Sri Sathya Sai College for Women, Bhopal

(An Autonomous College affiliated to Barkatullah University, Bhopal)

(NAAC Accredited 'A' Grade)

SYLLABUS
SESSION: 2023-24
PROGRAM: Degree

YEAR: III Year

CLASS: B.Sc./B.A./B.C.A./B.Com.

COURSE TYPE: Ability Enhancement Compulsory Course[F.C. II – B]

COURSE TITLE: Digital Awareness - Cyber Security

Sri Sathya Sai College for Women, Bhopal
(An Autonomous College Affiliated to Barkatullah University Bhopal)
Department of Higher Education, Govt. of M.P.
Under Graduate Syllabus (Annual Pattern)
As recommended by Central Board of Studies and approved by the Governor of M. P.
wef 2023-2024
(Session 2023-24)
(NEP-2020)

Class	U.G.
Year	III Year
Subject	Foundation Course
Course Title	Digital Awareness - Cyber Security
Course Type	Ability Enhancement Compulsory Course
Credit Value	2
Max. Mark	50

Course Outcome: On successful completion of this course , the students will be able to:

- Make optimum use of web browsers, search engines and Chatbots.
- Creating e-mail account, sending, receiving and managing emails.
- Describe reporting procedure of phishing emails.
- Identify email phishing attack and preventive measures.
- Configure security settings in Mobile Wallets and UPIs.
- Practice safe, legal and ethical means of using Information Technology.
- Practice and use the various online financial and government services of day-to-day use.
- Understand the basic concepts related to E-Commerce and digital payments.
- Discuss cyber security aspects, RBI guidelines and preventive measures against digital payment frauds.
- Explore and learn the online available courses of her interest.
- Use the Digilocker and Academic Bank of Credit.
- Describe the concept of Cyber security and issues and challenges associated with it.
- Explain the process of reporting cyber crime at Cyber crime Police Station/ at online platform.
- Appreciate various privacy and security concerns on online Social media.
- Guide through the reporting procedure of inappropriate content.
- Perform privacy and security settings for popular Social media platforms.

Particular

Unit-I	Overview of Computer and Web-technology, Architecture of cyberspace, World wide web, Advent of internet, Internet infrastructure for data transfer and governance, Internet society. **Use of Internet:** Web browsers, search engines and Chatbots. Difference between Website & Portal, E-mail: Account opening, sending & receiving e-mails, managing Contacts & Folders.

	Computer Security: Issues & protection, firewall & antivirus, making secure online transactions, Internet safety and digital security, Ethical use of digital resources, Measures of Online Self Protection.
Unit-II	**Digital Payments and E-Commerce:** Internet Banking: National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Immediate Payment Service (IMPS) Digital Financial Tools: Understanding OTP [One Time Password], QR [Quick Response] Code, UPI [Unstructured Supplementary Service Data], Card [Credit / Debit], eWallet, PoS [Point of Sale] **Definition of E-Commerce:** Main components of E-Commerce, Elements of E-Commerce threats, E-Commerce security best practices, Online Bill Payment. Digital payments related common frauds and preventive measures, RBI guidelines and provisions of Payment Settlement Act, 2007.
Unit-III	**e-Governance Service:** Overview of e-Governance Services like Railway Reservation, passport, eHospital; Accessing various e-Governance Services on Mobile Using "UMANG APP". Exploring services and resources of Government of India Portal (http://www.mygov.in/). Digi-Locker: About digilocker, features and benefits of digilocker, Registering, accessing and getting various certificates and mark sheets on digilocker. Academic Bank of Credit (ABC): About ABC, features and benefits of ABC, Registering, accessing and getting and sharing academic credits. Exploring Online Learning resources: Online learning through SWAYAM Central, (https://swayam.gov.in/) and e-pathshala (https://epathshala.nic.in/).
Unit-IV	**Introduction to Cyber security –** Regulation of cyberspace, Concept of cyber security, Issues and challenges of cyber security. Definition of cyber crimes and offences, Cyber crime targeting computers and mobiles. Cyber crime against women and children, Cyber bullying, Financial frauds, Social engineering attacks, Malware and Ransomware attacks, zero day and zero click attacks. Cyber criminals modus-operandi, Reporting of cyber crimes, Remedial and mitigation measures, Legal perspective of cyber crime, IT Act 2000 and its amendments, Organizations dealing with Cyber crime and Cyber security in India, Case studies.
Unit-V	**Social Media Overview and Security –** Introduction to Social Networks, Types of Social media, Social media platforms, Social media monitoring, Hashtag, Viral content, Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies.

Suggestion Books:

- Praveen Kumar Shukla, Surya Prakash Tripathi, Ritendra Goel "Introduction to Information Security and Cyber Laws" Dreamtech Press.
- Vivek Sood, "Cyber law simplified", Tata McGrawHill, Education (India).
- T. Bradley "Essential Computer Security: Everyone's Guide to Email, Internet, and Wireless Security".

- Cyber Crime Impact in the New Millennium, by R. C Mishra , Author Press. Edition 2010.
- Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
- Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform. (Pearson , 13th November, 2001)
- Electronic Commerce by Elias M. Awad, Prentice Hall of India Pvt Ltd.
- Cyber Laws: Intellectual Property & E-Commerce Security by Kumar K, Dominant Publishers.
- Network Security Bible, Eric Cole, Ronald Krutz, James W. Conley, 2nd Edition, Wiley India Pvt. Ltd.
- Fundamentals of Network Security by E. Maiwald, McGraw Hill

Reference Books:

- M. Stamp, "Information Security: Principles and Practice", Wiley.
- David J. Loundy, "Computer Crime, Information Warfare, And Economic Espionage", Carolina Academic Press.

Suggested equivalent online courses:

- http://egyankosh.ac.in//handle/123456789/9489
- https://workspace.google.com/intl/en_in/training/
- https://www.classcentral.com/course/openlearn-science-maths-technology-preparing-your-96104
- https://www.udemy.com/course/free-computer-literacy-101-course/
- https://www.mygov.in/
- https://epathshala.nic.in/
- https://www.digilocker.gov.in/
- https://www.abc.gov.in/
- https://swayam.gov.in/

Scheme of Marks:

Maximum Marks: 50		
Term End Exam: 50 marks		
External Assessment: University Exam Section Time:01.00 Hour	50 Objective type questions	50