Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16 (Autonomous)
End Semester Examination: OCT / NOV 2024
Faculty: Science and Technology

Program: BCA **Code:** BCASc08 **Semester:** V **SET:** A
Program (Specific): BCA (Science) **Course Type:** SEC
Class: TYBCA (Science) **Max. Marks:** 35
Name of the Course: Computer Network
Course Code: 24-BCA-355 **Time:** 2Hr
Paper: -

Instructions to the candidate:

1) *There are 4 sections in the question paper. Write each section on separate page.*
2) *All Sections are compulsory.*
3) *Figures to the right indicate full marks.*
4) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1) Attempt the following (Choose the correct option) 5*1=5

1. The combination of two or more interconnected networks is called
   a) Internetwork b) LAN c)MAN d)WAN
2. Which of the following network is a small, single-site network?
   a) MAN b) LAN c) WAN d) DSL
3. A topology that consists of a number of devices connected by point to point links to a central hub is called
   a) Mesh b) Bus c) Star d) Ring
4. TCP/IP is composed of how many layers?
   a) 5 b) 4 c) 6 d) 7
5. Which layer is not present in the OSI reference model?
   a) Physical Layer b) Application Layer c) Transport layer d) Internet layer

Q2) Answer the following (any 4) 4*1=4

1. Define Computer Network
2. Define WAN
3. Explain Transport Layer
4. Line Coding Concept
5. Define IP address.
6. Describe Digital data

SECTION: B

Q3) Answer the following (any 4) **4*2=8**

1. Describe performance of Network
2. Define Home Appliances
3. Describe wireless Networks
4. Describe Ring Topology
5. Explain Physical Addressing
6. Explain process-to-process Delivery

SECTION: C

Q4) Answer the following (any 4) **4*2=8**

1. Explain User Datagram Protocol(UDP)
2. Describe IPv4 Fragmentation
3. Explain Fixed Size Framing
4. Explain FDM Multiplexing
5. Describe Analog Signals
6. Explain HTTP Transaction

SECTION: D

Q5) Answer the following (any 5) **5*2=10**

1. Explain in details OSI Model with neat diagram
2. Explain IPv 6 Header Format with neat diagram.
3. Differentiate between Baseband and Broadband
4. Explain in details Circuit Switching and packet Switching