S. B. Roll. No.....

DIGITAL COMMUNICATION
5th Exam/ECE/2618/Nov'24
(For 2018 Batch Onwards)

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

SECTION-A

Q1. Do as directed. **15x1=15**

a. 1 Byte has _____ bits.
b. What is IC 8251 used for?
c. _____ are the set of rules which govern data communication.
d. What is DCE?
e. Define Nyquist theorem.
f. ARQ stands for_____
g. Voice signal type is (ANALOG/DIGITAL).
h. What is RS232?
i. OOK stands for____.
j. What is bit rate?
k. Coherent detection is also called _____detection.
l. Expand BPSK.
m. Baudot code is _____ bit code.
n. Signal Rate is also called_____.
o. What are Redundant Bits?

SECTION-B

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

i. List some advantages of digital communication.
ii. Compare synchronous and asynchronous transmission.
iii. Explain the block diagram of data communication.
iv. Explain ASK generation with waveform.
v. What are Eco Suppressors?
vi. Write a short note on QPSK Modulation.
vii. What is the ASCII Coding?
viii. What is MODEM and why it is needed? Which are its types?

SECTION-C

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

a. Draw and explain the block diagram of Digital Communication Systems.
b. Explain LRC/VRC technique and CRC method for error detection.
c. Explain FSK Modulation and Demodulation in detail.
d. Write short notes on i) EBCDIC code ii) Cross Talk
e. Explain the working principle of STS and TST switches.
f. What is Hamming Code and explain with example how it can detect and correct an error?