TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : JANUARY- 2023
SEMESTER – I
Sub: Computer Fundamentals Networking - (140-20/BCA-CS-140-20)

Date : 03/01/2023   **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)**

1. _____ are used to make digital copies of existing paper photos, documents, drawings etc.

   a) Printer   b) Monitor

   c) Scanner   d) joystick

2. Base of Decimal number system is _____

   a) 10   b) 16

   c) 2   d) 8

3. HTTP protocol is used to access _____

   a) FTP Server   b) Website

   c) Email Server   d) TCP/IP

4. IPv6 is _____ bit address

   a) 32   b) 128

   c) 64   d) 1024

5. Repeater is a device works at _____ layer

   a) Physical layer   b) Data link layer

   c) Transport layer   d) Session layer

Q.2. **State True/False.**   **(5)**

1. An Administrator is not required for Client Server networks

2. Hub is a multiport repeater

3. PAN means Private Area Network

4. RAM and ROM are secondary type of memories

5. SMTP is a mail protocol

Q.3. **Answer the following. (Solve any 5)**   **(10)**

1. What is router?

2. List Wireless Standards

3. Define logic gate.

4. What is the Internet? State its uses.

5. What is Wi-Fi network?

6. Convert $(345)_{10} = (?)_{16}$

Q. 4. **Answer the following in detail. (Solve any 6)** (30)

1. Explain working of DHCP server.

2. Explain any 3 topology in detail.

3. Explain NOR and NAND gates in detail.

4. What is an IP address? Explain the classes of it

5. Explain types of scanner in detail.

6. Explain IPv6 in detail.

7. Write short note on Algorithms and flowcharts with example

Q. 5. **Answer the following in detail. (Solve any 1)** (10)

1. Explain types of network in detail.

2. Explain OSI reference model in detail.

_____