

**October 2018**

Time – Three hours  
(Maximum Marks: 75)

*[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.  
Answer any FOUR questions from the remaining in each PART – A  
and PART – B*

*(2) Answer division (a) or division (b) of each question in PART – C.*

*(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and  
10 marks in PART – C.]*

PART – A

1. Define topology.
2. What is LOS?
3. What is MAC?
4. What is message switching?
5. Define subnetting.
6. Define cryptography.
7. What do you mean by E-Mail security?
8. Mention the types of honey pots based on design criteria.

PART – B

9. Discuss about point to point and multipoint connections.
10. Explain the functions of gateways.
11. Draw the FDDI frame format.
12. Explain connection oriented and connection less service.
13. Write short notes on Eaves dropping.
14. Write short notes on digest function.
15. Define application gateway.
16. Write a short note on DNS.

PART - C

17. (a) (i) Define data flow. Explain the different types of data flow methods.  
(ii) Explain client server and peer to peer networks.

(Or)

- (b) Briefly explain about the features and concepts of network devices.

18. (a) Explain in detail about OSI reference model with its connectivity diagram. State the functions of all layers.

(Or)

- (b) (i) Explain the concept and PDU format of CSMA/CD.  
(ii) Explain in detail about the concepts and services of ISDN.

19. (a) (i) Explain the functions of transport layer protocol with a neat diagram.

- (ii) Explain: (1)ARP (2)RARP

(Or)

- (b) (i) Explain dotted decimal notation with an example.  
(ii) Explain the following application layer protocols:  
(1)SMTP (2)HTTP.

20. (a) (i) What is network security? Explain the principles of security.  
(ii) Draw the IP security protocol structure and explain its architecture.

(Or)

- (b) Explain DES algorithm in detail.

21. (a) (i) What is a fire wall? Explain any two types of firewall.  
(ii) Explain how intruders are classified.

(Or)

- (b) Write shorts note on :(1)Transmission security (2)Authentication  
(3)WLAN detection.

-----