

## Lecture Plan - Advanced IT Skills (B23-SEC-301)

| S. No. | Lecture No. | Topic                                  | Subtopics                                     |
|--------|-------------|----------------------------------------|-----------------------------------------------|
| 1      | L1          | Website Address & URL                  | Concept of URL, Domain Name, Examples         |
| 2      | L2          | Introduction to IP Address             | IPv4 & IPv6, Role of ISP                      |
| 3      | L3          | Internet Protocol & ISP                | ISP services, broadband, USB tethering        |
| 4      | L4          | Modes of Connecting Internet           | Hotspot, Wi-Fi, LAN Cable                     |
| 5      | L5          | Identifying IP/MAC/IMEI                | Practical identification on devices           |
| 6      | L6          | Downloading & Printing Web Pages       | Methods, Tools                                |
| 7      | L7          | Introduction to Blogs & E-Commerce     | Basics, Applications                          |
| 8      | L8          | Netiquettes & Overview of e-Governance | Rules, Importance                             |
| 9      | L9          | e-Governance Services                  | Railway, Passport, eHospital, Mobile Services |
| 10     | L10         | Digital Financial Tools – Overview     | Need & Importance                             |
| 11     | L11         | OTP & QR Code                          | Working, Applications                         |
| 12     | L12         | UPI & AEPS                             | Aadhaar Enabled Payment System                |
| 13     | L13         | USSD & eWallet                         | Features & Uses                               |
| 14     | L14         | PoS Machines                           | Working, Applications                         |
| 15     | L15         | Internet Banking & NEFT                | Concepts & Process                            |
| 16     | L16         | RTGS & IMPS                            | Working, Use cases                            |
| 17     | L17         | Online Bill Payment                    | Utilities, Examples                           |
| 18     | L18         | Cyber Security – Basics                | Definition, Scope                             |
| 19     | L19         | Cyberspace & Architecture              | Regulation, Concepts                          |
| 20     | L20         | Issues & Challenges in Cyber Security  | Threats overview                              |
| 21     | L21         | Classification of Cybercrimes          | Types, Categories                             |
| 22     | L22         | Cybercrimes Targeting Devices          | Mobiles, Computers                            |
| 23     | L23         | Cybercrime Against Women & Children    | Issues, Protection                            |
| 24     | L24         | Financial Frauds & Social Engineering  | Phishing, Scams                               |
| 25     | L25         | Malware & Ransomware Attacks           | Types, Case Studies                           |
| 26     | L26         | Zero-Day & Zero-Click Attacks          | Explanation & Examples                        |
| 27     | L27         | Reporting & Mitigation                 | Organizations, Guidelines                     |
| 28     | L28         | Legal Perspective                      | IT Act 2000, Amendments                       |
| 29     | L29         | Organizations in Cyber Security        | Indian & Global Bodies                        |
| 30     | L30         | Introduction to Future Skills          | Concept, Importance                           |
| 31     | L31         | Internet of Things (IoT)               | Applications, Use Cases                       |
| 32     | L32         | Big Data Analytics                     | Concept, Real-world uses                      |
| 33     | L33         | Cloud Computing                        | Features, Models                              |
| 34     | L34         | Artificial Intelligence, Blockchain    | Concepts, Applications                        |