2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS
ASYNCHRONOUS TRANSFORM MODE
(ELECTRONICS & TELEMATICS

Apr/May 2006

TIME – 3 HOUR
MARK – 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain briefly the functions of layers in OSI model.

(b) Define virtual channel, virtual path and virtual path identifier.   [8+8]

2. What are the different topologies possible for packet network?. Explain briefly each topology with neat diagrams.   [16]

3. What are QoS performance parameters? Explain them briefly.   [16]

4. (a) Compare overhead of AAL 3/4 with that of AAL 5 for a 64 k byte packet.

(b) Discuss the purpose of all the error checking that is carried at the end systems and in the network for an ATM connection that carries cells produced by AAL3/4   [8+8]

5. Explain peak cell rate algorithm?   [16]

6. (a) What are the aims of arbitration strategies used in ATM switching elements?

(b) Compare the performance of different arbitration technologies?   8+8]

7. Explain the following configurations with neat diagrams w.r.t ATM networks?

(a) Star configuration

(b) Multiple star configuration

(c) Ring configuration   [6+5+5]

8. What is the impact of ATM on voice connections and how can one get rid of this?
      [16]