

**April 2019**

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 intranet and extranet.
2. What is VSAT?
3. What is MAC?
4. Define socket.
5. What is VLSM technique?
6. Define cryptography.
7. What do you mean by E-Mail security?
8. Mention the limitations of firewall.

**PART – B**

9. Discuss about the different types of data flow.
10. Give a brief note on the features and concepts of switches.
11. Write short notes about the types of Ethernet.
12. Draw a diagram to compare OSI model and TCP/IP model.
13. Write short notes on how to detect WLAN.
14. Give a brief note about the different types of attacks.
15. Define application gateway.
16. Describe about sub-netting.

[Turn over.....

PART – C

17. (a) (i) What are the components of DCS? Explain DCS with a neat diagram.  
(ii) Explain client server and peer to peer networks.  
(Or)
- (b) Discuss briefly about the different unguided transmission media with neat sketch.
18. (a) (i) Draw the frame format of FDDI and explain.  
(ii) Write short note about the concepts and services of ISDN.  
(Or)
- (b) Briefly explain about OSI reference model with its connectivity diagram. State the functions of all layers.
19. (a) (i) Explain the functions of transport layer protocol with a neat diagram.  
(ii) Explain (1)RARP (2)ARP.  
(Or)
- (b) (i) Explain connection oriented and connectionless services.  
(ii) Explain the following application layer protocols: (1)TELNET  
(2)FTP.
20. (a) (i) Write short notes on digest function.  
(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 briefly about the different historical hacking techniques.  
(Or)
- (b) What is meant by intruder detection? Briefly explain about the different type of intruder detection systems.
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