

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BVoc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)**

Branch - NETWORKING AND MOBILE APPLICATIONS

NETWORK COMPONENTS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Computer Network is a. Collection of hardware components and computers b. Interconnected by communication channels c. Sharing of resources and information d. All of the Above	K1	CO1
	2	Which of the following is Layer-7? a. Presentation Layer b. Session Layer c. Application Layer d. Transport Layer	K2	CO1
2	3	Which one of the following network devices stores the IP addresses? a. Router b. Switch c. Both a & b d. None of the above	K1	CO2
	4	What is the meaning of Bandwidth in Network? a. Transmission capacity of a communication channels b. Connected Computers in the Network c. Class of IP used in Network d. None of Above	K2	CO2
3	5	Which device is an example of a simplex device? a. Repeater b. Tap c. Keyboard d. Walkie Talkie	K1	CO3
	6	What is the format of IP address? a. 34 bit b. 64 bit c. 16 bit d. 32 bit	K2	CO3
4	7	Which of the following routing protocols is an EGP? a. BGP b. IS-IS c. RIP d. OSPF	K1	CO4
	8	The Open Shortest Path First(OSPF) protocol is an intra-domain routing protocol based on routing. a. distance vector b. link state c. path vector d. non-distance vector	K2	CO4
5	9	Which network is a collection of local-area networks (LANs) or other networks that communicate with one another? a. WAN b. MAN c. satellite d. All of these	K1	CO5
	10	What is the most common topology seen with a Dmvpn? a. Full mesh b. Ring c. Bus d. Hub and spoke	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Illustrate the functionality of Data Link Layer.	K2	C02
	(OR)			
	11.b.	Explain the Layers of the TCP/IP Stack.		
2	12.a.	Analyze Coaxial Cable media.	K4	CO3
	(OR)			
	12.b.	Inspect the use of Firewalls in security.		
3	13.a.	Analyze the features of Ethernet's CSMA/CD.	K4	CO3
	(OR)			
	13.b.	Examine the use of STP Operation.		
4	14.a.	Summarize the routed protocols and routing protocols.	K4	C03
	(OR)			
	14.b.	Analyze the link-state routing protocols.		
5	15.a.	Simply the three categories of wide area network (WAN) connections?	K4	CO5
	(OR)			
	15.b.	Illustrate the use of Digital Subscriber Line.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Analyze the various topologies in network.	K4	CO2
2	17	Examine the Specialized Network Devices.	K4	CO2
3	18	Illustrate the types of IPv4 addresses.	K4	CO3
4	19	Interpret the distance-vector protocols in network routing.	K5	CO3
5	20	Evaluate the WAN Media Types.	K5	CO5

Z-Z-Z

END