MARWADI UNIVERSITY

Faculty of Technology

[COMPUTER ENGINEERING]   [PROGRAMMING WITH PYTHON]

SEM: 7   MU FINAL EXAM   DECEMBER: 2022

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Subject: - (Programming with Python) (01CE1705)   Date:- 16/12/2022

Total Marks:-100   Time:- 10.30 am - 1.30 pm

Instructions:
1. **All Questions are Compulsory.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Question: 1.

(a) Objective MCQ   (No. of Questions 10)   [10]
   i. On encountering a _____ error, the interpreter does not execute the program unless we rectify errors, save and return the programs.
      A. Syntax error   B. Logical error   C. Runtime error   D. All of the above
   ii. The base class for all user-defined exceptions is _____
      A. ExceptionInherit   B. ExceptionBase   C. Exception   D. BaseException
   iii. Which of the following declaration is incorrect?
      A. _x=2   B. __x=10   C. __x__=10   D. None of these
   iv. The expression a{5} will match _____ characters with the previous regular expression.
      A. 5 or less   B. Exactly 5   C. 5 or more   D. Exactly 4
   v. What happens when '1' == 1 is executed?
      A: we get a True   B. TypeError occurs   C. ValueError occurs   D. None of these
   vi. What will be output of this expression: 'p' + 'q' if '12'.isdigit() else 'r' + 's'
      A. pq   B. rs   C. pqrs   D. pq12
   vii. Where is function defined?
      A: Module   B. Class   C. Another function   D. All of the mentioned
   viii. What is the use of "w" in file handling?
      A. Read   B. Write   C. Append   D. None of the mentioned
   ix. _____ is used to create an object.
      A. Class   B. Constructor   C. User-defined functions   D. In-built functions
   x. Which of the following statements is used to create an empty set in Python?
      A. ( )   B. [ ]   C. { }   D. set()

(b) Short Que. (answer in one sentence: No. of Questions 10)   [10]
   i. When will the else part of try-except-else be executed? The else part of try-except-else is executed when no exception occurs in the try block.
   ii. A variable that is defined inside a method and belongs only to the current instance of a class is known as? Instance variable
   iii. Can we write if/else into one line in python? Yes, using the ternary conditional expression.
   iv. What will be the output of the following Python code: print("Welcome to Python".split()) ['Welcome', 'to', 'Python']
   v. "What will be the value of the following Python expression?
      4 + 3 % 5" 7
   vi. Which function is used to close a file in python? close()
   vii. What is Instantiation in terms of OOP terminology? Creating an instance of a class, i.e., an object.
   viii. "What will be the output of the following Python code snippet if x=4?
      print(x<<2)" 16

ix. Python supports the creation of anonymous functions at runtime, using a construct called
___lambda___

x. If a={5,6,7}, what happens when a.add(5) is executed? No change, as sets do not allow duplicate elements, and 5 is already in the set.

Question: 2.

(a) Explain any four String operations in python with syntax and suitable examples. [08]

(b) Explain eight arithmetic operators in python with suitable examples. [08]

OR

(b) Explain inbuilt data structures in python with suitable examples. [08]

Question: 3.

(a) Explain different variations of for loop with syntax and suitable examples. [08]

(b) Explain use of break in loop manipulation in python with suitable examples. [04]

(c) Explain default arguments in functions with syntax and suitable examples. [04]

OR

(a) Explain execution process of While-Else loop with syntax and suitable examples. [08]

(b) Explain use of continue in loop manipulation in python with suitable examples. [04]

(c) Explain lambda functions with syntax and suitable examples. [04]

Question: 4.

(a) Explain list manipulation in python with suitable examples. [08]

(b) Explain use of tuple data structure with suitable examples. [08]

OR

(a) Explain dictionary manipulation in python with suitable examples. [08]

(b) Explain difference between List, Tuple and Dictionary with suitable examples. [08]

Question: 5.

(a) Explain Public, Private and Protected access specifiers in python class definition with suitable examples and syntax. [06]

(b) Explain variations of Match function of Regular express with suitable examples. [06]

(c) Write and explain python code to read file line by line. [04]

OR

(a) Explain use of init() method of Class in python with suitable examples. [06]

(b) Explain variations of Search function of Regular express with suitable examples. [06]

    (c) Explain use of Seek function in python with syntax and suitable examples.   [04]

Question: 6.

    (a) Explain array creation in numpy with syntax and suitable examples.   [08]

    (b) Explain use of Pandas library in python with suitable examples.   [04]

    (c) Explain Pie Chart plotting using Matplotlib with suitable example and syntax.   [04]

OR

    (a) Explain array manipulation in numpy with syntax and suitable examples.   [08]

    (b) Explain data manipulation in Pandas with suitable examples.   [04]

    (c) Explain Line Chart plotting using Matplotlib with suitable example and syntax.   [04]

---Best of Luck---

– Bloom'S Taxonomy Report –

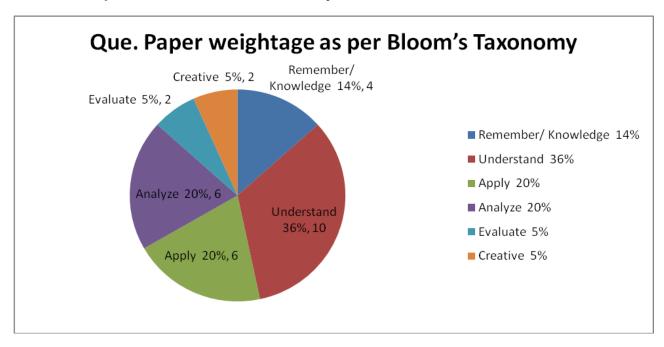**Sub: Programming with Python (01CE1705)**
Sem. 7
Branch: Computer Engineering

Que. Paper weightage as per Bloom's Taxonomy

LEVEL	% of weightage	Question No.	Marks of Que.
Remember/Knowledge	12	1, 2	20
Understand	30	2 (A), 2 (B), 2 (B) OR, 3 (B), 3 (A) OR, 4 (A), 6 (B) OR, 6 (C) OR	52
Apply	23	3 (A), 3 (C), 3 (B) Or, 3 (C) OR, 5 (A), 5 (A) OR, 6 (A) OR,	40
Analyze	26	4 (A) OR, 5 (B), 5 (B) OR, 6 (A), 5 (C), 5 (C) OR, 6 (B), 6 (C)	44
Evaluate	5	4 (B) OR	8
Higher order Thinking/ Creative	5	4 (B)	8

Chart/Graph of Bloom's Taxonomy