

12. (a) Illustrate the principles of designing IP over frame relay and ISDN design issues, briefly.

Or

- (b) Write short notes on :
- (i) Categorising IP routing protocol.
 - (ii) WAN design parameters.

13. (a) Perform encryption and decryption using the RSA algorithm for the following :

- (i) $p = 11, q = 13, e = 11, M = 8$
- (ii) $p = 17, q = 31, e = 7, M = 13$.

Or

- (b) Illustrate the SDES key generation and encryption process.

14. (a) What are the PGP cryptographic functions, algorithms and their description?

Or

- (b) What are the sequence of events in a secure electronic transaction?

15. (a) Illustrate SNMP configuration and the various components and their roles, with necessary diagrams.

Or

- (b) (i) What is a performance indicator? What are the issues in selection and use of appropriate indicators? (8)
- (ii) Define availability, response time, throughput and utilisation. (8)