



## Department of Artificial Intelligence and Machine Learning

Course Code: 22PL1B01

Date:

Sem: 1 Semester

Maximum Marks: 50

Duration: 120 Minutes

### Introduction to Python Programming

#### Quiz-1

Note: Answer all 10 Questions

SL. No	Question	M	BT	CO
1	What will be the value of the following Python expression? $4+9/3$	1	1	1
2	Why python is called as weakly typed language?	1	1	1
3	Write Analyse the output of below python code? <pre>i = 1 while True:     if i%3 == 0:         break     print(i)     i += 1</pre>	1	3	1
4	Which type of Programming does Python support? a) object-oriented programming      b) structured programming c) functional programming              d) all of the mentioned	1	1	1
5	Which arithmetic operator cannot be used with strings in Python? a) *      b) -      c) +      d) All of the mentioned	1	1	1
6	Identify the output of the following statement? <pre>X=3 print(x**3)</pre>	1	3	1
7	Modify the code to terminate the below infinite loop? <pre>a=10 while a&gt;=0:     print ("Printing: ", a)     if a==0:         break     a+=1</pre>	1	3	2
8	Write python code to print the below lines <pre>My++Name++Is--&gt;**</pre>	1	1	1



RV College of Engineering\*

Autonomous  
Institution Affiliated  
to Vignansaraya  
Technological  
University, Belagavi

Approved by AICTE  
New Delhi

Academic Year 2022-2023 (ODD Semester)

USN:

## Department of Artificial Intelligence and Machine Learning

	James\\Bond			
9	What is the result of the expression $10 < < 1$	1	1	1
10	Compare / and // operators in python	1	2	1

Course Outcomes: After completing the course, the students will be able to	
CO1:	Apply fundamental knowledge of Python programming to solve the engineering problems
CO2:	Identify the problems in various application domains and solve them using different concepts of Python programming
CO3:	Design a solution using Python programming with societal, environmental, and other concerns by engaging in lifelong learning for emerging technology
CO4:	Demonstrate the use of modern tools by exhibiting teamwork and effective communication skills

M-Marks, BT-Blooms Taxonomy Levels, CO-Course Outcomes

Marks Distribution	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Max Marks	6	4	-	-	6	1	3	-	-	-



## Department of Artificial Intelligence and Machine Learning

Course Code: 22PL1B01

Sem: I Semester

Duration: 120 Minutes

Date:

Maximum Marks: 50

### Introduction to Python Programming Test-1

Note: Answer all the Questions

SL. No	Questions	M	BT	CO
1	a) Discuss the typical characteristics of Python Programming Language.	5	2	1
	b) Illustrate the use of Escaping Sequences with the Strings	5	3	1
2	a) Accept the String from the User and illustrate any 5 String Operations.	5	3	2
	b) With an example illustrate Augmented Assignment Operators and how these are helpful in programming.	4+1	3	1
3	a) Illustrate: 1. Variables in Python and 2. Type Conversion	5	4	2
	b) Read the Three test marks from the user, find the average of the marks. If the average is greater than 40% print the student is eligible for SEE Exam, otherwise print not eligible	5	3	2
4	a) Write a program to create Simple Calculator using elif statements.	5	3	1
	b) Write a program to print the multiplication table $11 \geq N \leq 20$	5	3	1
5	a) Write a program to generate the following sequence 0 1 1 2 3 5 8 13 ..... N	5	3	1
	b) Illustrate Bitwise Operator.	5	3	1

Course Outcomes: After completing the course, the students will be able to

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M-Marks, BT-Blooms Taxonomy Levels, CO-Course Outcomes

Marks Distribution	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Max Marks	35	15	-	-	-	5	40	5	-	-





## Department of Artificial Intelligence and Machine Learning

Course Code: 22P115A

Sem: I Semester

Date: 24.02.2023

Duration: 110 Minutes

## INTRODUCTION TO PYTHON PROGRAMMING

QUIZ-2				
SL. No	Question	M	BT	CO
1	Tuples are immutable. Prove it with an example.	2	3	3
2	What is the output of following code: <pre>tuple1 = ('a', 'b', 'c') tuple2 = (1, 2, 3) tuple3 = tuple1 + tuple2 print(tuple3)</pre>	1	1	1
3	Give an example of INSERT () function for the list.	2	2	2
4	What is the output of following code: <pre>thislist = ['apple', 'banana', 'cherry'] print(thislist[-1])</pre>	1	3	3
5	List any two uses of dictionary.	2	1	1
6	Write an instruction to delete 'YEAR' from given dictionary <pre>thisdict = {     'brand': 'Ford',     'model': 'Mustang',     'year': 1964 } print(thisdict) //ADD INSTRUCTION HERE</pre>	1	2	2
7	What is the output of following code: <pre>txt = 'Hello, welcome to my world.' x = txt.index('welcome') print(x)</pre>	1	3	3
CIE-2				
SL. No	Questions	M	BT	CO
1	a) Differentiate between list and dictionary, with an example for each.	5	3	2

**Department of Artificial Intelligence and Machine Learning**

	b)	Write a program to find factorial of a given number 'n' using for loop.	6	3	2
2	a)	Discuss the below 'tuple' operations with an example for each: i) Concatenation. ii) Iteration. iii) Membership. iv) Repetition	6	2	3
	b)	Declare a string "Welcome to python programming". i) Split the string to print substrings. ii) Slice the string to print characters from position 3 to position 10	4	4	4
3	a)	With syntax, explain the working of break, continue and pass statements. Write an example for each.	6	2	3
	b)	Create a dictionary containing 5 students name with USN. Write a Python program to print only the USN of the students.	4	3	1
4	a)	Create a list of 'n' integers. Write a Python program to print minimum and maximum integer in the list.	6	4	2
	b)	What are functions? Explain the uses of creating functions in Python language.	4	1	4
5	a)	Write a Python function to print the sum of all numbers in a given list.	5	4	2
	b)	What are global variables and constants in Python language? Give examples.	5	1	1

**Course Outcome**

CO1	Apply fundamental knowledge of Python programming to solve the engineering problems
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CO4	Demonstrate the use of modern tools by exhibiting teamwork and effective communication skills

**M-Marks, BT-Blooms Taxonomy Levels, CO-Course Outcomes**

		CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
Marks Distribution	Particulars										
	Max Marks (Test)	27	20	7	6	9	22	17	12	-	-

## Department of Artificial Intelligence and Machine Learning

Course Code: 22PL15A  
Sem: I Semester  
Duration: 20 Minutes

Date: 23/03/2023

Maximum Marks: 50

### Introduction to Python Programming Improvement Quiz

Note: Answer all Questions

SL. No	Question	M	BT	CO
1	In what sense the readline() function is different for readlines() in file	1	1	1
2	Identify the type of Exception generated by the following code list = [10, 20, 30, 40, 50] print(list[5])	1	2	2
3	What is the output of following code class test: def __init__(self,a="Hello World"): self.a=a  def display(self): print(self.a) obj=test() obj.display()	2	2	2
4	Write an example for NameError Exception in Python?	1	1	1
5	What is the output of following code  file = open("file.txt", "w") file.write("Namma Bengaluru") file.close()  file = open("file.txt", "r") print (file.read(5)) file.close()	1	2	2
6	Write an example ofrstrip() function?	1	1	2
7	What is Instantiation in terms of Object Oriented Programming terminology? a) Deleting an instance of class b) Modifying an instance of class c) Copying an instance of class d) Creating an instance of class	1	1	1
8	What is the output of following code class Employee: # constructor def __init__(self, name, salary): self.name = name self.__salary = salary # creating object of a class emp = Employee('Jessa', 10000) print('Name : ',emp.name) print('Salary:', emp.__salary)	2	2	2



**Department of Artificial Intelligence and Machine Learning****Course Code: 22PL15A****Sem: I Semester****Duration: 90 Minutes****Date: 23/03/2023****Maximum Marks: 50****Introduction to Python Programming  
Improvement Test****Note: Answer all the Questions**

SL. No	Questions	M	BT	CO
1	a) What are Python methods, how they are invoked, explain with examples?	5	1	1
	b) Write a program to Create a text file called my_file.txt with some content, capitalize the first letter of every word, and print the content of the file in reverse order.	5	2	1
2	a) Discuss the different modes in which the file is operated in Python?	5	1	2
	b) Illustrate ZeroDivisionError in Python?	5	3	2
3	a) Illustrate Finally Keyword in expectations. List the advantages of finally keyword	5	3	2
	b) What is an Object in Python? Summarize with example	5	1	2
4	a) What is Constructor? Discuss the types of Constructor	5	2	1
	b) Discuss class methods and static methods.	5	2	1
5	a) Discuss the different Access Modifiers in Python with an example	5	2	1
	b) What is Encapsulation in python? Summarize with an example	5	2	1

**Course Outcomes: After completing the course, the students will be able to**

<b>CO1:</b>	Apply fundamental knowledge of Python programming to solve the engineering problems
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**M-Marks, BT-Blooms Taxonomy Levels, CO-Course Outcomes**

	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
<b>Marks Distribution</b>	<b>Max Marks Quiz</b>	3	7	-	-	4	6	-	-	-	-
	<b>Max Marks CIE</b>	30	20	-	-	15	25	10	-	-	-

**RV COLLEGE OF ENGINEERING®**  
 (An Autonomous Institution affiliated to VTU)  
 I Semester B. E. Examinations May-2023

Common to all programs

**INTRODUCTION TO PYTHON PROGRAMMING (ELECTIVE)**

*Maximum Marks: 100*

*Time: 03 Hours*

*Instructions to candidates:*

1. Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
2. Answer SIX full questions from Part B. In Part B question numbers 2 and 11 are compulsory. Answer any one full question from 3 and 4, 5 and 6, 7 and 8 & 9 and 10.

**PART-A**

1	1.1	What is the output of the following snippet? <code>Tuple(10,20,30,40,50)</code> <code>Tuple[3] = 50</code>	01
	1.2	What will be the output of this code? <code>a = ['APPLE','BANANA']</code> <code>for l in a:</code> <code>    print(i.lower())</code>	01
	1.3	What will be the output of the following code snippet? <code>a = 100</code> <code>b = 200</code> <code>print (a,b)</code> <code>a,b = b,a</code> <code>print (a,b)</code>	01
	1.4	What is the output of the following code? <code>X = "555"</code> <code>Y = X + str(9)</code> <code>print(Y)</code>	01
	1.5	Consider the following sequence <code>List = [10,20,40,50,60]</code> Add an integer 30 after the value 20.	01
	1.6	What is the output of the following statement? <code>print("\a")</code>	01
	1.7	Write the difference between the Conditional and Control Statements.	01
	1.8	What is the output of the following code? <code>for i in range (1,10,2):</code> <code>    print(i)</code>	01
	1.9	In what sense pop() function is different from clear() function in list.	01
	1.10	Write the output of the following code? <code>Fruits = {'grapes': 'green','apple':'red'}</code> <code>print(Fruits.keys())</code>	01

**PART-B**

2	a	Summarize the typical characteristics of the Python Language.	07
	b	Illustrate the following concepts with an example: i) Getting the input from the terminal ii) Type casting iii) Creating the Strings	07



3	a	Write Python Program to reverse a number and also find the Sum of digits in the reversed number. Prompt the user for input.	07
	b	Discuss Identity and Membership functions in python with an example.	07
<b>OR</b>			
4	a	Write a menu driven program to perform Arithmetic operations using Python.	07
	b	Discuss the usage of Bitwise Operators.	07
5	a	Illustrate Tuple operations.	07
	b	Consider a list <i>Example</i> = ['A','B','C','D','E'] and perform the following operations on the given list: i) sort() ii) extend iii) index() iv) copy()	07
<b>OR</b>			
6	a	Illustrate the concept the Dictionaries in python with an example.	07
	b	Consider a string <i>str</i> = 'RV College of Engineering' and perform the following operations on the given string: i) capitalize() ii) count iii) endswith() iv) find()	07
7	a	Discuss the concept of Global variable and Arbitrary Keyword Arguments in Python.	07
	b	Illustrate Exception handling in Python with an example.	07
<b>OR</b>			
8	a	With the help of Python functions, write a Python program to print the Multiplication table. Note: Accept the input from the Terminal	07
	b	Write a program to do the following tasks: i) Creating a file ii) Writing into the file iii) Reading from the file.	07
9	a	Illustrate Default and Parameterized Constructor.	07
	b	Discuss the concept of Polymorphism with Inheritance.	07
<b>OR</b>			
10	a	Illustrate the relevance of Access Modifiers in Python.	07
	b	Discuss Static and Class Methods.	07
11	a	Consider a sequence of numbers with some missing values. Write a python program for inserting the missing values, and remove some of the values from the sequence. Also, add a few more values to the existing sequence.	10
	b	Create an Employee 'Employee' Database using dictionaries and perform the insert, search and display operations.	10