D 52270 (Pages : 2) Name.....

Reg. No.....

THIRD SEMESTER B.VOC. (PROGRAMME) DEGREE EXAMINATION NOVEMBER 2018

(CUCBCSS—UG)

SDC 3IT 09—BASIC NETWORKING CONCEPTS

Time : Three Hours Maximum : 80 Marks

Section A

Answer **all** *questions.*

1. In ———— topology, every node on the network is connected through a central device.
2. The unused channel between each successive channel are known as ————.
3. The physical layer is concerned with transmission of ———— over physical medium.
4. CRC stands for ————.
5. The number of bit position in which code word differ is called the ————.
6. Which class of IP address provides a maximum of only 254 host addresses per network ID ?
   (a) Class A. (b) Class B.
   (c) Class C. (d) Class D.
7. Protocol which perform address mapping from physical address to logical address.
8. HTTP uses a ———— connection to transfer files.
   (a) TCP. (b) UDP.
   (c) SMTP. (d) None.
9. In asymmetric key cryptography, the private key is kept by :
   (a) Sender. (b) Receiver.
   (c) Sender and receiver. (d) All the connected devices to the network.
10. Name the protocol for email transfer between servers.

(10 × 1 = 10 marks)

Section B

Answer any **eight** *questions.*

11. List five components of data communication.
12. What is meant by attenuation ?
13. Define protocol and protocol stack.
14. How does a single bit error differ from burst error.
15. What is congestion ?

Turn over

16. What do you mean by link address ?
17. What is routing ?
18. Write short note on size of UDP data gram.
19. What is DNS ?
20. What are the three FTP transmission modes ?
21. What do you mean by encryption and decryption ?
22. What is meant by VOIP ?

(8 × 2 = 16 marks)

Section C

Answer any **six** *questions.*

23. Briefly explain circuit switched networks.
24. Compare contrast between analog and digital transmission.
25. Explain sliding window protocol.
26. Write in detail ALOHA and its types.
27. Explain in detail various inter networking devices.
28. Write in detail IP addressing.
29. Draw and explain UDP datagram format.
30. Write in detail digital signature.
31. Write short note on firewalls.

(6 × 4 = 24 marks)

Section D

Answer any **two** *questions.*

32. Explain in detail TCP.

Or

33. Explain in detail :
    (a) Various multiplexing techniques in detail.
    (b) Network Topology.
34. Explain in detail various classification of routing algorithms.

Or

35. Explain in detail :
    (a) File Transfer and Access Management Protocol (FTAM).
    (b) Common Management Information Protocol (CMIP).

(2 × 15 = 30 marks)