Reg. No. : | | | | | | | | | | |

Question Paper Code: 52232

M.E. DEGREE EXAMINATION, NOV 2016

Third Semester

Structural Engineering

15PCM302 – TELECOMMUNICATION SWITCHING AND MANAGEMENT

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. The links that run between the switching systems are called as

    (a) Trunks   (b) subscribers lines
    (c) copper cable   (d) All the above

2. Due to load sharing configuration, the effective traffic capacity

    (a) rapidly increases   (b) decreases
    (c) constant   (d) increases

3. In which of the following international signaling system, inband signaling is used

    (a) SS1   (b) SS2   (c) SS3   (d) SS4

4. Number of gray levels in document facsimile system is

    (a) 4   (b) 3   (c) 2   (d) 1

5. The effective value of call completion rate is

    (a) 0.75   (b) 0.65   (c) 0.85   (d) 0.55

PART B - (5 x 3 = 15 Marks)

6. When a link is called as trunk and how the number of trunks can be determined?

7. Differentiate single stage and multi stage networks.

8. Brief the factors which limit the length of the subscriber loop.

9. How the frame size and frame rate chosen for transmission channels?

10. Describe the function of Q-adapters.

PART C - (5 x 16 = 80 Marks)

11. (a) Discuss in detail on various design parameters for 100 line switching systems. (16)

Or

   (b) How the drawback of common control can be eliminated with cross bar switching? Explain in detail with necessary diagrams. (16)

12. (a) Apply the stored program concept to improve the functioning of distributed switching system. (16)

Or

   (b) Compare and contrast the functioning of time division and time multiplexed time switching. (16)

13. (a) Describe in detail about the objectives used to provide an unique number to a subscriber. (16)

Or

   (b) Discuss in detail about common channel signaling and compare it with in channel signaling. (16)

14. (a) Describe in detail about the network and protocol architecture used in ISDN. (16)

Or

   (b) How the information can be transferred in different types of facsimile systems. (16)

15. (a) Describe the solutions to be offered by TMN and explain in detail. (16)

Or

   (b) Explain about Network Traffic Load and Parameters with suitable examples. (16)

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