Printed Page:- 04		Subject Code:- AMICSE0101	
		Roll. No:	
	NOIDA INSTITUTE OF ENGINEERING	G AND TECHNOLOGY, GREATER NOIDA	
		Affiliated to AKTU, Lucknow)	
		.Tech (Integrated)	
		MINATION (2022 - 2023)	
Time	3 Hours	Solving using Python Max. Marks: 100	
	Instructions:	Wax. Warks. 100	
		paper with the correct course, code, branch etc.	
		ections -A, B, & C. It consists of Multiple Choice	
Question	s (MCQ's) & Subjective type questions.		
<b>2.</b> Maxim	num marks for each question are indica	ted on right -hand side of each question.	
3. Illustro	ate your answers with neat sketches who	erever necessary.	
	e suitable data if necessary.		
-	ably, write the answers in sequential ord		
		tten material after a blank sheet will not be	
evaluate	d/checked.		
	SECTI	ON A 20	
1. Atten	SECTI npt all parts:-	ON A 20	
	npt all parts:-		
	npt all parts:- Which of the following is the smalle		
	<b>npt all parts:-</b> Which of the following is the smalle (a) Bit		
	npt all parts:- Which of the following is the smalle (a) Bit (b) KB		
	npt all parts:-  Which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble	st unit of data in a computer. [CO1] 1	
1-a.	which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte	st unit of data in a computer. [CO1] 1	
1-a.	which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression	st unit of data in a computer. [CO1] 1	
1-a.	which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9	st unit of data in a computer. [CO1] 1	
1-a.	which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9  (c) 3	st unit of data in a computer. [CO1] 1	
1-a. 1-b.	which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9  (c) 3  (d) 1	st unit of data in a computer. [CO1] 1  n, 3*1**3. [CO1] 1	
1-a.	Which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9  (c) 3  (d) 1  What will be the final value of i after	st unit of data in a computer. [CO1] 1  n, 3*1**3. [CO1] 1	
1-a. 1-b.	Which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9  (c) 3  (d) 1  What will be the final value of i after for i in range(3): [CO2]	st unit of data in a computer. [CO1] 1  n, 3*1**3. [CO1] 1	
1-a. 1-b.	Which of the following is the smalle  (a) Bit  (b) KB  (c) Nibble  (d) Byte  What is the output of this expression  (a) 27  (b) 9  (c) 3  (d) 1  What will be the final value of i after	st unit of data in a computer. [CO1] 1  n, 3*1**3. [CO1] 1	

	(c) 2		
	(d) 3		
1-d.	What is the value of s[4:1:-1]. [CO2]	1	
	Where s="Python"		
	(a) pyt		
	(b) hon		
	(c) yth		
	(d) oht		
1-e.	Which keyword is used for function. [CO3]		
	(a) Fun		
	(b) Define		
	(c) def		
	(d) Function		
1-f.	A function is defined within. [CO3]	1	
	(a) Module		
	(b) Class		
	(c) Another function		
	(d) All of the mentioned		
1-g.	What will be the list comprehension to find the cube for the following: [CO4]	1	
	Number=[1, 2, 3, 4, 5, 6, 7, 8, 9].		
	(a) [x**3 for x in Number]		
	(b) [x^3 for x in Number]		
	(c) [x**3 in Number]		
	(d) [x^3 in Number]		
1-h.	Which data structure does not support indexing. [CO4]	1	
	(a) List		
	(b) Tuple		
	(c) Dictionary		
	(d) Set		
1-i.	block contains code which may cause exception. [CO5]	1	
	(a) try		
	(b) except		
	(c) else		

(d) finally 1 1-j. When a variable is not define which error is raised by python. [CO5] (a) ZeroDivisionError (b) NameError (c) ValueError (d) None of the above 2. Attempt all parts:-What are the rules for naming an identifier. [CO1] 2 2.a. 2.b. Print series 1,2,3,4,6,7,8,10 using continue. [CO2] 2 2.c. What is the use of the return statement. [CO3] 2 2.d. What is the difference between a tuple and a dictionary. [CO4] 2 2.e. 2 Write a short note on finally block with example. [CO5] **SECTION B** 30 3. Answer any five of the following:-Design a flow-chart to find sum of first n natural numbers. [CO1] 3-a. 6 3-b. Differentiate among Assembler, Compiler and Interpreter. [CO1] 6 3-c. Write a Python program to check whether the given number is Armstrong 6 number or not. [CO2] 3-d. Write a program to decide given number is prime or not.[CO2] 6 3.e. Discuss the need and importance of function in python. [CO3] 6 3.f. Differentiate between the following methods of list using example: [CO4] 6 a) append() and extend() b) pop() and remove() Describe different types of errors in programming language. [CO5] 3.g. 6 **SECTION C** 50 4. Answer any one of the following:-Draw a diagram of digital computer and explain its all components in details. 4-a. 10 (CO1) 4-b. Write a python program to illustrate all Bitwise operators. Also, show the 10 expected output.[CO1] 5. Answer any one of the following:-5-a. Write a Python program to enter marks of a student in four subjects. Then 10

calculate Total and aggregate, and display the grade obtained by the students. [CO2]

if the student scores greater than 100 %, then the invalid score. If the student scores an aggregate greater than 75%, then the grade is Distinction. If aggregate is 60>=and<=75, then the grade is First Division. If aggregate is 50>= and<=60, then the grade is Second Division. If aggregate is 40>=and<50, then the grade is third Division. Otherwise the grade is fail. 5-b. Write a Python Programs to print following patterns. [CO2] 10 1 121 12321 1234321 123454321 6. Answer any one of the following:-6-a. A 4 digit integer is entered through the keyboard. Write a function to calculate 10 the sum of the 4 digit number both without recursion and using recursion.[CO3] 6-b. Write short notes on: 10 [CO3] (a.) Keyword Arguments (b.) Default Arguments (c.) Lambda functions 7. Answer any <u>one</u> of the following:-7-a. What is List? Write Python program to sort words in a sentence in decreasing 10 order of their length. Display the sorted words along with their length. [CO4] 7-b. Explain all the data types in python with suitable example of each type. 10 [CO4] 8. Answer any one of the following:-8-a. Explain try, except, else and finally block with their syntax and also discuss 10 application of these blocks. [CO5] 8-b. A file named DATA.txt contains a series of integer numbers. Write a program to 10 read these numbers then write all "odd" numbers to a file to be called ODD.txt and all "even" numbers to a file to be called EVEN.txt.[CO5]