PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023

(First Semester)

Branch - APPLIED ELECTRONICS

COMPUTER NETWORKS AND OPERATING SYSTEMS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks $(10 \times 1 = 10)$

ADD questions carry EQUAL marks $(10 \times 1 = 10)$								
Module No.	Question No.	Question	K Level	СО				
1	1	Physical or logical arrangement of network is a) Topology b) Routing c) Networking d) Control	K1	CO1				
	2	Protocol is a set of a) Formats b) Procedures c) Formats & Procedures d) None of the mentioned	K2	CO1				
2	3	Automatic repeat request error management mechanism is provided by a) logical link control sublayer b) media access control sublayer c) network interface control sublayer d) application access control sublayer	K1	CO2				
	4	How many fields frame in High-level Data Link Control (HDLC) may contain? a) three fields b) four fields c) five fields d) six fields	K2	CO2				
	5	What is the main advantage of UDP? a) More overload b) Reliable c) Low overhead d) Fast	K1	CO3				
3	6	What does POP stand for? a)Post office Protocol b)Post Operating Protocol c) Pre Operating Protocol d) Post office Protoco	K2	CO3				
4	7	Which of the following two operations are provided by the IPC facility? a) write & delete message b) delete & receive message c) send & delete message d) receive & send message	K1	CO4				
	8	Which one of the following is the deadlock avoidance algorithm? a) banker's algorithm b) round-robin algorithm c) elevator algorithm d) karn's algorithm	K2	CO4				
5	9	What is the core of the Linux operating system? a)Vi Editor b) Command Line c)Terminal d) Kernel	K1	CO5				
3	10	The kernel identifies the driver with its a) module b) major number c) device file d) module number	K2	CO5				

SECTION - B (35 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module	Question	Question	K Level	со
No. 1	No.	What are the components of Data communication? Explain it.		CO1
	(OR)		K2	COI
	11.b.	Classify the various type of topologies.		
2	12.a.	Organize the data link control with explanation.		CO2
		(OR)	K3	
	12.b.	Identify the importance of routing concept.		
3	13.a.	Distinguish the operation of DNS.		CO3
		(OR)	K4	
	13.b.	Conclude about the Sockets and its applications.		
4	14.a.	Elucidate the services of operating systems.	K3	604
	(OR)		K3	CO4
	14.b.	Explain the Dead lock.		
5	15.a.	Conclude the uses of NS2.	K4	CO5
		(OR)		005
	15.b.	Contrast about the device drivers.		

SECTION -C (30 Marks) Answer ANY THREE questions ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	со
1	16	What is Protocols? Analyze it with examples.	K4	CO1
2	17	Determine the working principles of packet switching.	K4	CO2
3	18	What is meant by MIME? Justify its importance.	K4	CO3
4	19	Organize the concept of memory management.	K4	CO4
5	20	Analyze the threads in Linux.	K4	CO5