C 80101 (Pages : 2) Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2015

(UG–CCSS)

Core Course

Computer Science

CS 6B 17—COMPUTER NETWORKS

(2012 Admissions)

Time : Three Hours Maximum : 30 Weightage

I. Answer *all* questions :

1 Which layer of the OSI reference model is known as network dialog controller ?

2 In SONET network ———— multiplexing is used to multiplex and demultiplux multiple optical fiber channels.

3 A Bluetooth device has ———— layer which is equivalent to the physical layer of the internet model.

4 MIME stands for ————.

5 Identify the class of the address 14.23.120.8 ?

6 The packets in IPV4 layer is called ————.

7 UDP port 111 is reserved for ———— protocol.

8 The ———— algorithm shapes bursty traffic into fixed rate traffic by averaging the data rate.

9 The ———— between two words of the same size is the number of differences between the corresponding bits.

10 Which protocol is responsible for pushing messages in an E-Mail system from the client to the server ?

11 The art of transforming messages to make them secure and immune to attacks is called ————.

12 In a Bluetooth system an interconnected collection of piconets is called ————.

(12 × ¼ = 3 weightage)

II. Answer *all* questions :

13 What is mesh topology ?

14 What is meant by polling ?

Turn over

15 What is meant by data link control ?

16 What is the functionality of repeaters ?

17 What are the different categories of ICMP messages ?

18 What is DNS ?

19 What are the different types of user agents available in the E-Mail system ?

20 What is the functionality of network interface card ?

21 What is Samba server ?

(9 × 1 = 9 weightage)

III. Answer any *five* questions :

22 What is the difference between serial and parallel transmission ?

23 Explain the various categories of networks.

24 Distinguish between Pure Aloha and Slotted Aloha protocols.

25 Explain Distance Vector Routing.

26 Explain the Bluetooth architecture.

27 Explain the Diffie Hellman algorithm for asymmetric key cryptography.

28 Distinguish between SMTP and POP protocols.

(5 × 2 = 10 weightage)

IV. Answer any *two* questions :

29 Explain the functions of various layers in the OSI reference model.

30 What is congestion control in transport layer ? Explain the various categories of Congestion control mechanisms.

31 Explain the various multiplexing techniques.

(2 × 4 = 8 weightage)