

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2026
(Fifth Semester)

Branch - ELECTRONICS

MAJOR ELECTIVE COURSE – I:
COMPUTER HARDWARE AND NETWORKING

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	The BIOS is stored in which type of memory? a) RAM b) ROM c) Cache d) Hard Disk	K1	CO1
	2	Which of the following bus standards is the fastest? a) ISA b) PCI c) AGP d) EISA	K2	CO1
2	3	Which of the following is volatile memory? a) ROM b) HDD c) RAM d) CD-ROM	K1	CO2
	4	Which of the following storage devices works on the principle of magnetism? a) Hard Disk b) CD-ROM c) DVD d) Blu-ray	K2	CO2
3	5	The device that is mainly used for engineering drawings is: a) Scanner b) Digitizer c) Plotter d) Laser Printer	K1	CO3
	6	VGA stands for: a) Video Graphics Array b) Visual Graphics Adapter c) Virtual Graphics Access d) Video Gain Access	K2	CO3
4	7	Which of the following is not a type of network topology? a) Star b) Tree c) Mesh d) Protocol	K1	CO4
	8	The network model which separates functionality into layers is: a) TCP/IP b) OSI c) Hybrid d) Client-Server	K2	CO4
5	9	Which of the following assigns domain names to IP addresses? a) FTP b) DNS c) HTTP d) SMTP	K1	CO5
	10	Which of the following is a connectionless transport layer protocol? a) TCP b) UDP c) IP d) HTTP	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.	Explain different motherboard form factors with examples.	K2	CO1
	(OR)			
	11.b.	Describe bus standards used in a PC system.		
2	12.a.	Discuss different types of memory packaging techniques.	K2	CO2
	(OR)			
	12.b.	Explain the disk organization in DOS.		
3	13.a.	Write a short note on the working of a scanner.	K3	CO3
	(OR)			
	13.b.	Compare VGA and display adapters in terms of functionality.		
4	14.a.	Evaluate the need for networking in modern organizations.	K4	CO4
	(OR)			
	14.b.	Analyze the functions of different types of servers in a network.		
5	15.a.	Write short notes on IP addressing and its classes.	K3	CO5
	(OR)			
	15.b.	Discuss the role of firewalls in computer networking.		

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	Describe the internal architecture of a motherboard and its main components.	K2	CO1
2	17	Explain the working principle of optical storage devices. Compare CD, DVD, and Blu-ray	K2	CO2
3	18	Discuss different types of printers with their advantages and disadvantages.	K3	CO3
4	19	Explain the various network topologies with neat diagrams.	K4	CO4
5	20	Discuss the TCP/IP protocol suite and its applications in modern communication.	K3	CO5

Z-Z-Z

END