UNIT-1

MULTIPLE CHOICE QUESTIONS

1. Structured programming supports the concept of discarding _____ statement. [CLO-1,L1]

   A. Foreach B. Goto C.Inline D.Step (**Ans: B)**

2. _____ is the world's first programming language. [CLO-1,L1]

   A. Plankalkul B.ALGOL C. C program D. ProLog**(Ans: A)**

3. _____ is the first successful high level programming language. [CLO-1,L1]

   A.C Program b. Fortran c. COBOL D. Anime **(Ans: B)**

   A. Which of the following is true regarding meta programming?[CLO-1,L2]
   B. generates semantic associations
   C. Programs about programs
   D. generates higher-order programs
   E. is used for assembly level manipulations(**Ans: C)**

4. Syntax of Variable-length arguments . [CLO-1,L2]

   A (*arg) B.(arg)

   C. (/arg) D.(#arg) (**Ans A)**

6 What will be the output of the following code?[CLO-1,L2]

```
a=1
while a==1:
        print("Hello World!")
```

A)Hello is printed once B) Hello infinite number of times
C) Hello is not printed at all D) Exception is thrown
Ans B

7 Which of the following remarks about the differences between constructors and destructors are correct ? [CLO-1,L1]
A.Constructors can take arguments but destructors cannot.
B.Constructors can be overloaded but destructors cannot be overloaded.
C.Destructors can take arguments but constructors cannot.

D.Both (a) and (b)

8 According to Bohm-Jacopini, a function is possible by combining subprograms in which three manners? . [CLO-1,L1]

A. Jump, Sequence and Loop

B. Sequence, Function Calls and Subroutines

C. Sequence, Iteration and Selection

D. Iteration, Macros and Branching

(Ans:C)

9. print() is _____[CLO-1,L1]

A. Built-in function, B.anonymous ,
C.Predefined Funcion, D.Keyboard function

Ans:A

10.anonymous function means_____[CLO-1,L2]

A.Function to be defined without any name B.Function to be defined no arguments

C.Function to be defined class name D.Function to be defined object name

Ans:A

11.Predict the output of the following program: [CLO-1,L3]

```
def func(a=18, b=5, c=10):
        print 'a is', a, 'and b is', b, 'and c is', c
func(3, 7)
```

A. 3,7,10 B.5,10,7
B. 5,9,1 D.5,10,3

12.Which of the following is not a basic control structure? [CLO-1,L1]

A. Process

B. Decision

C. Loop

D. Sequential

(Ans:A)

13.Identify the arguments from the following piece of code. [CLO-1,L3]

```
def greet(name,msg):
    print("Hello",name + ', ' + msg)
greet("Monica","Good morning!")
```

A. name, msg B."Hello",name + ', ' + msg

C. Monica, Good morning D. name, Monica

(Ans:C)

14.Identify a procedure call from the following snippet [CLO-1,L2]

A. n=input (n) B. f=input(n) C. input(n) D. f=n

(Ans: C)

15.When will an infinite loop error occur? [CLO-1,L1]

A. When the body of the loop has a static variable
B. when the body of the loop doesn't change the test condition
C. When the body of the loop affects the test condition
D. When the test condition fails

(Ans: B)

16.Structure Programming supports what kind of Approach? [CLO-1,L2]

A.Bottom up B.Top Down

C.Single Approach D.None of these

(Ans: B)

17.Predit the output[CLO-1,L3]

```
class Parent:
  def func1(self):
      print("this 1")
class Parent2:
  def func2(self):
      print("this 2")
class Child(Parent , Parent2):
   def func3(self):
       print("this 3")
ob = Child()
ob.func1()
ob.func2()
```

ob.func3()

A.this 1,this 2,this 3 B.this 2,this 2,this 3

C.this 31,this 2,this 3 D.this is 1,this 2,this 2

(Ans:A)

18Which keyword is used for creating Class in Python?[CLO-1,L1]

A. Class	B. Define
C. def	D. Function

Ans A

19.Which of the following is correct output of this program? [CLO-1,L3]

```
def my_sum(*args):
 return sum(args)
print(my_sum(1, 2, 3))
print(my_sum(1, 2, 3, 4, 5, 6, 7, 8))
```

A.6,36 B.36,36
C 11,10 D.15,10
Ans:A

20.What does the following code print to the console?[CLO-1,L3]

```
if 5 > 10:
    print("fan")
elif 8 != 9:
    print("glass")
else:
    print("cream")
```

A. Fan B. glass C. cream D. glass cream

(Ans: C)

21.Which one of the following is the correct way of calling a function? [CLO-1,L2]

A. function_name() B. call function_name()

C. ret function_name() D. function function_name()

Ans:D

22.What will be the output of the following code?[CLO-1,L3]

```
def outerFun(c,d):
    def innerFun(e, f):
        return e + f
    return innerFun(c, d)
    return c
result = outerFun(10, 5)
print(result)
```

A..10 B.error C.10 d.15
Ans:A

23.What is the output of the following code?[CLO-1,L3]

```
def f():
    global s
    print s
    s = "Python Section"
    print s
# Global Scope
s = "Python is great!"
f()
print s
```

A.Python section Python is great B. Python section Python section

C. Error: local variable ‘s’ referenced before assignment

D.Python is great Python section

(Ans: D)

24.How to Create a function named my_function. [CLO-1,L3]

```
print("Hello from a function")
```

A. def my_function() B. my_function()
C. def myfunction() D.def My_function();

Ans:A

25.If you do not know the number of keyword arguments that will be passed into your function, there is a prefix you can add in the function definition, which prefix? [CLO-1,L3]

```
def my_function(-----kid):
  print("His last name is " + kid["lname"])
```

A.*** B**

C.**/ D.&**

Ans B

26.What is the correct syntax to create a class named Student that will inherit properties and methods from a class named Person? [CLO-1,L2]

```
class ----------:
```

A.*Student(Person) B.//Student(Person)

C.Student(Person): D. Class Student(Person)

Ans D

27.We have used the Student class to create an object named x.

What is the correct syntax to execute the printname method of the object x? [CLO-1,L3]

```
class Person:
  def __init__(self, fname):
    self.firstname = fname
  def printname(self):
    print(self.firstname)
class Student(Person):
  pass
x = Student("Mike")
```

A.x.printname() B.x.PrinName();

C.x.printfname() C.x(printname());

Ans: A

28.What is the correct syntax to import a module named "mymodule"?[CLO-1,L1]

---------- mymodule

A.import B.include

C.inheret D.insert

Ans A

29.Display the sum of 5 + 10, using two variables: x and y. [CLO-1,L3]

-------=-----

y = 10

print(x y)

A.x=5 B.x=10

C.y=5 D.x=y

Ans A

30.The following code example would print the data type of x, what data type would that be? [CLO-1,L3]

x = "Hello World"

print(type(x))

A.str* B. <class 'str'>

C.string D.strs

Ans B

31.The following code example would print the data type of x, what data type would that be?

x = ["apple", "banana", "cherry"][CLO-1,L2]

print(type(x))

A.**list** **B.**print

C.int D.str

Ans A

32.Use the len method to print the length of the string. [CLO-1,L3]

x = "Hello World"

print(---------(x))

A.length B.**len**

C.lan D.long

Ans B

33.Python is a popular programming language. It was released in----------[CLO-1,L1]

A.1991 B.1998

C.1992 D.1990

Ans A

34.---------- refers to the spaces at the beginning of a code line. [CLO-1,L1]

A.Indentation B.input

C.Inherit D.identification

Ans A

35.Insert the missing part of the code below to output --------"Hello World".[CLO-1,L1]

A.Print("Hello World") B.Print f("Hello World")

C.Print("Hello "): D.Printf("Hello World"):

Ans A

36.How do you insert COMMENTS in Python code? [CLO-1,L2]

A./*This is a comment*/ B./*This is a comment*/

C./*This is a comment*/ D.#This is a comment
Ans D
30.What is the correct way to create a function in Python? [CLO-1,L2]

A.Function myfunction(): B.def myFunction()
C.Create myFunction(): D.def myFunction():
Ans: D

37.Use the p1 object to print the value of x: [CLO-1, L3]
class MyClass:
x = 5
p1 = MyClass()
print(-------)
A.p1(x) B. p1.x
C.p1*x D. p1.x;
Ans B
38. How many independent objects can be returned at same time from a function?[CLO-1,L1]

A) 1 B) 2

C) 3 D) 4

(Ans: A)

39.Identify the option that represents call by value .[CLO-1,L2]

Int a=10, b=20;

A,Swap(&a,&b) B.Swap(a,b)

C,Swap(*a,*b) D.Swap()

(Ans: B)

40.Which keyword is used for function in Python?[CLO-1,L1]

A) Fun B) Define

C) def D) Function

(Ans: C)

41.Which of the following Items are present the function header?[CLO-1,L1]

A. function name only B. function name and parameter list

C. parameter list only D. return value

(Ans: B)

42.What is the output of the following? [CLO-1,L3]

```
x = "abcdef"
i = "i"
while i in x:
    print(i, end=" ")
```

A)no output B) i i i i i i … c) a b c d e f D) abcdef

(Ans:A)

43. Objects are data structures that contain _____[CLO-1,L1]

A.Variables and properties B.Indexes and attributes

C.Attributes and operations D.Only attributes

(Ans: C)

44. Which of the following best defines a class?[CLO-1,L2]

A) Parent of an object B) Instance of an object

C) Blueprint of an object D) Scope of an object

45.If a function can perform more than 1 type of tasks, where the function name remains same, which feature of OOP is used here?[CLO-1,L1]

A) Encapsulation B) Inheritance

C) Polymorphism D) Abstraction

(Ans:C)

46Which access specifier is usually used for data members of a class?[CLO-1,L1]

A) Private B) Default

C) Protected D) Public

(Ans:D)

47.Which specifier should be used for member functions of a class to avoid inheritance?[CLO-1,L1]

A) Private B) Default

C) Protected D) Public

(Ans: A)

48.Which among the following best defines abstraction?[CLO-1,L2]

A) Hiding the implementation B) Showing the important data

C) Hiding the important data D) Hiding the implementation and showing only the features

(Ans: D)

50. How the constructors and destructors can be differentiated?[CLO-1,L1]

A) Destructor have a return type but constructor doesn't

B) Destructors can't be defined by the programmer, but constructors can be defined

C) Destructors are preceded with a tilde symbol, and constructor doesn't

D) Destructors are same as constructors in syntax

(Ans:C)

51.-----comprises both data members and methods

A.Class B.Instance
C.Field D.Data
Ans A

PART B: 4 marks:

1. Write notes on the sub-fields of study under Programming language theory [CLO-1,L-1]
2. Write a python program with an add() function to return the sum of two integers. [CLO-1,L-3]
3. Write a python program to generate factorial of 'n' numbers.[CLO-1,L-3]
4. Write a python program to check palindrome using python procedure.[CLO-1,L-3]
5. What is structured programming? How does it minimize the complexity? [CLO-1,L-1]
6. Summarize the ways in which statements within a specific control structure are executed [CLO-1,L-2]
7. List the verbal Guidelines of structured programming [CLO-1,L1]
8. Compare structured programming and Procedural programming [CLO-1,L-2]
9. Outline the working of bounded iteration with Python code snippets. [CLO-1,L2]
10. Write a program to create list and print the values. (CLO-1, L4)
11. Elaborate on Variables and its types(CLO-1, L2)
12. Write a program to implement constructors and destructors(CLO-1, L1)
13. What are the Functions declaration used in procedural programming language ? Give example (CLO-1, L1)

14. Write the program to implement recursion.(CLO-1, L1)
15. Write a program to implement Fibonacci series using python. (CLO-1, L3)
16. Write down the basic Steps to design a Class.
17. Write a program to check prime numbers using class and objects.(CLO-1, L3)
18. Define Encapsulation. List any two of its advantages(CLO-1, L1)
19. What is Data abstraction and explain its types(CLO-1, L1)(CLO-1, L2)
20. Define Inheritance(CLO-1, L1)

PART C: 12Marks:

1. There are 50 computers available in computer programming lab where each computers are used six hours per day. Write a Python program using classes and objects that contain getDetail() for getting input from user,calculatesecondperDay() for calculating the usage of each computer in seconds per day, calculateminutesperWeek() for calculating the usage of each computer in minutes per week ,calculatehourperMonth() for calculating usage of each computer in hour per month and calculatedayperYear() for calculating usage of each computer in day per yearList all the Components of structured programming language (CLO-1, L3)
2. Write a python program to create three classes namely, rectangle, square and cube to find the area and perimeter, using classes and objects.(CLO-1, L3)
3. Develop a python program that get the student details such as student id, student name in class student and get the mark1, mark2 in class subject. Create a new class result and inherit the properties from student and subject class. Display all the details from result class(CLO-1, L3)
4. Explain in detail about Control structures of structured programming language (CLO-1, L5)
5. (a)Write a python program to create list, dictionary and tuple and access all three items using while and for loop (CLO1-L3)
   (b)Write a program to implement bubble sort. (CLO1-L3)
6. Explain in detail Structured programming in Python(CLO-1, L1)
7. Discuss the features of procedural programming(CLO-1, L6)

8. Define Function and recursion and explain them in detail (CLO-1, L1)(CLO-1, L2)
9. List out the Features of object oriented programming(CLO-1, L4)
10. Define Data abstraction and list out its types in detail (CLO-1, L1)(CLO-1, L4)
11. Write a python program to get square and cube of a number using inheritance concept.(CLO1-L3)