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Instructions :	(2) Answe (3) Illustr (4) Figure (5) Assum (6) Use of perminant (7) Mobil	estions are comper each next manate your answeres to the right in a suitable data, f Non-programessible. The Phone, Pageres are not permites.	in que s with ndicate if nec nmable	estion in neat e full cessar e Ele	sketch marks y. ctroni her Ele	hes wi s. c Poo	herevoor	Calcul	ator i	is
									ľ	Marks
1. A) Attempt any three	: :									12
a) Define data trai	nsmission rat	e. How it is calcu	ılated'	? List	its unit					4
b) Explain asynch	ronous comn	nunication mode	with su	uitable	e diagra	ım.				4
c) List IP address	classes. Exp	lain any two.								4
d) Define followin	g terms:									4
1) Delay disto	rtion									
2) Attenuation	1									
3) Noise										
4) Error.										
B) Attempt any one:										6
 a) Enlist different detail. 	light sources	used for Fiber O	ptic C	ommı	unicatio	on. De	escribe	e any o	ne in	6
b) With the neat d	iagram expla	nin ESS and BSS	. How	thev	are diff	fer fro	m eac	h othe	r.	6
,			/ /	- j ·		110	5000			
2. Attempt any two:										16
a) Explain LRC and V	/RC for error	r detection.								8

b) Draw and explain the block diagram of fiber optic communication. State two light sources and

c) Describe ATM with respect to switching mode, packet size, ATM cells and ATM layer.

two light detectors.

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3. Attempt any four: a) Explain encoder and decoder. b) Explain the terms scramble and unscramble. c) HowARR works? Explain with neat diagram. d) Explain CRC with example. e) Explain synchronous communication mode with suitable diagram. f) Compare TDM and FDM. 4. A) Attempt any three: a) Define modulation, demodulation, bandwidth and data rate. b) Explain the concept of FHSS. Give its advantages (any two advantages). c) Name the different types of fiber cable losses and explain any two of them. d) Explain the concept of parity check using example. What types of error cannot be detected by this method. B) Attempt any one: a) Explain FTP protocol and state its applications. b) Explain data transmission models with any suitable example. 5. Attempt any two: a) Explain and parallel communication with its two advantages and disadvantages. b) Explain TCP/IP layer architecture with neat sketch. c) Describe Bluetooth architecture with neat sketch. c) Describe Bluetooth architecture with neat sketch. d) Describe Bluetooth architecture with respect to two types: 1) Piconet 2) Scatternet. 8. 6. Attempt any four: a) List any two advantages and disadvantages of fiber optic cable. d) List and describe ethernet properties. c) Draw and explain the neat construction of optical fiber cable. d) Define the following terms: 1) Reflection 2) Refractive index. e) Explain ICMP protocol 4 f) Explain ICMP protocol			Ma	rks			
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f) Explain ICMP protocol		e) Explain the stop and wait mechanism with example.					
1) Explain Telvin protocol.		f)	Explain ICMP protocol.	4			
