PADASALAI.NET'S - QUARTERLY MODEL EXAM 2022
HIGHER SECONDARY SECOND YEAR
COMPUTER SCIENCE

Time : 3.00 Hrs **Max Marks : 70**

PART A

Choose the best answer: **15 X 1 = 15**

1 A function definition which calls itself is called
a) User defined function b) Recursive function c) Built-in function d) Derived function

2 Which provides modularity?
a) Data types b) Subroutines c) Abstraction d) Classes

3 Which of the following contain instructions, processing logic and data?
a) Scopes b) Indentation c) Modules d) Access control

4 Which of the following component is defined as the total space required to store certain data and variables for an algorithm?
a) Time part b) Variable part c) Fixed part d) Memory part

5 Python uses the symbols and symbol combinations as ..... in expressions.
a) Literals b) Keywords c) Delimiters d) Identifiers

6 Executable segments that yield the result are .....
a) Operator b) Statements c) Keywords d) Identifiers

7 How many return statement is executed at runtime?
a) 2 b) 3 c) 1 d) Multiple

8 Another name of string index values are
a) Class b) Subscript c) Function d) Arguments

9 What is the output for the following?
sim=['T','E','A','M']
for i in sim:
print (sim[2])
a) T b) E c) A d) M

10 ..... are called as functions of the class.
a) Methods b)Members c) Variables d)Loop

11 Abbreviation of GIS is
a) Global Information System b) Geographic Information System
c) Global Information Source d) Geographic Intelligent System

12 Who developed ER model?
a) Chen b) EF Codd c) Chend d) Chad

13 Class members are accessed through which operator?
a) & b) . c) # d) %

14 The subscript of a string may be :
a) Positive b) Negative c) Both (a) and (b) d) Either (a) or (b)

15 Which statement is generally used as a placeholder?
a) Continue b) Break c) Pass d) Goto

PART – II

Answer any six questions. Question No. 24 is compulsory. **6 X 2 = 12**

16 Write notes on Impure function.

17 What is a pair? Give an example.

18 List different factors in which the time efficiency of an algorithm its measured.

19 What are keywords? Name any four keywords in python?

20 Write a program to display all 3 digit even numbers.

21 What are arguments? What are the types?

22 What will be the output of the given python program?

Str="COMPUTER SCIENCE"

a) print (str*2) b) print (str[0:7)

23 What is the purpose of Destructor?

24 What will be the output of the following snippet?

```
alpha=list (range(65,70))
for x in alpha:
        print (ch(x),end='\t')
```

PART – III

Answer any six questions. Question No. 33 is compulsory. **6 X 3 = 18**

25 Write the algorithmic function definition to find the minimum among 3 numbers.

26 Define Global scope with an example.

27 What are the rules followed while defining python identifier?

28 What will be the output of the following program

```
i=1
while (i<=6):
        for  j in range (1,i):
print(end='\n')
i+=1
```

29 What is the use of find() function? Explain with an example.

30 Define List Comprehensions.

31 What are class members? How do you define it.

32 What is difference between Select and Project command?

33 Write a note floor(), ceil(), sqrt() with an example.

PART – IV

Answer all the questions. **5 X 5 = 25**

34 A) Explain the types of scopes for variable or LEGB rule with example. **(OR)**

B) Differentiate Algorithm and Program.

35 A) Explain the key features and coding of python? **(OR)**

B) Explain while loop with example.

36 A) Explain different types argument used in python with an example. **(OR)**

B) Write the output for the following python commands:

str1="Welcome to Python"

i) print (str)

ii) print (str1[11:17])

iii) print (str1[11:17:2])

iv) print (str1[::4])

v) print (str1[::-4])

37 A) Explain the different set operations supported by python with example. **(OR)**

B) Consider the following tuple declaration:

>>>Mytuple = tuple([x2 for x in range(2,11,2)])**

What will be the output of the following print statements?

i) >>> print(Mytuple[2:3])

ii) >>> print(Mytuple[3:1])

iii) >>> print(Mytuple[:])

38 A) Explain the different types of relationship mapping. **(OR)**

B) Explain the different operators in Relational algebra with suitable examples.