

Information about the exam:

Here is some information about the expected answers to the exam questions and/or where you can find them in the book.

1. Acronyms
  1. 3DES – Triple Data Encryption Standard
  2. DDoS – Distributed Denial of Service
  3. PKI – Public Key Infrastructure
  4. RSA – Rivest–Shamir–Adleman
  5. SNMP – Simple Network Management Protocol
  6. TOR – The Onion Router
2. Security services defined in X.800
  - \* course book, p.12: authentication, access control, data confidentiality, data integrity, nonrepudiation
3. Symmetric vs. asymmetric cryptography
  - \* course book, p.29–30, 74–76
4. Link encryption vs. end-to-end encryption
  - \* course book, p.51–52
5. MAC
  - \* course book, p.61–62
6. Digital signature
  - \* course book, p.85
7. Environmental shortcomings of Kerberos v4
  - \* course book, p.108
8. Services of PGP
  - \* course book, p.134: digital signature, message encryption, compression, email compatibility, segmentation
9. IPsec scenario
  - \* course book, p.180
10. Services of IPsec
  - \* course book, p.183: access control, connectionless integrity, data origin authentication, rejection of replayed packets, confidentiality, limited traffic flow confidentiality
11. Web security threats
  - \* course book, p.224
12. Approaches to Web security
  - \* course book, p.225: network level (ex. IPsec), transport level (ex. TLS), application level (ex. S/MIME)
13. Classes of intruders
  - \* course book, p.301: masquerader, misfeasor, clandestine user
14. Intrusion detection
  - \* course book, p.305: statistical anomaly detection with threshold detection and profile based detection, rule-based detection with anomaly detection and penetration identification

15. Malicious software
  - \* course book, p.334: definitions
16. Types of viruses
  - \* course book, p.339: parasitic, memory-resident, boot sector, stealth, polymorphic, metamorphic
17. Antivirus software
  - \* course book, p.344-345
18. Firewalls
  - \* course book, p.358
19. Packet-filtering router
  - \* If the first fragment is missing, reassembly will be impossible and the packet is discarded.