

SYLLABUS for 3rd SEMESTER

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|-----------------------------|----------|--|
| Course Code | : | SEC338 |
| Title of the Course | : | Internet Technology & Computer Networks |
| Nature of the Course | : | Skill Enhancement Course(SEC) |
| End Semester | : | 40(Theory)+20(Practical)Marks |
| In-Semester | : | 40Marks |
| Total Credits | : | 03 |

COURSEOBJECTIVE:

1. To impartability in the field of Web Technology and Computer Networks.
2. To provide entrepreneurship opportunities in the field of E-Commerce using web technology and networking architecture.

| UNITS | CONTENTS | L | T | P | TOTALHOURS |
|-----------------|---|---|---|---|------------|
| 1 (12marks) | <p>Introduction to Internet:</p> <p>History of Internet, Structure of Internet (include client server architecture)</p> <p>Internet Terminologies (www, URL, search engine, bandwidth, browser, cookies, domain name service, IP address, website and its components, telnet etc.)</p> | 5 | 1 | - | 6 |
| 2 (12 marks) | <p>Use of DOM, XML & HTML, CSS:</p> <p>Introduction to Document Object Model (DOM), hierarchy of objects in DOM</p> <p>Introduction to XML, Applications of XML.</p> <p>Introduction to HTML. Webpage Elements, attributes, heading, paragraphs, images, tables, lists, forms. Basic of CSS, Add style to document</p> <p>Creating Style sheet rules, Style sheet properties, Font, Text, List, Color and background color, Box, Display properties.</p> | 6 | 1 | 3 | 10 |

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|-----------------|---|----|----|----|----|
| 3 (12 marks) | Computer Network: Introduction to computer networks, analog and digital transmission, parallel and serial communication, Transmission media: guided and unguided media, Types of networks, Network Topologies, Network reference models. | 6 | 1 | - | 7 |
| 4 (12marks) | Network Technology: Switching technologies, Error control & detection mechanisms. Data link layer: flow control and access protocol, MAC Network layer: Routing protocols, Internet protocol, IP addresses. Transport layer : TCP & UDP Challenges of ornamental fish trade in India | 6 | 1 | - | 7 |
| 5 (12 marks) | Practical: 1. Design dynamic and interactive web pages to validate user input. 2. Apply CSS, Ajax in WebPages. 3. Apply PHP in a webpage. 4. LAN setup 5. Network Configuration and Settings 6. Network Management | - | - | 15 | 15 |
| | TOTAL | 23 | 04 | 18 | 45 |

Where,

L:Lectures

T:Tutorials

P:Practical

MODES OF IN-SEMESTER ASSESSMENT:

40 Marks

- One Internal Examination-

20 Marks

- Others-

20 Marks

- Web Page design in any platform
- Project Report Submission with database
- Presentation on project work
- Network configuration

COURSE OUTCOMES: (CO)

After completing this course, the learners will be able to

CO1. Develop web page

CO2. Work in e-commerce websites

CO3. Configure LAN setup in laboratories

CO4. Track unwanted data bleaching over the internet

SUGGESTED READINGS:

1. Tenanbaum A.S., "Computer Networks", Pearson Education Asia, 4th Ed., 2011.
2. Behrouz A. F, "Data Communication and Networking", TataMcGraw Hill, 6th edition,2014
3. Hahn, H, "The Internet Complete Reference", Mcgraw-Hill Osborne Media,2nd Edition,2002
4. 2. Roy U.K,"Web Technologies", Oxford University Press,1st edition, 2010.

(This syllabus is prepared by the Department of Computer Science, DHSK College)