TILAK MAHARASHTRA VIDYAPEETH, PUNE

BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)

SPECIALIZATION IN CYBER SECURITY (CS)

EXAMINATION : DECEMBER -2023 SEMESTER - I

Sub: Computer Fundamentals Networking (BCA- 140-18/140-20/BCA-CS-140-20)

Date: 30/12/2023 Total Marks: 60 Time: 10.00 am to 12.30 pm

Instructions:

- 1. All questions are compulsory unless and otherwise stated.
- 2. Bold figures to the right of every question are the maximum marks for that question.
- 3. Candidates are advised to attempt questions in order.
- 4. Answers written illegibly are likely to be marked zero.
- 5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
- 6. Draw neat and labelled diagrams wherever necessary.

Q.1.	Fill in the blanks.	(5	5)
1.	Repeaters works at layer of OSI layer		
	a) Data link layer	b) Session layer	
	c) Application layer	d) Physical layer	
2.	is a mail protocol	a) I hybrodi layor	
2.	a) SMTP	b) FTP	
	c) HTTP	d) TELNET	
3.	Default subnet mask address for Class B IP address is		
٥.	a) 255.255.0.0 b) 255.0.0.0		
	a) 233.233.0.0	0) 233.0.0.0	
	c) 255.255.255.0	d) 255.255.255	
4.	is a pictorial representation of algorithm.		
	a) Sequence Diagram	b) Data flow	
	c) Flowchart	d) block diagram	
5.	topology connects all hosts to a central access point called HUB or Switch		
	a) Ring	b) Star	
	c) Bus	d) Hybrid	
	,	, ,	
Q.2.	State True/False.		5)
1.	Gateways are device that connect two or more networks		
2.	Zero NOR Zero produces Zero.		
3.	Base of the octal number system is 7		
4.	IPv4 is 64 bit address		
5.	RAM is a volatile type of memory		
Q.3.	Answer the following. (Solve an	y 5) (10))
1.	What are Server and Client?		
2.	What is router?		
3.	What is impact and non impact pri	nter?	
4.	What is IP address?		
5.	What is subnetting?		
6.	Convert into Hexadecimal – (1024	$(x)_{10}$	

Q. 4. Answer the following in detail. (Solve any 6) (30)Explain IPv6. 1. 2. Explain network model. 3. Explain NOR and NAND gate. 4. Explain DHCP protocol Explain any 3 pointing devices. 5. Write short note on storage units. 6. 7. Explain star topology, ring topology and tree topology Q. 5. Answer the following in detail. (Solve any 1) **(10)** 1. Explain 7 layers of OSI reference model.

2. Explain different type of scanner.