



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16
End Semester Examination: April 2024
Faculty: Science and Technology

Program: BCA(Science)

Semester:IV

SET: B

Program (Specific): BCA(Science)

Course Type:

Class: SYBCA(Science)

Max.Marks: 70

Name of the Course:Object oriented programming in Python

Course Code: 23-BCA-242

Time: 3Hr

Paper:

Instructions to the candidate:

- 1) *There are 4 sections in the question paper. Write each section on a separate page.*
- 2) *All Sections are compulsory.*
- 3) *Figures to the right indicate full marks.*

SECTION: A

Q1) a) Multiple Choice Question

[5x1=5]

- I. Which brackets are used to access dictionary elements?
A. [] B. { } C. () D. < >
- II. Suppose $A=\{1,2,3,4\}$ and $B=\{2,4,6,8\}$ what is $(A|B)$?
A. {2,4} B. {1,2,2,3,4,4,6,8}
C. {1,2,3,4,6,8} D. None of the above
- III. How do we import tkinter in a python program?
A. import tkinter B. import tkinter as t
C. from tkinter import D. All of the above
- IV. To begin Slicing from the end of the string, which of the following is used in python?
A. indexing B. negative indexing
C. begin with 0th index D. Escape characters
- V. Which of the following keywords marks the beginning of function block?
A. fun B. define C. def D. function

b) Define or Explain .

[5x1=5]

- I. What will be the output of
`>>>m = [[x, x + 1, x + 2] for x in range(0, 3)]`Python code?
- II. Explain dict.items() built-in function in python.
- III. How to create a class in python?
- IV. What is an exception in python?
- V. Define the term slicing list.

SECTION: B

Q2) short answer questions. (Attempt any 5)

[5x3=15]

- I. Which are basic tuple operations explained with suitable examples.
- II. What is the use of constructor and destructor?
- III. Write a python program to generate and print a dictionary that contains a number (between 1 and n) in the form of (x,x*x)
- IV. Which are different conditional statements? Explain any two.
- V. Write any three functions of the math module with examples.
- VI. What are logical operators in python?

SECTION: C

Q3) Short answer questions. (Attempt any 5)

[5x4=20]

- I. Explain the use of try, except, finally, and else blocks in exception handling.
- II. What are standard built in exceptions? Explain with examples.
- III. Write a python program to find the sum of Natural numbers.
- IV. State any four functions of the time module.
- V. Write a Python program to count the occurrences of each word in a given sentence.
- VI. Write a python program to perform different set operations.
- VII. What is the string slice? Explained with an example.

SECTION: D

Q4) Long answer type questions. (Attempt any 5)

[5x5=25]

- I. Write methods to update and Delete the Dictionary with examples.
- II. Which are different ways to import modules in python?
- III. Explain any three widgets available in Tkinter in brief.
- IV. Write a python program to create a dictionary with key as first character and value as words starting with that character.
- V. Difference between Generator function and Normal function.
- VI. Which method will be used to traverse the Directory tree? Explain with examples.
- VII. Write note on slicing of list with example.