SV - 190

Total No. of Pages : 2

Seat No.	

S.E. (C.S.E.) (Part-II) (Semester - III) (Revised) Examination, April - 2018
DATA COMMUNICATIONS (Theory)
Sub. Code : 63527

Day and Date : Friday, 27 - 04 - 2018 **Total Marks : 50**
Time : 02.30 p.m. to 04.30 p.m.

Instructions :
1) **Solve any TWO questions from each Section.**
2) **Figures to the right indicate full marks.**

SECTION - I

Q1) a) With a neat diagram, explain about Simplex, Half-duplex and Full-duplex. **[6]**

b) With neat diagram for transport layer discuss about the any four responsibilities of transport layer in OSI model. **[6]**

Q2) a) Explain Shannon Capacity for Noisy channel.

A telephone line normally has a bandwidth of 3000 Hz (300 to 3300 Hz) assigned for data communications. The signal-to-noise ratio is usually 3162. Find the channel capacity. **[6]**

b) Explain about AMI line coding scheme. Draw diagram for 010010 using AMI scheme. **[6]**

Q3) a) Write about any five advantages and any two disadvantages of optical fiber. **[7]**

b) Explain in brief about any TWO about following: **[6]**

i) Repeaters

ii) Bridges

iii) Switches

P.T.O.

SECTION - II

Q4) a) Explain Parity check code. [7]

b) Difference between noisy channel Protocol and noiseless channel Protocol. [6]

Q5) a) Explain IEEE standard in details. [6]

b) Explain GO BACK N Protocol in detail. [6]

Q6) a) Design the Stop-and-Wait Protocol with ARQ in detail. [7]

b) Explain CSMA/CD Protocol in detail. [6]

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