

PG DEPARTMENT OF COMPUTER SCIENCE				CLASS: I PG				
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
II	NME- 2	21P2DNM2	Basics Of Internetworks	2	2	25	75	100

Nature of Course			
Knowledge and skill	✓		Employability oriented
Skill oriented			Entrepreneurship oriented ✓

Course Objectives

1. To impart the knowledge of basics of Internet.
2. Learning the various aspects of internet design and functionalities.
3. To learn the concept of sending and receiving the Email.
4. To familiarize the concept of Computer Security.
5. To provide the knowledge of computer Viruses, Bombs and Worms.

Unit	Content	Hrs	K-Level	CLO
I	Internet: Internet Definition - Network Definition-Common terminologies – Node - Host- Workstation -Network Administrator - Network security - Network Components – Types of Networks - Addressing in Internet – DNS - Network topologies.	6	Up to K2	1
II	Browsers and Search engines: Browsers – browser - Introduction – Parts of a browser window -Running a browser - working with a Browser. Search Engines: What is Search Engine? - Types of Search Engines.	6	Up to K2	2
III	E-mail: E-mail - E-mail Networks and Servers - E-mail Protocols - Structure of E-mail - Attachments – E-mail Clients - web based E-mail-Address book – Signature File.	6	Up to K2	3
IV	Computer Security: Types of Computer Crimes – Computer Security – Crime and Security – Computer Crime by Authorized Users – Computer Crime through Unauthorized access – Malicious Computer Programs.	6	Up to K2	4
V	Computer Viruses, Bombs, and Worms: What do Viruses do? – Virus Prevention guidelines – Types of Viruses – Characteristics of Viruses – Categories of Viruses – Antivirus Software or Virus vaccines.	6	Up to K2	5

Books for Study

1. Internet Technology and Web design by Ramesh Bangia, Firewall Media, Third Edition, Lakshmi Publications Pvt. Ltd, 2011.
2. Fundamentals of Information Technology by Alexis Leon & Mathews Leon, Vikas Publishing House Pvt. Ltd., Second Edition, 2009.

Chapters

Text Book: 1

Unit 1: Chapter 1,2

Unit 2: Chapter 3 & Chapter 4

Unit 3: Chapter 5(5.6), Chapter 8(8.11 &8.13)

Text Book: 2

Unit 4: Chapter 30

Unit 5: Chapter 32

Books for Reference

1. The Internet Book by Douglas E. Comer, Fourth Edition, PHI Learning Pvt. Ltd., New Delhi, 2009.
2. Using the Internet the Easy Way by Young Kai Seng, Minerva Publications, First Edition, 2000.

Web Resources

1. [https:// www.tutorialspoint.com](https://www.tutorialspoint.com)
2. <https://www.simlilearn.com>
3. <https://www.w3schools.com>
4. <https://www.top-windows-tutorials.com>

Rationale for Nature of the course

- Helps to get a chance to showcases their skills and capabilities in an interactive and advanced environment.

Activities on Knowledge and Skill

- Creating and Accessing E-Mail
- Surfing on Web

Activities on Entrepreneurship Oriented

- Networking
- E-Commerce

Pedagogy

Chalk and talk , Materials, PPT, Assignment , Seminar , Problem solving , Group discussion , Interaction and Demonstration.

Course Designer(s) Name

1. Mrs. K. Imaya
2. Ms. S.Saranya

Lesson Plan

UNIT	Topics to be covered	Hours	Mode
I	Internet Types of Networks - Addressing in Internet – DNS - Network topologies.	6	Lecture, GD
II	Browsers -Search Engines.	6	Lecture
III	E-mail.	6	Lecture, PPT
IV	Types of Computer.	6	Lecture, PPT
V	What do Viruses do? Categories of Viruses.	6	Lecture, GD, Assignment

Course Learning Outcomes

On the completion of the course, the students will be able to

CLOs	COURSE LEARNING OUTCOME	K- Levels
CLO 1	Describe the concept of Network Definition, Network Administrator, Network Security and Network Topologies	Up to K2
CLO 2	Discuss the concepts of Browsers and Search Engines	Up to K2
CLO 3	Describe the E-mail Networks and Servers, E-mail Protocols, Structure of E-mail, Attachments, E-mail Clients, web-based E-mail-Address book, Signature File	Up to K2
CLO 4	Elaborate the concept of Computer Security and Computer Crimes.	Up to K2
CLO 5	Discuss the concept of Computer Viruses, Bombs and Worms	Up to K2

Mapping of CLOs with PO

CLO / PO	PO1	PO2	PO3	PO4	PO5	PO6
CLO 1	2	-	-	-	1	1
CLO 2	2	-	-	-	1	1
CLO 3	2	2	1	2	1	2
CLO 4	2	-	-	2	3	2
CLO 5	2	-	-	3	3	2

(3 –Advanced Application, 2 – Intermediate Level, 1- Basic Level)

Continuous Internal Assessment (CIA): 25 Marks

Components	Marks	K Level
Test (Average of two tests) (Conducted for 40 marks and converted into 10 marks)	10	(Refer Next Table)
Assignment	5	K2
Seminar	5	K2
Quiz	5	K2
Total	25	

Learning Outcome Based Education & Assessment (LOBE)

Formative - Blue Print – Model for Basics of Internetworks

Articulation Mapping – K Levels with Courses Learning Outcomes (CLOs)

Units	CLOs	K- Level	Section A		Section B (Either/or Choice)	Section C (Open Choice)
			Short Answers			
			No of Questions	K - Level		
1	CLOX	Up to K2	2	K1	2(K2&K2)	2(K1)
2	CLOY	Up to K2	1	K1	2(K2&K2)	1(K1)
No. of Questions to be asked			3		4	3
No. of Questions to be answered			3		2	2
Marks for each question			2		7	10
Total Marks for each section			6		14	20

- CLO5 will be allotted for individual Assignment which carries five marks as part of CIA component.

Distribution of Section-wise Marks with K Levels (CIA I & II)

K - Levels	Section A (No Choice)	Section B (No Choice)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated %
K1	6	-	30	36	56.25	100
K2	-	28	-	28	43.75	
Total Marks	6	28	30	64	100.00	100%

Learning Outcome Based Education & Assessment (LOBE)
Summative - Blue Print – Model for Basics of Internetworks
Articulation Mapping – K Levels with Courses Learning Outcomes (CLOs)

S.No	CLOs	K- Level	Section A		Section B		Section C (Open Choice)
			Short Answers		(Either/or Choice)		
			No of Questions	K - Level	No of Questions	K - Level	
1	CLO1	Up to K2	1	K1	1	K2& K2	1(K1)
2	CLO2	Up to K2	1	K1	1	K2& K2	1(K1)
3	CLO3	Up to K2	1	K1	1	K2& K2	1(K1)
4	CLO4	Up to K2	1	K1	1	K2& K2	1(K1)
5	CLO5	Up to K2	1	K1	1	K2& K2	1(K1)
No. of Questions to be asked			5		10		5
No. of Questions to be answered			5		5		3
Marks for each question			2		7		10
Total Marks for each section			10		35		30

K1 – Remembering and recalling facts with specific answers

K2 – Basic understanding of facts and stating main ideas with general answers

Distribution of Section – wise Marks with K Levels *

K Levels	Section A Short Answers	Section B (Either/or Choice)	Section C (Open Choice)	Total Marks	% of Marks without choice	Consolidated
K1	10	-	50	60	46.16	46
K2	-	70	-	70	53.84	54
Total Marks	10	70	50	130	100	100%