Paper code: 13525

1525

B.Sc. (Computer Science) (Part 3)

Examination, 2017

Paper No. 3.1

COMPUTER NETWORKS

Time: Three Hours] [Maximum Marks: 50

Note: Attempt any five questions. All questions carry equal marks.

1. (a) Define Computer Network. What are the applications of using network?

(b) Explain the OSI reference model.

2. (a) Describe the properties of fiber optical cable.

(b) What do you mean by the term "ATM" networks?

3. (a) How is error control performed in data link layer?

(b) Explain the sliding window protocol.

4. (a) What are various ISDN services?

(b) Differentiate LAN, MAN and WAN.

5. (a) Summarize various IEEE standards.

(b) What is the difference between bridge and router?

6. (a) How is routing performed? Describe the term "Broadcast routing".

(b) What do you mean by IP-address? Explain. http://www.mjpruonline.com

7. (a) How does firewall work? What is its importance?

(b) Explain the various protocols supported in the transport layer.

8. (a) Define SMTP and PPP.

(b) How does TCP/IP work? Explain in detail.

9. Explain any five of the following terms:

(a) Token Bus

(b) Switch

(c) Flooding

(d) Arpanet

(e) Repeter

(f) IEEE standard 802.4

(g) Duplex mode of transmission

(h) Gateway

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