Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science Engineering

Class Test – I   Session- July- Dec 2022   Month- December

Sem- 5ᵗʰ [A, B & C]   Subject- Microprocessor & Interfaces - C022511(022)

Time Allowed: 2 hrs   Max Marks: 40

Note: -   *Attempt any 5 question. All questions carry equal marks.*

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	Explain the architecture and function of each unit of 8085 Microprocessor.	[8]	Understanding	CO1
2.	Discuss the comparison between Harvard and Princeton Architecture.	[8]	Understanding	CO1
3.	Explain the Pipeline Architecture of 8086.	[8]	Understanding	CO2
4.	Explain the various addressing mode of 8086.	[8]	Understanding	CO2
5.	Write a program in assembly language to find count of even and odd numbers from a given series of 100 16 bit numbers stored in memory location from 2000:0D00H. Sore even count in BX and odd count in DX.	[8]	Apply	CO2
6.	Write a Assembly Language program to find the largest among among the series of 50 number. Store the largest no at 5000:2001H memory location.	[8]	Apply	CO2

Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science & Engineering

Class Test – I   Session- July-December, 2022   Month- December

Sem- CSE 5th [A&B] Subject- Computer Networks   Code- C022512(022)

Time Allowed: 2 hrs   Max Marks: 40

Note: -   All questions are compulsory and carries equal marks..

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Design full ISO/OSI reference model. Explain the function of each layer.	[8]	Creating	CO1
Q2	Compare LAN, MAN and WAN with neat diagram.	[8]	Evaluating	CO1
Q3	Explain the various methods of error detection and correction. Solve if the 7-bit hamming code word received by receiver is 1011011 assuming the even parity state whether the received code word is correct or wrong. If wrong locate the bit having error.	[8]	Applying	CO2
Q4	Diffrentiate following protocols with neat diagram . a) Controlled Access Protocols b) Channelization Protocols	[8]	Understanding	CO2
Q5	Illustrate various features of following: a) ARP b) RARP c) DHCP d) Wireless Lan	[8]	Understanding	CO2

Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science & Engineering

Class Test – I Session- July-December, 2022 Month- December
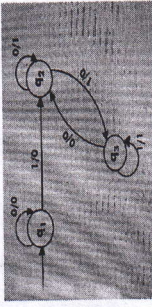
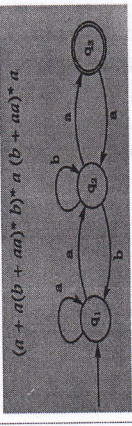**Sem- CSE 5th [C] Subject-** Computer Networks **Code-** C022512(022)
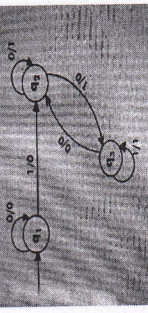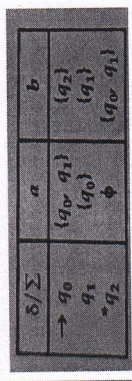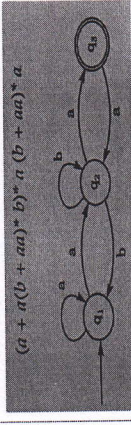
Time Allowed: 2 hrs

Max Marks: 40

Note: - All questions are compulsory and carries equal marks..

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Design full ISO/OSI reference model. Explain the function of each layer.	[8]	Creating	CO1
Q2	Compare LAN, MAN and WAN with neat diagram.	[8]	Evaluating	CO1
Q3	Explain IP4 and IP6.	[8]	Applying	CO3
Q4	Diffrentiate following protocols with neat diagram . a) Controlled Access Protocols b) Channelization Protocols	[8]	Understanding	CO2
Q5	Illustrate various features of following: a) ARP b) RARP c) DHCP d) Wireless Lan	[8]	Understanding	CO2

Shri Shankaracharya Institute of Professional Management & Technology
Department of Computer Science & Engineering
Class Test – I Session- Jul-Dec, 2022 Month– December

Sem- CSE 5th [A, B &C] Subject- Formal Language and Automata Theory Code- C022513(022)

Time Allowed: 2 hrs   Max Marks: 40

Note: - All questions are compulsory

Q. N.	Questions	Marks	Levels of Bloom's taxonomy	COs
A.	Discuss and differentiate between DFA, NFA and ∈ –NFA	[8]	Understanding	CO1
B.	Construct a Moore machine from the given Mealy machine	[8]	Applying	CO1
C.	Given NFA is Convert it into DFA.	[8]	Evaluating	CO1
D.	Consider the transition system, prove that the strings recognized are (using Arden's lemma) $(a + a(b + aa)^* b)^* a (b + aa)^* a$	[8]	Analyzing	CO2
E.	Apply Pumping Lemma to show that L=$\{a^i b^i | i \geq 1\}$ is not regular	[8]	Applying	CO2

Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science & Engineering

Class Test – I   Session- JULY-DEC 2022   Month- December

Sem- CSE 5th [A, B & C] Subject- Data Analytics with Python   Course Code: C022514(022)

Time Allowed: 2 hrs

Max Marks: 40

Note: - All the questions are compulsory.

Q. N.	Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Explain list, tuple and set in python.	[8]	Understanding	CO1
Q2	Define rules of broadcasting along with suitable example.	[8]	Remembering	CO3
Q3	Illustrate matplotlib library and also write a program for subplot of two graphs.	[8]	Understanding	CO5
Q4	Explain structured array with an example.	[8]	Applying	CO3

Q5	Write command forthe following-
	1. Create a dictionary with 5 key value pair and also write a command to print only the keys.
	2. Write code to print- `*`
	`* *`
	`* * *`
	`* * * *`
	`* * * * *`
		[8]	Applying	CO1

Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science & Engineering

Class Test – I   Session- July-Dec` 2022   Month-December

Sem- CSE 5th [A, B & C]   Subject-Computer Graphics   Code-   C022531(022)

Time Allowed: 2 hrs

Max Marks: 40

Note: - All questions are compulsory and carry equal marks.

Q. N.	Questions	Marks	Levels of Bloom's taxonomy	COs
	Section I			
1	a. State various applications of computer graphics. b. Differentiate between Raster scan system and Random scan system?	[8]	Analyzing	CO1
2	a. The endpoints of a given line are (20,10) and(30,18). Scan convert the straight line using Bresenhems line drawing algorithm. b. Differentiate DDA and Bresenham`s line drawing algorithm.	[8]	Applying	CO1
3	a. Write midpoint circle drawing algorithm. b. Scan conert a circle having radius 10 and centered at origin using algorithm.	[8]	Applying	CO1
4	a. Magnify the triangle with vertices A(0,0), B(1,1), and C(5,2) to twice its size while keeping C(5,2) fixed. b. Perform a 45degrees rotation of triangle A(0,0), B(1,1), C(5,2) about (-1,-1) .	[8]	Applying	CO2
5	Write 3D transformation matrix for a. Translation b. Scaling c. Rotation	[8]	Understanding	CO2