POKHARA UNIVERSITY

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1.	a)	Explain the client/server model. Compare TCP's features with that of UDP's.	7
	b)	Explain TCP state transition with a supporting diagram.	8
2.	a)	List and explain different Unix socket address structures.	7
	b)	What is a concurrent server? Discuss the use of fork function to develop a concurrent server?	8
3.	a)	List and explain the functions, in the specific order, required to create a UDP server in the Unix System.	7
	b)	List and explain I/O models of Unix System.	8
4.	a)	What is a daemon process? Explain the syslogd daemon. How can a process log messages with help of the syslogd daemon.	8
	b)	Explain the mechanism of passing file descriptor in the Unix System.	7
5.	a)	Discuss about the Winsock architecture. Differentiate between Unix and windows sockets. Why were asynchronous functions implemented in Winsock?	8
	b)	What is an overlapped I/O? Discuss how WSASocket and WSARecv can be used to implement asynchronous I/O.	7
6.	a)	How do you implement stream communication in Winsock? Describe each step with the help of relevant APIs.	8
	b)	Discuss about the use of connect function with non-blocking socket.	7
7.	Write short notes on: (**Any two**)		2×5
	a)	ping	
	b)	ifconfig/ipconfig	
	c)	telnet	