PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2023
(Second Semester)

Branch – **NETWORKING AND MOBILE APPLICATIONS**

DATA COMMUNICATION AND NETWORKING

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (5 x 1 = 5)

1. All of the parts in a computer talk to each other by sending _____
    (i) Digital Signals   (ii) Smoothly varying signal waves
    (iii) Analog Signals   (iv) Radio Waves

2. _____ cable consists of two insulated copper wires twisted together.
    (i) Twisted pair   (ii) Optical fiber
    (iii) Coaxial cable   (iv) Microwave

3. Which data communication system within a building, plant, or campus, or between nearby buildings?
    (i) LAN   (ii) WAN
    (iii) MAN   (iv) SAN

4. Which of the following is correct IPv4 address?
    (i) 124.256.3.1   (ii) 01.200.128.123
    (iii) 300.142.64   (iv) 28.64.0.0

5. Security based connection is provided by which layer?
    (i) Network layer   (ii) Application layer
    (iii) Transport layer   (iv) Session layer

SECTION - B (15 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks   (5 x 3 = 15)

6   a. Describe Internet.
                        OR
    b. Bring out the Physical Layer in OSI Model.

7   a. State Multiplexing.
                        OR
    b. Sketch the Shield - Twisted Pair Cable.

8   a. What is framing in Data-Link Control?
                        OR
    b. Examine IEEE standards.

9 a. Explain the IPv4 addresses.

OR

b. What is ICMP?

10 a. Describe the Process-to-Process Delivery.

OR

b. Explain DNS.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks   (5 x 6 = 30)

11 a. Enumerate types of Protocols.

OR

b. Categorize OSI Model.

12 a. Outline the Analog and Digital Signals.

OR

b. Discuss the Un-guided Media with neat examples.

13 a. Highlight Error Correction and Detection.

OR

b. Dissect Point-to-Point Protocol in Data Link Control.

14 a. Point out the Address Mapping.

OR

b. Elaborate the IPv4 vs IPv6.

15 a. Differentiate UDP and TCP.

OR

b. Distinguish WWW and HTTP.

Z-Z-Z   END