Roll No ....

EC - 501

B.E. V Semester

Examination, December 2015

Voice and Data Communication

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What is subscriber loop?
   b) Define the channel noise.
   c) List different call progress tones with their frequency and ON/OFF duration.
   d) List and explain the different transmission parameters.

   OR

   What do you understand by cross talk, Explain atleast two types of them.

2. a) What is local loop?
   b) Explain trunk circuit in short.
   c) What are the functions of a telephone set?

   d) What do you mean by common channel signaling system? Explain in detail.

   OR

   Explain the working of automatic exchanges with block diagram.

3. a) What is base band signal?
   b) Explain bit and word interleaving.
   c) Differentiate between TDM and FDM.
   d) Explain the wavelength division multiplexing in detail.

   OR

   Write short notes on codecs and combo chips.

4. a) What is Modem?
   b) What is digital to digital encoding?
   c) Explain DTE-DCE interface.
   d) What do you mean by transmission media? Discuss guided and unguided media.

   OR

   Discuss the topology and explain its types with suitable diagram.

5. a) What is hamming distance?
   b) Discuss about cyclic code.
   c) Explain briefly about redundancy check.
   d) Explain space-time division circuit switching.

   OR

   What do you mean by virtual circuit and datagram packet switching?

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