

Shri Shankaracharya Institute of Professional Management & Technology



Department of Computer Science Engineering

Class Test – II Session- July- Dec 2022 Month- January

Sem- 5th (A, B & C) Subject- Microprocessor & Interfaces Code- 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 Interrupt structure in 8086 and draw the interrupt vector table.	[8]	Understanding	CO3
2.	Write a program to perform 1 byte BCD addition .	[8]	Apply	CO3
3.	Explain 8257 DMA Controller functional block diagram.	[8]	Understanding	CO4
4.	Explain and draw minimum mode of 8086.	[8]	Understanding	CO4
5.	Draw the interface of two 4k*8 EPROM and two 4k*8 RAM with 8086.	[8]	Analyzing	CO4
6.	Explain and draw the block diagram of 80386	[8]	Understanding	CO5

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Class Test – II Session- July-December, 2022 Month- January 2023

Sem- CSE 5th (Sec- 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	Describe the need of network layer and explain IPv4 Header format in detail.	[8]	Understanding	CO3
Q2	Design and explain the distance vector unicast routing protocols with diagram.	[8]	Creating	CO3
Q3	Evaluate the following flow control protocol: a) STOP and WAIT Protocol b) Stop and Wait ARQ	[8]	Evaluating	CO4
Q4	Distinguish open-loop and closed loop congestion control with appropriate diagram.	[8]	Analyzing	CO4
Q5	How cryptography is important for internet security? Describe symmetric key cryptography with example.	[8]	Understanding	CO5



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

Time Allowed: 2 hrs

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Class Test – II Session- July-Dec 2022 Month-January

Sem - CSE 5th [Section -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
QA	Explain multicast routine protocol.	[8]	Understanding	CO3
QB	Differentiate between TCP and UDP.	[8]	Analyzing	CO4
QC	Describe the basic services provided by the transport layer.	[8]	Understanding	CO4
QD	Define the term link state routing protocol.	[8]	Remembering	CO3
QE	Define the term cryptography and explain its various types in detail.	[8]	Understanding	CO5



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Class Test – II Session- July-Dec 2022 Month-January

Sem - CSE 5th [Section -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
QA	Explain multicast routine protocol.	[8]	Understanding	CO3
QB	Differentiate between TCP and UDP.	[8]	Analyzing	CO4
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Class Test – II Session- Jul-Dec, 2022 Month-January

Sem- CSE 5th (A, B&C) Subject- Formal Language and Automata Theory Code- C022513(022)
 Max Marks: 40

Time Allowed: 2 hrs

Note: - All questions are compulsory.

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
A.	Discuss Chomsky classification of Grammar?	[8]	Understanding	CO3
B.	Check whether the following grammar is ambiguous or not (assume string by self) $S \rightarrow iCS/iCSes$ $C \rightarrow b$ $S \rightarrow a$	[8]	Applying	CO3
C.	Convert CFG into CNF form which is given below $S \rightarrow bA/aB$ $A \rightarrow bAA/aS/a$ $B \rightarrow aBB/bS/a$	[8]	Evaluating	CO3
D.	Design a Push Down Automata which accepts $L = \{a^n b^{2n} n \geq 1\}$	[8]	Analyzing	CO4
E.	Obtain a Turing Machine to obtain the language $L = \{0^n 1^n 2^n n \geq 1\}$	[8]	Applying	CO4



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 Max Marks: 40

Time Allowed: 2 hrs

Note: - All questions are compulsory.

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Class Test – II Session- July-Dec 2022 Month-January

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

Time Allowed: 2 hrs

Max Marks: 40

Note: - All questions are compulsory.

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	Cos
Q1	Illustrate the construction of Bar and Histogram.	[8]	Understanding	CO5
Q2	Step by step describe the working of scatter plot.	[8]	Applying	CO5
Q3	Briefly describe the function by row and columns in Pandas.	[8]	Applying	CO4
Q4	Illustrate the window static function of Pandas with suitable example.	[8]	Understanding	CO4
Q5	Explain the uses of Legend in matplotlib library.	[8]	Applying	CO5

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Class Test – II Session- July-Dec 2022 Month-January

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

Time Allowed: 2 hrs

Max Marks: 40

Note: - All questions are compulsory.

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	Cos
Q1	Illustrate the construction of Bar and Histogram.	[8]	Understanding	CO5
Q2	Step by step describe the working of scatter plot.	[8]	Applying	CO5
Q3	Briefly describe the function by row and columns in Pandas.	[8]	Applying	CO4
Q4	Illustrate the window static function of Pandas with suitable example.	[8]	Understanding	CO4
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 Class Test – II Session- July-Dec 2022 Month-January
 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.

Section I				
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
A.	Use the Cohen Sutherland algorithm to clip two lines P1(35,10)- P2(65,40) and P3(65,20)-P4(95,10) against a window A(50,10), B(80,10), C(80,40) and D(50,40).	[8]	Applying	CO3
B.	Discuss any one Polygon clipping algorithm.	[8]	Understanding	CO3
C.	Explain any one Visible Surface Detection methods Z-Buffer or Painters algorithm.	[8]	Understanding	CO3
D.	Explain spline and convex hull? Describe Bezier curve, its Blending function, and properties.	[8]	Understanding	CO4
E.	Given that A0(1,1), A1(2,3), A2(4,2), and A3(3,1) are the vertices of Bezier control polygon. Determine any five points on the Bezier curve.	[8]	Applying	CO4

Shri Shankaracharya Institute of Professional Management & Technology
Department of Computer Science & Engineering
 Class Test – II Session- July-Dec 2022 Month-January
 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.

Section I				
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
A.	Use the Cohen Sutherland algorithm to clip two lines P1(35,10)- P2(65,40) and P3(65,20)-P4(95,10) against a window A(50,10), B(80,10), C(80,40) and D(50,40).	[8]	Applying	CO3
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