

Advanced Internet Technology [AINT]

B.E. Sem. VIII [CMPN]

(Elective – II)

EVALUATION SYSTEM

	Time	Marks
Theory Exam	3 Hrs.	100
Oral Exam	–	25
Term Work	–	25

SYLLABUS

Objectives of the course:

- To understand Technical aspect of Internet Technology
- To learn Advanced web programming.

1. Contents of the Course

Section 1 : Advanced Internet Protocols

DNS, Working of DNS, DNS Header, Type of Records in DNS, forward and Reverse lookup, Configuration of Open Source (OS) DNS, working of DDNS - DHCP, DHCP header, Working of DHCP, Configuration of OS DHCP - FTP, Working of FTP, Configuration of OS Public FTP server and Private FTP server

Understanding IPv6, CIDR, Hierarchical Routing, and Routing Protocol over internet.

Multimedia over Internet, Voice over IP, Virtual Private network

Section 2: Internet as a Distributed computing platform

- 1) Understanding Web Services technology, REST based web services (Resource Oriented Architecture) and Service oriented Architecture.
- 2) Introduction to cloud computing, case study and working of Google App engine and Amazon cloud.
- 3) Working of Peer to Peer over internet with case study of Bittorent ,

Section 3: Advanced Internet programming

HTML 5.0, Rich Internet Technology, AJAX, FLEX , Integrating PHP and AJAX, Consuming Web Service with AJAX, Resource Syndication (RSS), Working principle of search engines

Section 4: Internet Security

Public Key Infrastructure, Client side Vulnerabilities, Server Side Vulnerabilities, Database Vulnerabilities, Secure Payment Mechanism, Security issues in cloud.

Reference Books :

Section 1

- 1) TCP/IP Protocol Suite (*Behrouz A. Forouzan*) Tata McGraw-Hill

Section 2

- 1) Cloud Computing : A practical Approach (*Anthony T. Velte*) Tata McGraw-Hill
- 2) Using Google App Engine (*Charles*) O'reilly Press
- 3) Cloud Application Architecture (*George*) O'reilly Press
- 4) RESTful web services (*Leonard*) O'Reilly Press
- 5) Web Services Essentials (*Ethan*) O'Reilly

Section 3

- 1) Rich Internet Application AJAX and Beyond (Dana moore) Wrox press
- 2) Web 2.0 Programming (*Eric*) Wrox Press

- 3) HTML 5.0 (*Mark*) O'reilly Press
- 4) Web Technologies NEW Black Book Dreamtech

Section 4

- 1) Information Security (*Mark Stamp*) Wiley Publication
- 2) Cloud Security and Privacy (*Tim*) O'Reilly

