

B. TECH. (COMPUTER SCIENCE & BUSINESS SYSTEMS) (CBCS - 2018 COURSE)
Computer Science & Business Systems

B.Tech. (CSBS) Sem - VI :SUMMER : 2023

SUBJECT : COMPUTER NETWORK

Day : Monday

Date : 22-05-2023

S-20469-2023

Time : 02:30 PM-05:30 PM

Max. Marks : 60

N.B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of **CALCULATOR** is allowed.
- 4) Draw neat diagram **WHEREVER** necessary.

Q.1 Explain the following concepts in detail with diagram :- (10)
i) Wired LAN
ii) Wireless LAN
iii) Virtual LAN

OR

Q.1 Explain different topologies of network. (10)

Q.2 Explain in detail (10)
i) GO BACK-N ARQ
ii) Selective Repeat ARQ

OR

Q.2 Explain the working of CRC in detail. A Bit stream 10011101 is transmitted (10)
using the standard CRC method. The generator polynomial is $x^3 + 1$.
i) What is the actual bit string transmitted?
ii) Suppose the 3rd bit from the left is inverted during transmission.
How will receiver detect this error?

Q.3 Explain circuit switching and packet switching in detail. (10)

OR

Q.3 Explain in detail different Unicast Routing Protocols. (10)

Q.4 Explain FTP. Can we specify file transfer in a webpage? Explain with the help (10)
of suitable example. Explain any four FTP commands.

OR

Q.4 Explain with diagram:- (10)
i) TELNET
ii) Bluetooth

Q.5 Explain multiplexing in detail. Explain any 2 types of multiplexing in brief (10)
with its application.

OR

Q.5 Explain FHSS and DSSS in detail. (10)

Q.6 Explain about OSI security architecture model with neat diagram. (10)

OR

Q.6 Explain various components of cryptography. (10)

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