# ▨ SESSION 14 & 15 – MCQs

## IT Act • LDAP / Active Directory • Blockchain

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## ◇ EASY (Q1–Q10)

**Q1.** The Information Technology Act, 2000 in India primarily deals with:
A. Network routing
B. Cyber laws and electronic transactions
C. Encryption algorithms
D. Operating systems

**Q2.** Which year was the IT Act enacted in India?
A. 1995
B. 1998
C. 2000
D. 2005

**Q3.** Which section of the IT Act addresses unauthorized access and damage to computer systems?
A. Section 43
B. Section 65
C. Section 66F
D. Section 79

**Q4.** LDAP stands for:
A. Lightweight Directory Access Protocol
B. Local Directory Authentication Process
C. Logical Data Access Protocol
D. Linked Data Authorization Protocol

**Q5.** Active Directory is primarily used for:
A. Data encryption
B. Centralized authentication and authorization
C. Web hosting
D. Blockchain mining

**Q6.** Which protocol does Active Directory use for authentication by default?
A. RADIUS
B. Kerberos
C. OAuth
D. OpenID

**Q7.** Blockchain is BEST described as a:
A. Centralized database
B. Distributed immutable ledger
C. Relational DBMS
D. File system

**Q8.** Which cryptographic technique ensures integrity in blockchain?
A. Symmetric encryption
B. Hashing
C. Encoding
D. Compression

**Q9.** Which authority issues Aadhaar-related cyber guidelines under IT governance?
A. UIDAI
B. CERT-In
C. RBI
D. TRAI

**Q10.** Which blockchain component links blocks together securely?
A. Nonce
B. Merkle tree
C. Previous block hash
D. Timestamp

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# ◇ MEDIUM (Q11–Q25)

**Q11.** Which IT Act amendment introduced stricter cybercrime provisions?
A. 2002
B. 2004
C. 2008
D. 2011

**Q12.** Which IT Act section deals with identity theft?
A. Section 43
B. Section 65
C. Section 66C
D. Section 67

**Q13.** Which LDAP component defines the hierarchical structure of directory entries?
A. Schema
B. Attribute
C. Distinguished Name (DN)
D. Directory Information Tree (DIT)

**Q14.** Which Active Directory object is used to apply security policies?
A. Domain
B. Forest
C. Organizational Unit (OU)
D. Global Catalog

**Q15.** Which LDAP authentication method is MOST secure?
A. Anonymous bind
B. Simple bind
C. SASL bind with TLS
D. Plain bind

**Q16.** Which Active Directory role stores a writable copy of the directory database?
A. Global Catalog
B. Domain Controller
C. DNS Server
D. Client machine

**Q17.** Which blockchain feature prevents retroactive data modification?
A. Decentralization
B. Transparency
C. Immutability
D. Scalability

**Q18.** Which consensus algorithm is used by Bitcoin?
A. Proof of Stake
B. Proof of Authority
C. Proof of Work
D. PBFT

**Q19.** Which IT Act concept provides limited liability protection to intermediaries?
A. Cyber tribunal
B. Safe harbour
C. Digital signature
D. Adjudication

**Q20.** Which AD attack exploits excessive user privileges?
A. Phishing
B. Privilege escalation
C. Replay attack
D. DoS

**Q21.** Which blockchain type is MOST suitable for enterprise use?
A. Public blockchain
B. Private blockchain

C. Permissionless blockchain
D. Anonymous blockchain

**Q22.** Which IT Act section deals with cyber terrorism?
A. Section 66A
B. Section 66C
C. Section 66F
D. Section 67B

**Q23.** Which AD protocol enables directory queries?
A. Kerberos
B. LDAP
C. NTLM
D. SMB

**Q24.** Which blockchain component efficiently verifies large numbers of transactions?
A. Nonce
B. Block header
C. Merkle tree
D. Consensus node

**Q25.** Which security risk is COMMON to both AD and blockchain private key systems?
A. Data replication
B. Key compromise
C. Network latency
D. Compression failure

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## ◇ HARD (Q26–Q40)

**Q26.** Which IT Act limitation MOST impacts modern cloud-based cybercrime investigations?
A. Weak encryption definitions
B. Jurisdictional challenges
C. Lack of hashing standards
D. Absence of PKI

**Q27.** Which AD misconfiguration MOST enables lateral movement attacks?
A. Strong password policies
B. Flat domain structure
C. MFA enforcement
D. Auditing enabled

**Q28.** Which blockchain attack occurs when a single entity controls majority mining power?
A. Sybil attack
B. Eclipse attack

C. 51% attack
D. Replay attack

**Q29.** Which LDAP security control prevents unauthorized directory access?
A. Indexing
B. Access Control Lists (ACLs)
C. Replication
D. Global Catalog

**Q30.** Which IT Act provision MOST directly supports e-Governance?
A. Section 43
B. Section 4
C. Section 66F
D. Section 79

**Q31.** Which AD security failure would have the WIDEST organizational impact?
A. Single user compromise
B. OU deletion
C. Domain Admin credential compromise
D. Password expiry

**Q32.** Which blockchain property MOST complicates data privacy compliance (e.g., GDPR)?
A. Transparency
B. Decentralization
C. Immutability
D. Scalability

**Q33.** Which LDAP attack involves capturing credentials over plaintext channels?
A. Replay attack
B. LDAP sniffing
C. Dictionary attack
D. Side-channel attack

**Q34.** Which IT Act section covers protection of personal data and privacy (post-amendment interpretation)?
A. Section 43A
B. Section 66
C. Section 67
D. Section 79

**Q35.** Which blockchain design choice MOST improves auditability?
A. Private transactions
B. Immutable public ledger
C. Off-chain storage
D. Encryption only

**Q36.** Which AD defense MOST reduces privilege escalation risk?
A. Flat OU structure
B. Least privilege and tiered admin model
C. Password reuse
D. Anonymous binds

**Q37.** Which blockchain component ensures consensus participants agree on transaction order?
A. Hash function
B. Digital signature
C. Consensus algorithm
D. Wallet

**Q38.** Which IT Act challenge arises from rapid technological evolution?
A. Over-enforcement
B. Technology-neutral drafting limitations
C. Excessive penalties
D. Too many amendments

**Q39.** Which LDAP/AD practice MOST aligns with Zero Trust principles?
A. Trusting internal network
B. Continuous authentication and authorization
C. Static ACLs only
D. Anonymous binds

**Q40.** Which statement BEST summarizes IT Act, AD, and Blockchain together?
A. All replace traditional security models
B. Legal, identity, and distributed trust pillars of cyber security
C. Only blockchain ensures security
D. IT Act is purely technical