CS/IT-8301

B. E. (Eighth Semester) EXAMINATION, June, 2010 (Common for CS & IT Engg.)

ATM NETWORKS (Elective-III)

Time: Three Hours Maximum Marks: 100 Minimum Pass Marks: 35

Note: Attempt any five questions. All questions carry equal marks.

- 1 (a) Give the layered structure of ATM and compare with ISO-OSI model. 10
- (b) What is the methodology of controlling congestion in ATM networks? Explain clearly. 10
- 2. (a) Distinguish between physical layer transport functions and ATM layer transport functions. 7
- (b) Using diagram explain about ATM layer and ATM adaptation layer. 7
- (c) What is cell terminology and function of each layer of ATM? 6
- 3. (a) List and explain different traffic control parameters in ATM. 8
- (b) What should the main coasiderations for payload size? 8
- (c) What do you mean by cell loss ratio? 4
- 4. (a) List the different functions of AAL layer of ATM. 4
 - (b) List different switch models. 4
 - (c) What is the use of header of a cell? . 4
 - (d) What is ATM data exchange interface? 4
 - (e) What are idle cells? 4
- 5. (a) What does asynchronous mean in the term of ATM A
 - (b) What are the ATM performance parameters?
 - (c) Which ATM transfer capabilities make use of RM cells? 4
 - (el) Explain physical medium characteristics of ATM. 4
 - (e) How does the next hope resolution protocol works ?4
- 6. Explain the following in brief: 5 each
 - (a) Meta signaling
 - (b) ATM address migration
 - (c) Optical switching
 - (d) B-ISDN network topology
- 7. What do you understand by ISDN? Explain in detail ISDN system, its different data rate, architecture, uses and advantages. 20
- 8. Write short notes on the following: 5 each
- (a) Virtual path connection
- (b) ATM standards
- (c) ATM cell transfer function
- (d) Virtual channel and virtual path