

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

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

Branch – NETWORKING AND MOBILE APPLICATION

NETWORK COMPONENTS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Question No.	Question	K Level	CO
1	Recall the network topology that requires a central controller or hub a) Star b) Ring c) Mesh d) Bus	K1	CO1
2	WPAN Stands for _____ a) Wireless Personal Area Network b) Wired Personal Area Network c) Wifi Personal Area Network d) Wide Personal Area Network	K2	CO2
3	Match from the following , networking device used to connect multiple devices within a local area network a) Hub b) Switch c) Router d) Bridge	K1	CO1
4	Show Which is the most commonly used VoIP standard a) Session Description Protocol (SDP) b) Session Initiation Protocol Telephony (SIP) c) IP Multimedia Systems (IMS) d) H.323	K2	CO2
5	Recall that a an IPv4 address is _____ bits long. a) 16 b) 128 c) 32 d) 265	K1	CO1
6	Relate the following Which is not a transmission type of IPv6. a) Unicast b) Broadcast c) Multicast d) Anycast	K2	CO2
7	EBGP Stands for _____. a) External Best Gateway Protocol b) External Border Gateway Packet c) External border Gateway Protocol d) Exterior border Gateway Protocol	K1	CO1
8	Show that Routing tables of a router is used to keep _____. a) MAC Address Assignments b) Port Assignments to network devices c) Distribute IP address to network devices d) The routes for forwarding the data to its destination	K2	CO2
9	Which wireless LAN security protocol provides the highest level of security? a) WEP b) WPA3 c) WPA d) WPA2	K1	CO1
10	Interpret the mode in which wireless network interface controller can work a) Infrastructure b) ad hoc c) Both infrastructure and ad-hoc d) Client	K2	CO2

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Identify the types of network topology.	K3	CO2
(OR)			
11.b.	Apply wireless network topology with example.		
12.a.	Identify the types of Network media.	K3	CO4
(OR)			
12.b.	Make use of the Virtual Network devices.		
13.a.	Compare IPv4 addressing with IPv6 addressing.	K4	CO3
(OR)			
13.b.	Analyze subnetting and subnet mask in Networks.		
14.a.	Examine basic routing processes involved in IP Packet Routing.	K4	CO3
(OR)			
14.b.	List out the characteristics of Routing Protocol.		
15.a.	Explain the WAN properties .	K5	CO4
(OR)			
15.b.	Evaluate the WAN components in detail.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Question No.	Question	K Level	CO
16	Classify the different layers of a OSI Reference Model.	K4	CO3
17	Inspect the working of Network infrastructure devices.	K4	CO3
18	Analyze Ethernet Technology in detail.	K4	CO3
19	Explain the multicast routing in detail.	K5	CO4
20	Evaluate the ways of deploying Wireless LAN.	K5	CO5