



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor of Vocation Degree Examination – July 2020
II Semester

Class : I B. Voc
Major : Artificial Intelligence & Machine Learning

Time : 3 hours
Max. Marks : 100

19VAIC04 Programming in Python

Part A
Choose the Correct Answer

10 x 1 = 10

1. What is the output of the following code?
`>>>print9//2`
a. 4.5 b. 4.0 c. .4 d. None of the above
2. The format function when applied on a string returns
a. List b. Bool c. Int d. String
3. What is the result of `cmp(3, 1)`?
a. 1 b. 0 c. True d. False
4. Which keyword is used for function?
a. Fun b. Define c. Def d. Function
5. What will be the output of the following Python code?
`>>>print("Hello {name1} and {name2}".format(name1='foo', name2='bin'))`
a. Hello foo and bin b. Hello {name1} and {name2}
c. Error d. Hello and
6. How can we swap two numbers `a = 10, b = 20` in python without using third variable?
a. `a = b b = a`
b. `a,b=b,a` c. both a and b d. `b=a a=b`
7. The list1 is `[2, 33, 222, 14, 25]`, What is `list1[-1]`?
a. 14 b. 33 c. 25 d. 2
8. What will be the output of the following Python code?
`>>>t=(1,2,4,3)`
`>>>t[1:3]`
a. (1, 2) b.(2, 4) c. (1, 2, 4) d. (2, 4, 3)
9. `d = {"john":40, "peter":45}`, to delete the entry for "john" what command do we use?
a. `d.delete("john":40)` b. `d.delete("john")`
c. `del d["john"]` d. `del d("john":40)`
10. Name the error that doesn't cause program to stop/end, but the output is not the desired result or is incorrect.
a. Syntax error b. Runtime error
c. Logical Error d. All the above

Part B

5x6=30

Answer ALL questions

Answer should not exceed 400 words or two page

- 11.a. Explain the basic data types available in Python with examples.
(or)
- 11.b. Write Python code to find the factorial of a number using function.
- 12.a. Discuss the following special characters in detail.
i) \d ii) \w iii) \b iv) {m, n} v) \ vi)?
(or)
12. b. Write a short notes on function with parameters and arguments.
- 13.a. Discuss the following list functions.
i) len() ii) sum() iii) any() iv) all() v) sorted()
(or)
- 13.b.Explain the use of join() and split() string methods with examples.
Describe why strings are immutable with an example.
- 14.a.Write Python program to swap two numbers without using
Intermediate/Temporary variables. Prompt the user for input.
(or)
- 14.b. Explain in detail about the relation between tuples and lists, tuples and
dictionaries in detail.
- 15.a. Discuss the following methods associated with the file object.
i) read() ii) readline() iii) readlines()
iv) writelines() v) append() vi) write()
(or)
- 15.b. Describe the need for catching exceptions using try and except statements.

Part C

5X12=60

Answer ALL questions

Answer should not exceed 800 words or four pages

16. a. Describe Operator and its types in detail with examples.
(or)
- 16.b. Explain the Identifiers, Keywords, Statements, Expressions,
and Variables in Python programming language with examples.
- 17.a. Write a Python Program using function to input information for n number of
Students as given below:
i) Name ii) Registration Number iii) Total Marks
(or)
- 17.b. Explain with example.
i) Recursive function ii) Anonymous function
- 18.a. i) How to create, access and traverse a list?
ii) What is Built in list operators
(or)
- 18.b. Write a note on:
i) Strings are immutable ii) String Slicing.
- 19.a. Explain in brief about Dictionary and discuss the following
dictionary methods with an example.
i) get() ii) keys() iii) pop()
iv) update() v) values() vi) items()
(or)
- 19.b. Elaborate Tuples, Basic and built in tuple functions.
- 20.a. What are the different modes of operating a file? Explain with example.
(or)
- 20.b. Brief about User defined exceptions and built in exceptions with example.
