Sem-6 <sup>th</sup> [A B & C] Subject- Compiler Design Code- C022611(022)  Time Allowed: 2 hrs  Max !	Department of Computer Science and Engineering Class Test – II Session- Jan-June, 2023 Month-June	Shri Shankaracharya Institute of Professional Management & Technology
Max Marks: 40		nnology

Tin Note	Time Allowed: 2 hrs  Note: - All questions are compulsory.		Max Marks: 40	ks: 40
Q. N.	V. Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Illustrate both Synthesized and Inherited Attributes with example	8	Apply	C03
Q2	Convert the following expression:  -(a+b)*(c+d)-(a+b+c) into  (i) Quadruples  (ii) Triples  (iii) Indirect Triples	8	Apply	CO3
&	Consider the grammar E→ E+T E-T T T→ T*F T/F F F→ (E) id digit Obtain the semantic rules to construct a syntax tree for the expression "a-4+c" using bottom-up approach	[8]	Evaluate	СОЗ
Q4	Point out the various techniques under loop optimization.	8	Analyze	CO <sub>4</sub>
Q.	Apply the algorithm of code generation on the expression:  a=(p+q)-((r+s)-t)	8	Apply	CO3

Max Marks: 40

Note: - All questions are compulsory.

Q5	Q4	Q	Q2	Q1	Q. N.
Apply the algorithm of code generation on the expression:  a=(p+q)-((r+s)-t)	Point out the various techniques under loop optimization.	Consider the grammar E→ E+T E-T T T→ T*F T/F F F→ (E) id digit Obtain the semantic rules to construct a syntax tree for the expression "a-4+c" using bottom-up approach	Convert the following expression: -(a+b)*(c+d)-(a+b+c) into (i) Quadruples (ii) Triples (iii) Indirect Triples	Illustrate both Synthesized and Inherited Attributes with example	Questions
[8]	[8]	[8]	8	[8]	Marks
Apply	Analyze	Evaluate	Apply	Apply	Levels of Bloom's taxonomy
. CO5	C04	CO3	CO3	CO3	COs

### SSIPMT

## Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering

Class Test - II Session- Jan- June, 2023 Month-June

Time Allowed: 2 hrs Sem-6th [A] Subject- Software Engineering and Project Management Code-C022612(022) Max Marks: 40

control sharp) 173.8 °			,	8	Q4	Q3	Q2	Q1	Q.N.	Note:
Embedded	Semi-detached	Organic	Software Product Type	Suppose that a project was estimated to be 400 KLOC. Calculate effort & time for each of 3 modes of development.	Describe the rule of seven in project management. Explain CMM and describe the uses of CMM	Explain Six Sigma process using SixSigma graph. Discuss the characteristics of Six Sigma using the appropriate diagram.	Compare scope verification and scope validation. Explain Norden's Work using Rayleigh graph.	Describe types of work breakdown structure. Explain different types of outsourceing relationship.	Qu	Note: - All questions are Compulsory.
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0.32	0.35	0.38	d	be 400 3 modes	agement. M	SixSigma graph. Sigma using the	ation. oh.	ionship.		
ABOVE TO STATE OF THE		Charles Colonia	<b>o</b>		[8]	[8]	[8]	[8]	Marks	
	and a good of the state of the	Addition and the Addition	Apply		Understand	Analyze	Apply	Understand	Levels of Bloom's taxonomy	
			C02		C04	CO4	CO3	C03	COs	

## Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering

Class Test - II Session- Jan- June, 2023 Month-June

Time Allowed: 2 hrs Sem-6th [A] Subject-Software Engineering and Project Management Code-C022612(022) Max Marks: 40

### Note: - All questions are Compulsory.

				S.	Q F. I	Q3 I	Q2 E	Q1 E	Q.N.
Embedded	Semi-detached	Organic	Software Product Type	Suppose that a project was estimated to be 400 KLOC. Calculate effort & time for each of 3 modes of development.	Describe the rule of seven in project management. Explain CMM and describe the uses of CMM	Explain Six Sigma process using SixSigma graph. Discuss the characteristics of Six Sigma using the appropriate diagram.	Compare scope verification and scope validation. Explain Norden's Work using Rayleigh graph.	Describe types of work breakdown structure. Explain different types of outsourceing relationship.	Qı
3.6	3.0	2.4	ສ	t was & tim	ven in ribe the	cess usics of	ion and	oreakdo of outso	Questions
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0.32	0.35	0.38	d	be 400 3 mode	agement M	a graph using the	ation.	ionship.	
			[0]			[8]	[8]	[8]	Marks
			Apply		Understand	Analyze	Apply	Understand	Levels of Bloom's taxonomy
			C02		C04	C04	CO3	CO3	COs

### SSIPMT A

## Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering

Class Test - II Session- Jan - June, 2023 Month-June

Sem-6th Section [B & C] Subject- Software Engineering & Project Management Code- C022612(022) Time Allowed: 2 hrs Max Marks: 40

Note: - Attempt all questions. All carry equal marks.

Ivoie: -	Note; - Auempi un questionis. Au curiy equa mures.			
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Discuss the importance of project human resource management and explain its processes.	[8]	Understand	CO3
Q2.	Classify the different levels of SEI Capability Maturity Model.	8	Apply	CO4
Q4.	Discuss following in brief:- 1. Formal Technical Review 2ISO 9001	[8]	Understand	CO4
Q3.	Define software risk. Explain various types of risk in software development.	8	Remember	COS
Q5.	Suppose you are the chief executive officer (CEO) of a software development team. Which team structure would you select for your organization and why?	8	Analyze	cos

## Shri Shankaracharya Institute of Professional Management & Technology

Department of Computer Science and Engineering Class Test - II Session- Jan - June, 2023 Month-June

Sem-6th Section [B & C] Subject-Software Engineering & Project Management Code-C022612(022) Time Allowed: 2 hrs Max Marks: 40

Note: - Attempt all questions. All carry equal marks.

			Levels of	
Q.N.	Questions	Marks	Bloom's taxonomy	COs
Q1	Discuss the importance of project human resource management and explain its processes.	<b>®</b>	Understand	CO3
Q2.	Classify the different levels of SEI Capability Maturity Model.	[8]	Apply	CO4
Q4.	Discuss following in brief:- 1. Formal Technical Review 2ISO 9001	[8]	Understand	C04
Q3.	Define software risk. Explain various types of risk in software development.	[8]	Remember	CO5
Q5.	Suppose you are the chief executive officer (CEO) of a software development team. Which team structure would you select for your organization and why?	. 8	Analyze	CO5
	And of the state o			

Shri Shankaracharya Institute of Professional Management & Technology, Raipur

Department of Computer Science and Engineering

Class Test – II Session-Jan-June, 2023 Month-June

Sem-6<sup>th</sup> [A, B & C] Subject- Artificial Intelligence & Expert System Code- C022613(022)
Time Allowed: 2 hrs

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

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
2	Discuss components of planning with example of any planning method.	[8]	Apply	CO3
Q2	Explain blocks world problem for robotic arm with all steps.	[8]	Understand	CO3
Q3	Illustrate the ATN networks and design any one example of semantic grammer.	8	Apply	C04
Q4	Describe artificial neural network model with diagram and examples of supervised learning and unsupervised learning.	8	Analyze	COS
S	Compare between process of knowledge acquisition and expert shell	[8]	Evaluate	COS

Shri Shankaracharya Institute of Professional Management & Technology, Raipur

Department of Computer Science and Engineering

Class Test – II Session-Jan-June, 2023 Month-June

Sem-6<sup>th</sup> [A, B & C] Subject- Artificial Intelligence & Expert System Code- C022613(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
Q <sub>1</sub>	Discuss components of planning with example of any planning method.	[8]	Apply	C03
Q2	Explain blocks world problem for robotic arm with all steps.	8	Understand	C03
Q3	Illustrate the ATN networks and design any one example of semantic grammer.	[8]	Apply	CO4
9	Describe artificial neural network model with diagram and examples of supervised learning and unsupervised learning.	8	Analyze	COS
S.	Compare between process of knowledge acquisition and expert shell	[8]	Evaluate	CO5

# Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering Class Test – II Session- Jan – June, 2023 Month-June Sem- CSE 6th [A, B & C] Subject- Internet of Things(Professional Ellective-II) Code-C022632(022)

Note: - All questions are Compulsory.

Time Allowed: 2 hrs

	y	,	y		-
S	2	Q3	Q2	Q	Q.N.
Discuss the IaaS and SaaS Systems used in cloud computing for IoT applications.	Demonstrate different componenets of Raspberry Pi board along with its major characteristics.	Implement a pseudo code to read data from IR sensor connected to auduino board and explain its working.	Differntial working of servo motor and stepper motor used in IoT systems.	Discuss the applications of actuators in IoT.  Differential a thermal actuator pneumatic actuators.	Questions
[8]	[8]	[8]	8	[8]	Marks
Understand	Apply	Analyze	Apply	Understand	Levels of Bloom's taxonomy
C05	C04	CO4	соз	C03	COs

## Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering

Class Test - II Session- Jan-June, 2023 Month-June

Sem- CSE 6th [A, B & C] Subject- Internet of Things(Professional Ellective-II) Code-C022632(022)
Time Allowed: 2 hrs

### Note: - All questions are Compulsory.

Max Marks: 40

1016.	Tote: - An questions are compassory.			Marian Ozero
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
Q1	Discuss the applications of actuators in IoT.  Differential a thermal actuator pneumatic actuators.	8	Understand	CG CG
Q2	Differntial working of servo motor and stepper motor used in IoT systems.	[8]	Apply	C03
ପ୍ତ	Implement a pseudo code to read data from IR sensor connected to auduino board and explain its working.	<u>8</u>	Analyze	CO4
2	Demonstrate different componenets of Raspberry Pi board along with its major characteristics.	[8]	Apply	CO4
S	Discuss the IaaS and SaaS Systems used in cloud computing for IoT applications.	8	Understand	CO5



Shri Shankaracharya Institute of Professional Management & Technology, Raipur
Department of Computer Science and Engineering
Class Test – II Session- Jan – June 2023 Month- June
Sem-6<sup>th</sup> [ A, B & C] Subject-Cryptography & Network Security Code-C000619(022)

Time Allowed: 2 hrs

Note: - All questions are Compulsory.

Max Marks: 40

Q.N.	Questions	Marks	Levels of Bloom's taxonomy	COs
	How does a digital signature work? Briefly describe the steps that should be followed to choose a perfect digital signature.	[8]	Apply	C04
2.	Analyze the process of Advanced Encryption Standard (AES) in detail. Mention the steps that are performed during encryption in every round.	[8]	Analyze	C02
'n	Illustrate FIREWALL design principles in detail with proper diagram.	8	Understand	COS
4.	Point out and describe why Euclidian Algorithm is used and also Write the steps of Algorithm by taking suitable example.	[8]	Apply	CO2
5.	Differentiate between MD5 and SHA1 algorithm along with the working of one process and also Differentiate between MAC and HMAC.	[8]	Understand	C04

## Shri Shankaracharya Institute of Professional Management & Technology Department of Computer Science and Engineering

Department of Computer Science and Engineerin
Class Test – II Session- Jan – June 2023 Month- June

Sem-6th A, B & Cl Subject-Cryptography & Network Security Code-C000619(022)

Time Allowed: 2 hrs
Note: - All questions are Compulsory.

Max Marks: 40

	of experience or a control of the first of t			
Š.	Questions	Marks	Levels of Bloom's taxonomy	COs
	How does a digital signature work? Briefly describe the steps that should be followed to choose a perfect digital signature.	8	Apply	CO <sub>4</sub>
2.	Analyze the process of Advanced Encryption Standard (AES) in detail. Mention the steps that are performed during encryption in every round.	8	Analyze	C02
$\omega$	Illustrate FIREWALL design principles in detail with proper diagram.	8	Understand	CO5
.4	Point out and describe why Euclidian Algorithm is used and also Write the steps of Algorithm by taking suitable example.	[8]	Apply	C02
5.	Differentiate between MD5 and SHA1 algorithm along with the working of one process and also Differentiate between MAC and HMAC.	8	Understand	CO4