



**SE-6849**

**B. E. III (Sem. V) (I.T.) Examination**

**May / June - 2011**

**Computer Networks**

Time : 3 Hours]

[Total Marks : 100

**Instructions :**

(1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य लખवी. Fillup strictly the details of signs on your answer book.		Seat No. :	
Name of the Examination :		<input type="text"/>	
Name of the Subject :		<input type="text"/>	
Subject Code No. : <input type="text" value="6"/> <input type="text" value="8"/> <input type="text" value="4"/> <input type="text" value="9"/>		Section No. (1, 2,.....) : <input type="text" value="Nil"/>	
		Student's Signature	

- (2) Attempt all questions.  
(3) Figure to the extreme right indicates marks.

- 1 (a) Define following terms : 10  
(a) Standards  
(b) Burst error  
(c) Line Discipline  
(d) Crosstalk  
(e) Broadcasting  
(b) Explain pure Aloha system. Derive the equation for the throughput of pure Aloha system. 10
- 2 (a) Discuss various B-ISDN services. 8  
(b) Write short note on : Radio Transmission 7
- OR**
- 2 (a) Explain various 802.3 cabling scheme. 7  
(b) What is FDDI ? Discuss it in detail. 8
- 3 (a) What is peer to peer process ? Explain the concept of port address, logical address and physical address with suitable example. 7  
(b) Explain architecture of ATM. 8

**OR**

<b>3</b>	(a) Discuss various Bit Encoding Technique used at physical layer.	<b>8</b>
	(b) Write short note on : X.25	<b>7</b>
<b>4</b>	(a)I Fill in the blanks.	<b>05</b>
	(1) FDDI is a _____ network.	
	(2) RARP stands for _____.	
	(3) The IP address 10.10.1.1 is an IP of class _____.	
	(4) UDP is a _____ protocol.	
	(5) TTL stands for _____.	
	II State true or false with proper justification.	<b>05</b>
	(1) The PSTN is example of circuit-switched network.	
	(2) UDP is more reliable protocol than TCP.	
	(3) Repeaters function in transport layer.	
	(4) A datagram approach treats each packet independently.	
	(b) Explain domain name system in detail.	<b>08</b>
<b>5</b>	(a)I List and explain all the protocols of network layer and explain any one of them in brief.	<b>09</b>
<b>OR</b>		
	I Explain the difference between static web-documents and dynamic web-documents.	<b>06</b>
	(a)II Explain the optimality principle ? Explain shortest path routing algorithm with example.	<b>03</b>
	(b) Explain IP protocol in detail.	<b>08</b>
<b>6</b>	Answer any three of the following :	<b>15</b>
	(1) Discuss the limitations of the distance vector routing algorithm ?	
	(2) What is the main goal of network layer ? Explain services provided by network layer to transport layer.	
	(3) Discuss the problems associated with fragmentation.	
	(4) Explain three-way handshaking of transmission control protocol.	