S. B. Roll. No...

DIGITAL COMMUNICATION
5th Exam/ECE/2618/Dec'22
(For 2018 Batch Onwards)

Duration: 3Hrs.   **M.Marks:75**

SECTION-A

Q1. Give answer in one line.   **15x1=15**

    a.   How many unique characters can be represented in ASCII code?
    b.   What is phase difference between two signals in BPSK?
    c.   Write the unit of signaling speed or modulation rate.
    d.   Write the full form of ASCII.
    e.   In which transmission the start and stop bits are also transmitted.
    f.   What is the primary advantage of digital communication over analog communication?
    g.   Which type of modem will allow simultaneous transmission in both the directions?
    h.   Define parity.
    i.   Define full duplex transmission.
    j.   Write the full form of OOK
    k.   Define attenuation.
    l.   What is major disadvantage of FSK?
    m. Define bit rate.
    n.   Write the full form of EBCDIC.
    o.   Define CRC.

SECTION-B

Q2. Attempt any six questions.   **6x5=30**

    i.   Write a short note on RS-232 serial interface.
    ii.   Explain ASCII code for data representation.
    iii.   Explain the block diagram of digital communication system.
    iv.   Explain the ECHO SUPPRESSORS and its need.
    v.   What is the difference between7 bit ASCII and EBCDIC code?
    vi.   Explain various error correction techniques.
    vii.   Write characteristics of data transmission circuits.
    viii.   Compare synchronous and asynchronous transmission.

SECTION-C

Q3. Attempt any three questions.   **3x10=30**

    a.   What is need of MODEM? Explain different types of MODEM?
    b.   Explain the working principle of STS and TST switches.
    c.   Explain the comparison of digital communication with analog communication system.
    d.   Explain generation and detection of ASK with block diagram.
    e.   What is QPSK? Compare BPSK with QPSK.