

AUSD561: INTRODUCTION TO INFORMATION SECURITY
Model Question Paper

Time: 3 hours

Total Marks: 80

Section A

Answer all questions in one or two sentences

1. Name the types of security attacks?
2. Define cryptography.
3. Name any three security services.
4. Define firewall?
5. Brief about gateway.
6. Is DoS a passive or active attack?
7. Define the term virus.
8. How is Trojan Horse different from Worms?
9. Name the two encryption methods.
10. How is Snooping different from Masquerade?

10 x 1 = 10 marks

Section B

Answer any EIGHT questions, not exceeding a paragraph of 50 words.

11. Explain about symmetric encryption.
12. Define trusted systems? Explain.
13. Write a note on Active Attack?
14. Write a note on digital signatures.
15. Brief on the aim of Consumer Protection Act?
16. Differentiate between block cipher & stream cipher?
17. Discuss packet filters.
18. Define the term hacking & types of Hackers?
19. Write a note on IPv6.
20. Does firewall have limitation? Explain.
21. Draw the operational model of Network Security?
22. Write a short note on email security?

8 x 2 = 16 marks

Section C

Answer any SIX questions, in a page of 100 words.

23. Write notes on Substitution Ciphers with examples.
24. Explain about the architecture of firewall.
25. Explain about The law of convergence.
26. Explain MIME.
27. Explain Security Attacks & Types of attacks in detail.
28. State Indian Copyright Act.
29. Explain the methodology of PGP.
30. Discuss ESP protocol in detail.
31. Using the Caesar cipher encrypt and decrypt the following message:
"I want to see your college"

6 x 4 = 24 marks

Section D

Answer any TWO questions, not exceeding four pages.

32. Explain the DES algorithm:
 - a) Subkey Generation
 - b) Rounds 1 to 16
 - c) Triple DES
33. Draw the packet diagram of authentication header of IPSec and explain the strengths and benefits of IPSec.
34. Describe the characteristics & different types of firewall.
35. Explain in detail.
 - (a) Information Technology Act 2000/2008.
 - (b) Cyber Crime

2 x 15 = 30 marks