# Government PG College, Ambala Cantt

Course File: 2025-26 Odd Semester

Name of Professor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class: BCA – Semester

Subject: Cyber Security and E-Governance

## COURSE OBJECTIVES

1. To make students understand WWW, E-Governance, and basics of e-commerce.
2. To introduce digital financial tools and applications.
3. To provide awareness on cyber security, issues, challenges, and laws related to cybercrimes.
4. To explore Future Skills including IoT, Big Data Analytics, Cloud Computing, AI, Blockchain, etc.
5. To equip students with practical skills in using digital tools, e-governance services, and cyber safety measures.

## COURSE OUTCOMES (COs)

1. Students will be able to identify and use e-governance services and basics of e-commerce.
2. Students will use digital financial tools like UPI, eWallet, AEPS, NEFT, RTGS, and IMPS.
3. Students will understand types of cybercrimes, modus operandi of cybercriminals, and preventive measures.
4. Students will acquire knowledge about IT Act 2000, cyber laws, and organizations dealing with cybercrime.
5. Students will explore and analyze future technologies including IoT, AI, Blockchain, VR/AR, and Robotics.

## LESSON PLAN

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| Sr. No | Topics | No. of Days | To be Completed up to | Activities/Assessment |
| 1 | WWW and E-Governance: Website Address and URL, IP Address, ISP, Modes of Internet Connection, Identifying and uses of IP/MAC/IMEI, Downloading/Printing Web Pages, Blogs, Basics of E-commerce, Netiquettes, Overview of e-Governance Services (Railway Reservation, Passport, eHospital, ORS, Mobile Services) | 5 | 20 Aug 2025 | Class Test – 1 |
| 2 | Digital Financial Tools and Applications: OTP, QR Code, UPI, AEPS, USSD, eWallet, PoS, Internet Banking, NEFT, RTGS, IMPS, Online Bill Payment | 5 | 05 Sept 2025 | Assignment – 1 |
| 3 | Cyber Security: Definition, Architecture of Cyberspace, Issues & Challenges, Classification of Cybercrimes (against individuals, women, children, financial frauds, ransomware, phishing, etc.), Cybercriminals modus-operandi, Reporting of cybercrimes, Legal perspective (IT Act 2000), Cyber laws, Cybercrime in India | 7 | 25 Sept 2025 | Student Presentation |
| 4 | Overview of Future Skills: IoT, Big Data Analytics, Cloud Computing, Virtual Reality, Artificial Intelligence, Social & Mobile, Blockchain Technology, 3D Printing, Additive Manufacturing, Robotics Process Automation | 7 | 15 Oct 2025 | Class Test – 2 |
| 5 | Practical Work: E-Governance Services, Writing Blogs, Using Digital Financial Tools, Reporting Cybercrimes, Reporting Phishing Emails | 25 | 10 Nov 2025 | Lab Assignment – 2, Viva |