

**MID-TERM EXAMINATION**  
**(Course Name :ECE-AI ) (Semester :2 )**  
**(May, 2023) OFF LINE mode**

Subject Code: BAI-110

Subject: Programming with Python

Time :1 ½ Hours

Maximum Marks : 30

Note: Q. 1 is compulsory.

Q1		(2.5*4)	
(a)	Find errors in the following code and rewrite the correct code: <pre>a,b = 0 if(a = b) a+b=c print(z)</pre>		
(b)	Differentiate between literals, variables and identifiers in python with suitable examples.		
(c)	Briefly explain binary, text and csv files in python.		
(d)	Explain the concept of local and global variables used in python with suitable examples.		

Q2 (Attempt any Two Parts ) UNIT-1

(5,5)

Q2A (a) Find output of the following program:(2.5)

w = 20

x = 10

y = 15

z = 2

result\_1 = (w+x)\*y/z

result\_2 = ((w+x)\*x)/z

result\_3 = ((w+x)\*(y/z))\*\*z

result\_4 = w+(x\*y)/z

print('The value of (w+x)\* y/z is',result\_1)

print('The value of ((w+x)\*x)/z is',result\_2)

print('The value of ((w+x)\*(y/z))\*\*z is',result\_3)

print('The value of w+(x\*y)/z is',result\_4)

(b) What does following piece of code returns:

(2.5)

my\_list = ['Siya', 'Tiya', 'Guru', 'Daksh', 'Riya', 'Guru']

i = 0

while True:

print(my\_list[i])

if (my\_list[i] == 'Guru'):

print('Found the name Guru')

break

print('After break statement')

i += 1

print('After while-loop exit')

Q2(B) (a) Write a program to check the grade of the students based on marks.(Conditions given below) Prompt the user for input.

(2.5)

1. if marks <50 then Grade is F
2. if marks >=50 <60 then Grade is D
3. if marks >=60 <70 then Grade is C



4. if marks  $\geq 70$  < 80 then Grade is B
5. if marks  $\geq 80$  < 90 then Grade is A
6. if marks  $\geq 90$  then Grade is A+

(b) write a program to print string concatenation of two strings and do the slicing from index 5 to 7. also give the output of the program for the following strings (2.5)

- (i) str1= "hello world"
- (ii) str2= "everyone should be happy"

Q2(C)

Explain the need for continue and break statements. Write a program to check whether a number is prime or not. Prompt the user for input. (5)

Q3

(Attempt any Two Parts ) UNIT-2

(5,5)

Q3 (A)

(a) What does sequence mean and which three types of data fall into this category? Give suitable examples. (2.5)

(b) Write a Python program to sum all the items in a list. (2.5)

Q3 (B)

(a) Write a Python program to check if a given key already exists in a dictionary. (2.5)

(b) Explain with examples the four types of arguments that python functions can work with. (2.5)

Q3 (C)

(a) Write a Python function that takes two lists and returns True if they have at least one common member. (2.5)

(b) def func(n):

numb = 1

while(n!=0):

numb \*= n

n = n-1

print("The output is",numb)

inputNumber = int(input("Enter the number: "))

func(inputNumber)

What does above code prints if inputNumber=6?

(2.5)