

1. What is computer? Explain some characteristics of computer.
2. What do you mean by generation of computer? Explain different generations of computer with their main characteristics.
3. Explain applications of computer.
4. What do you mean by analog, digital and hybrid computer? What are key differences between these?
5. How is computer classified based on its size? Explain with examples.
6. Explain human and source data entry devices with examples.
7. Draw and explain the block diagram of computer.
8. Explain instruction format, instruction set and instruction cycle in brief.
9. Explain RISC and CISC architecture with examples.
10. Explain pyramid of memory hierarchy.
11. Explain different primary and secondary memory used in computer.
12. Describe about sequential and random access memory with examples.
13. Explain the working of I/O system.
14. Explain about different types of software. Why do we need system software?
15. Explain different types of operating system.
16. Explain different function of operating system.
17. What is deadlock? What are some measures to prevent it?
18. Explain in brief about CPU scheduling.
19. What do you mean by compute network? Explain in brief about OSI reference model.
20. Explain about internet, intranet, and extranet.
21. Describe different network topologies with advantages and disadvantages.
22. Explain some application of computer network.
23. Explain different types of data transmission media.
24. Explain different transmission modes.
25. Explain different types of switching.
26. What is IoT? Explain its importance in smart city.
27. What do you mean by cloud computing? Explain types of cloud computing.
28. What is database? Differentiate between file oriented approach and database approach.
29. Who is DBA? Explain roles of DBA.
30. What do you mean by schema and instances? Explain different data models.
31. Explain about different database system architecture.
32. What is data warehouse? Why do we need data warehouse?
33. Explain about big data.
34. What is the main difference between security threat and security attacks? Explain virus, worm, and Trojan horse.
35. Explain different security services.
36. What is firewall? Explain types of firewall.
37. Why do we need firewall? Discuss your answer.
38. What do you mean by cryptography? Explain about digital signature.

39. Explain security awareness. How can we formulate better security policy?
40. What is Network Device? Describe the features of repeater, hub, switch, bridge, router, and gateway in brief.