29180

Name : ....

Reg. No: ....

SEVENTH SEMESTER B.TECH (ENGINEERING) DEGREE EXAMINATION, NOVEMBER 2012

EC 2K 704 – COMPUTER COMMUNICATION AND NETWORKING

Time : Three Hours   ·   **Maximum : 100 Marks**

Answer all questions.

I   (a) Briefly explain the Network bottlenecks.

     (b) What is meant by Synchronous Pay load Envelope.

     (c) What are the functions of an ATM network?

     (d) Describe the term piggy backing with its advantages.

     (e) Explain the functions of physical layer of an ISO-OSI model.

     (f) Explain the SONET frame format.

     (g) State Little's theorem.

     (h) What are the Erlang fixed point equations?

                                          (8 x 5 = 40 Marks)

II (a) Explain the various virtual channels and virtual paths used with ATM.

                           (Or)

     (b) Explain in detail about the IP over ATM.

III (a) Describe the IP over ATM.

                           (Or)

     (b) (i) What is the significance of virtual channel identifier and virtual path identifier in ATM address field?

         (ii) Describe the format of an ATM cell?

IV (a) Discuss the characteristics of communication networks.

                           (Or)

     (b) With neat sketch explain in detail about the FDDI and its functions.

V (a) (i) Describe the operation of the DQDB protocol with the help of figure?

         (ii) Compare the features of Frame relay and X.25?

                           (Or)

     (b) (i) Describe the concept of classless interdomain routing?

         (ii) What are the features of Ethernet?

                                     (4 x 15 = 60 Marks)

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