, Browsing, Searching the Web	
	11	Internet protocols- TCP/IP Protocol suite, UDP, IP addresses, IP Versions – IPV4, IPV6	
	12	Services of the Internet- FTP, HTTP, Email	
IV		**Web Design using HTML**	**12**
	18	HTML- Understanding HTML, Text tags	
	19	Graphics, Video and Sound Tags; Link and Anchor Tags	
	20	Table Tags; Frame Tags	
	21	Miscellaneous tags (layers, image maps etc)	
V		**Advanced Internet Technologies**	**12**
	22	3G, 4G, 5G Networks, Internet of Behaviors	
	23	XR, AR, VR, Edge AI	
	24	Serverless Computing, Zero Trust Security, Federated Learning	

Text Books and Materials

1. Dr.Surender Jangra, "Basics of Internet and Web", Vayu Education of India. New Delhi, 110002
2. Raymond Greenlaw, Ellen Hepp, "Fundamentals of Internet and the World Wide Web, McGraw-Hill.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO-1	Summarise about Network Technologies	U	PSO-1
CO-2	Outline structure of a Web Page	U	PSO-1
CO-3	Cite techniques used in Internet Protocol	U	PSO-1
CO-4	Develop Web pages using HTML	Ap	PSO-1, 2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Note: 1 or 2 COs/module

Name of the Course: INTERNET TECHNOLOGY

Credits: 4:0:0 (Lecture: Tutorial: Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO-1	Summarise about Network Technologies	PO-6, 7 PSO-1	U	F, C	L	-
CO-2	Outline structure of a Web Page	PO-6, 7 PSO-1	U	F, C	L	-
CO-3	Cite techniques used in Internet Protocol	PO-6, 7 PSO-1	U	F, C	L	-
CO-4	Develop Web pages using HTML	PO-3, 5, 6, 7 PSO-1, 2	Ap	F, C,P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
CO 1	-	-	-	-	-	1	1	-	2	-	-	-
CO 2	-	-	-	-	-	2	1	-	3	-	-	-
CO 3	-	-	-	-	-	2	1	-	3	-	-	-
CO 4	-	-	2	-	2	2	1	-	3	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam