



32524/E 240

Reg. No.

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**V Semester B.C.A.3 Degree Examination, Nov./Dec. 2017
(Regular/Repeater)
COMPUTER NETWORKS**

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Answer **all** Sections.
2) Draw **neat** diagrams **wherever** necessary.
3) Write question numbers **correctly**.

SECTION – A

1. Answer **any ten** questions : **(10×2=20)**
- a) What is packet switching ?
 - b) State the properties of radio waves.
 - c) What is subnet ?
 - d) Which different services a datalink layer provides to network layer ?
 - e) What is stop and wait protocol ?
 - f) List the basic assumptions for dynamic channel allocation.
 - g) What is 10Basez ?
 - h) What is adaptive and non-adaptive routing algorithm ?
 - i) What is flooding ?
 - j) List different transport service primitives.
 - k) What is DNS ? Mention any two generic domains.
 - l) What is symmetric release in transport layer ?

SECTION – B

- Answer **any four** questions : **(4×5=20)**
- 2. Explain twisted pair transmission media.
 - 3. Explain in brief applications of computer network.

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4. Describe flag bits with bit stuffing framing method.
5. Differentiate between ALOHA and Pure ALOHA protocols.
6. Explain Leaky bucket algorithm.
7. What is TCP ? Explain TCP header.

SECTION – C

Answer **any four** questions :

(4×10=40)

8. Explain OSI reference model.
 9. A bit stream 10011101 is transmitted using the standard CRC method. The generator polynomial is $x^3 + 1$. Show the actual bit string transmitted. Suppose that the third bit from the left is inverted during transmission. Show that this error is detected at the receiver's end.
 10. Explain IEEE 802.3 frame format.
 11. Explain Link state routing algorithm.
 12. Write short notes on **any two** :
 - i) NSFNET
 - ii) LAN
 - iii) Bluetooth.
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