

Government PG College, Ambala Cantt

Course File(Session 2023-24) Even Sem

Name of Professor: Dimple Rani

Class: B.Com(CAV)/4th Semester

Subject code and Name: BC(Voc)/ ADVANCED COMPUTER APPLICATIONS

SYLLABUS

Maximum Marks: 80

Internal: 20

Time: 3 hours

Note: Examiner will set nine questions in all. Question No. 1, comprising five short type questions carrying four (4) marks each, is compulsory. It covers the entire syllabus. Answers to each question should not more than one page. Candidate is required to attempt four questions from the remaining eight questions, each carrying 15 marks.

UNIT – I

Networking: fundamentals, LAN/MAN/WAN, Network Topologies, Transmission media, ISDN, B-ISDN protocols- TCP/IP, OSI, ATM, internet services; hardware and software requirements for internet.

UNIT –II

Information technology applications in business, E-business, net banking; online purchasing and selling. Online banking, electronic payment systems- an overview.

UNIT – III

E-governance-concept and example, Digitalization of services – income tax, digital lockers, etc. E-disha etc., linking AADHAR to service - issues and impact.

UNIT – IV

Social and ethical aspects of IT. Cyber Laws – IT Act 2000, impact of IT on other laws concerning business; cyber security – threats, anti-virus software, firewalls, etc.

References:

- Forouzan, Data Communication & Networking, TMH.

- A.S., Tanenbaum, Computer Networks, 3/e Peterson Education.
- Prabhu, E-Governance, Prentice Hall of India.
- Pavan Duggal, Cyber Law, Universal Law Publishing.

COURSE OBJECTIVES

The course objectives outlined are as follows:

- Develop a comprehensive understanding of networking fundamentals, including LAN/MAN/WAN distinctions, network topologies, transmission media, and protocols such as TCP/IP, OSI, and ATM.
- Evaluate hardware and software requirements for internet connectivity, and demonstrate proficiency in setting up and maintaining network infrastructure.
- Acquire practical skills in utilizing information technology tools for business applications, including e-business, net banking, and online purchasing/selling.
- Understand the concepts of digitalization of services and e-governance, with a focus on examples such as income tax filing, digital lockers, and e-disha.
- Evaluate the benefits and challenges of linking Aadhaar to services, considering issues of privacy, security, and service accessibility.
- Identify common cyber threats and vulnerabilities, and implement appropriate cyber security measures such as anti-virus software and firewalls to mitigate risks.

COURSE OUTCOMES:

After the successful completion of the course, students will be able to:

- Develop a comprehensive understanding of networking fundamentals and their applications in business and society.
- Demonstrate proficiency in utilizing information technology tools for business operations and online transactions.
- Analyze the social, ethical, and legal implications of information technology in various contexts.
- Apply cyber security measures to protect against cyber threats and ensure data security.

- Evaluate the impact of information technology on businesses and society, including its role in digitalization and e-governance initiatives.

Lesson Plan

Week No	Scheduled Dates	Topics to be covered
1	1-6 January	Networking: fundamentals, LAN/MAN/WAN,
2	8-13 January	Network Topologies, Transmission media,
3	15-20 January	ISDN, B-ISDN protocols, TCP/IP
4	22-27 January	OSI, ATM, internet services; hardware and software requirements for internet
5	29-3 February	Information technology application in business, E-business,
6	5-10 February	net banking; online purchasing and selling.
7	12-17 February	Online banking, electronic payment systems- an overview
8	19-24 February	E-governance-concept and example, Digitalization of services – income tax
9	26-2 March	Digitalization of services -digital lockers, etc. E-disha etc.,
10	4-9 March	Linking AADHAR to service - issues and impact.
11	11-16 March	Social and ethical aspects of IT.
12	18-23 March	Cyber Laws – IT Act 2000, impact of IT on other laws concerning business
13	1-6 April	cyber security – threats,
14	8-13 April	anti-virus software, firewalls, etc.
15	15-20 April	Final Test, Assignments and REVISION of Contents
16	22-27 April	Previous Year Question Papers Discussion