



BHAVAN'S VIVEKANANDA COLLEGE
OF SCIENCE, HUMANITIES AND COMMERCE
(Accredited with 'A' Grade by NAAC)
Autonomous College – Affiliated to Osmania University
Department of Computer Science

COURSE NAME: Information Technologies (GE)
(w.e.f 2022-23)

PPW: 4

NO. OF CREDITS:4

COURSE OBJECTIVE: To enrich student's knowledge in the field of emerging technologies which play a major role in the mankind process.

UNIT-WISE COURSE OBJECTIVES:

COB1: To understand the basics of communications in computers

COB2: To introduce various communication techniques

COB3: To understand the major aspects in information security

COB4: To understand the risk issues and cyber laws

UNIT – I:

Computer Networks: Introduction, Connection Media, Data Transmission Mode, Data Multiplexing, Data Switching, Network Topologies, Types of Networks, Networking Devices, OSI Model. The Internet: Internet Services, Types of Internet Connections, Internet Security.

UNIT – II:

Introduction to Emerging Computer Technologies: Distributed Networking, Peer-to-peer Computing, Grid Computing, Cloud Computing, Utility Computing, On-demand Computing, Wireless Network, Bluetooth, Artificial Intelligence.

UNIT – III:

Email, Functions of Email, Browser, Web Browser, Internet Service Providers. Introduction to Information Security – Need for Information Security, Threats to Information Systems, Information Assurance, Cyber Security.

UNIT – IV:

Introduction to Application Security and Counter Measures – Introduction to Application Security, Data Security Considerations, Security Technologies, Security Threats, Security Threats to ECommerce, E-Cash and Electronic Payment System.

hrali
CHAIRPERSON
BOS in Computer Science
Bhavan's Vivekananda College
Sainikpuri

Dr. N. KISHAN
Professor & Head
Department of Mathematics
OSMANIA UNIVERSITY
HYDERABAD-500 007. T.S.

PRESCRIBED BOOK:

1. **Introduction to Information Security and Cyber Laws** , Dr. Surya Prakash T, Ritendra G, Praveen Kumar S, Dreamtech Publication, Simplified Chinese Edition, 2014.

COURSE OUTCOMES:

At the end of the course students will be able to:


CO1: Understand the basics of computer communications.

CO2: Understand the communication technologies.

CO3: Get an idea on major aspects in information security.

CO4: Understand the issues and cyber laws.

hali
CHAIRPERSON
BOS in Computer Science
Bhavan's Vivekananda College
Sainikpuri


Dr. N. KISHAN
Professor & Head
Department of Mathematics
OSMANIA UNIVERSITY
HYDERABAD-500 007. T.S.