GIET UNIVERSITY, GUNUPUR – 765022
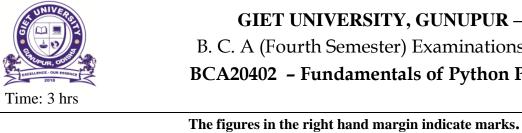B. C. A (Fourth Semester) Examinations, May - 2024
BCA20402 – Fundamentals of Python Programming

Time: 3 hrs   Maximum: 70 Marks

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)   **(1 x 10 = 10 Marks)**

Q. 1 Answer *ALL* questions   CO #   PO #

a. Is Python case sensitive when dealing with identifiers?   CO1   PO1
    i.   Yes   ii.   No
    iii.   Machine dependent   iv.   None of the mentioned

b. What is the output of the following snippet?   CO1   PO1
print (0.1 + 0.2 == 0.3)
    i.   True   ii.   False
    iii.   Error   iv.   Machine dependent

c. Which of the following statements create a dictionary?   CO2   PO1
    i.   d = {}   ii.   d = {"john":40, "peter":45}
    iii.   ) d = {40:"john", 45:"peter"}   iv.   All of the above

d. What will be the output of the following Python code?   CO2   PO1
>>>t = (1,2,4,3)
>>>t[1:3]
    i.   (1,2)   ii.   (1,2,4)
    iii.   (2,4)   iv.   (2,4,3)

e. Which of the following is a Python tuple?   CO1   PO1
    i.   [1, 2, 3]   ii.   (1, 2, 3)
    iii.   {1, 2, 3}   iv.   None of the above

f. for i in range (0,5):   CO3   PO1
    print(i)
    i.   0,1,2,3,4   ii.   0,1,2,3,4,5
    iii.   1,2,3,4,5   iv.   None of these

g. Which of the following is a valid for loop in Python?   CO3   PO1
    i.   for(i=0; i < n; i++)   ii.   for i in range(0,5):
    iii.   for i in range(0,5)   iv.   for i in range(5)

h. Python supports the concept of class and object   CO4   PO1
    i.   True   ii.   False
    iii.   Can't say   iv.   None of the above

i. In python a class is declared using which of the following keyword   CO4   PO1
    i.   Def   ii.   Class
    iii.   for   iv.   _class_

j. When is the finally block executed?   CO4   PO1
    i.   When there is no exception   ii.   When there is an exception
    iii.   When condition are satisfied   iv.   Always

PART – B: (Short Answer Questions)   **(2 x 10 = 20 Marks)**

Q.2. Answer *ALL* questions

		CO #	PO #
a.	How a string can be declared in python?	CO1	PO1
b.	What are bitwise operators in python?	CO1	PO2
c.	What is the difference between list and tuple in python?	CO2	PO1
d.	How list can be constructed in python give with an example?	CO2	PO1
e.	Write a program to print the calendar or the year 2024.	CO2	PO1
f.	What is the use of break in loop give with an example?	CO3	PO2
g.	Define lambda function in python.	CO3	PO1
h.	What is _init_ in python?	CO3	PO1
i.	Recall reduce() in python.	CO4	PO1
j.	What is Zero Division Error in python?	CO4	PO2

PART – C: (Long Answer Questions)   **(10 x 4 = 40 Marks)**

Answer *ALL* questions

		Marks	CO #	PO #
3.a.	What are the features and applications of Python?	5	CO1	PO1
b.	What is a data type? List out the types of data types with example.	5	CO1	PO2
	(OR)			
c.	What is comment line in python and recall various approaches of adding comment lines in python with suitable example?	5	CO1	PO2
d.	Recall the rules and regulation to declare an identifier in python.	5	CO1	PO3
4.a.	Enumerate the Strings and its methods with example.	5	CO2	PO1
b.	Define Variable and mention rules for choosing names of Variable.	5		
	(OR)			
c.	Write a program to swap two numbers using assignment operator in python.	5	CO2	PO2
d.	List various kind of bitwise operators in python.	5	CO2	PO3
5.a.	Explain the syntax of the following statements and example programs (i) For loop (ii) While loop	5	CO3	PO2
b.	Write a python program to check the number is palindromic number or not.	5	CO3	PO1
	(OR)			
c.	What is module in python? Recall the procedure to create a module with suitable example.	5	CO3	PO1
d.	Write a python program to find the given year is leap or not.	5	CO3	PO2
6.a	Write a program to create a class called student and add the following members: (i) Name of the student, roll number, dues (ii) Add two methods called getdata() and putdata() to manipulate the members of the class. (iii) Finally create an instance for the class student and print the student details	10	CO4	PO1
	(OR)			
b.	Compare class and object with python code.	5	CO4	PO1
c.	Recall the term encapsulation.	5	CO4	PO1

--- End of Paper ---