**Q-1. Which of the following represents a distinctly identifiable entity in the real world?**

**A.** A class   
**B.** An object   
**C.** A method  
**D.** A data field

**Q-2. Which of the following represents a template, blueprint, or contract that defines objects of the same type?**

**A.** A class   
**B.** An object  
**C.** A method  
**D.** A data field

**Q-3. Which of the following keywords mark the beginning of the class definition?**

**A.** def  
**B.** return  
**C.** class   
**D.** All of the above.

**Q-4. Which of the following is required to create a new instance of the class?**

**A.** A constructor   
**B.** A class  
**C.** A value-returning method  
**D.** A None method

**Q-5. Which of the following statements is most accurate for the declaration x = Circle()?**

**A.** x contains an int value.  
**B.** x contains an object of the Circle type.   
**C.** x contains a reference to a Circle object.  
**D.** You can assign an int value to x.

**Q-6. What will be the output of the following code snippet?**

class Sales:

def \_\_init\_\_(self, id):

self.id = id

id = 100

val = Sales(123)

print (val.id)

**A.** SyntaxError, this program will not run  
**B.** 100  
**C.** 123 -Y  
**D.** None of the above

**Q-7. Which of the following statements are correct? - pending**

**A.** A reference variable is an object.  
**B.** A reference variable refers to an object.  
**C.** An object may contain other objects.  
**D.** An object can contain the references to other objects.

**Q-8. What will be the output of the following?**

s = "\t\tWelcome\n"

print(s.strip())

**A.** \t\tWelcome\n  
**B.** Welcome\n  
**C.** \t\tWELCOME  
**D.** Welcome

**Q-9. What will be the output of the following code snippet?**

class Person:

def \_\_init\_\_(self, id):

self.id = id

sam = Person(100)

sam.\_\_dict\_\_['age'] = 49

print (sam.age + len(sam.\_\_dict\_\_))

**A.** 1  
**B.** 2  
**C.** 49  
**D.** 50  
**E.** 51

**Q-10. Which of the following can be used to invoke the \_\_init\_\_ method in B from A, where A is a subclass of B?**

**A.** super().\_\_init\_\_()   
**B.** super().\_\_init\_\_(self)   
**C.** **B.**\_\_init\_\_()   
**D.** **B.**\_\_init\_\_(self)

**Q-11. Which of the following statements are correct about the given code snippet?**

class A:

def \_\_init\_\_(self, i = 0):

self.i = i

class B(A):

def \_\_init\_\_(self, j = 0):

self.j = j

def main():

b = B()

print(b.i)

print(b.j)

main()

**A.** Class B inherits A, but the data field “i” in A is not inherited.  
**B.** Class B inherits A, thus automatically inherits all data fields in **A.**    
**C.** When you create an object of B, you have to pass an argument such as B(5).  
**D.** The data field “j” cannot be accessed by object b.

**Q-12. Which of the following statements is true? -- pending**

**A.** By default, the \_\_new\_\_() method invokes the \_\_init\_\_ method.  
**B.** The \_\_new\_\_() method is defined in the object class.  
**C.** The \_\_init\_\_() method is defined in the object class.  
**D.** The \_\_str\_\_() method is defined in the object class.  
**E.** The \_\_eq\_\_(other) method is defined in the object class.

**Q-13. What will be the output of the following code snippet?**

class A:

def \_\_init\_\_(self):

self.calcI(30)

print("i from A is", self.i)

def calcI(self, i):

self.i = 2 \* i;

class B(A):

def \_\_init\_\_(self):

super().\_\_init\_\_()

def calcI(self, i):

self.i = 3 \* i;

b = B()

**A.** The \_\_init\_\_ method of only class B gets invoked.  
**B.** The \_\_init\_\_ method of class A gets invoked and it displays “i from A is 0”.  
**C.** The \_\_init\_\_ method of class A gets invoked and it displays “i from A is 60”.  
**D.** The \_\_init\_\_ method of class A gets invoked and it displays “i from A is 90”.

**Q-14. What will be the output of the following code snippet?**

class A:

def \_\_init\_\_(self):

self.calcI(30)

def calcI(self, i):

self.i = 2 \* i;

class B(A):

def \_\_init\_\_(self):

super().\_\_init\_\_()

print("i from B is", self.i)

def calcI(self, i):

self.i = 3 \* i;

b = B()

**A.** The \_\_init\_\_ method of only class B gets invoked.  
**B.** The \_\_init\_\_ method of class A gets invoked and it displays “i from B is 0”.  
**C.** The \_\_init\_\_ method of class A gets invoked and it displays “i from B is 60”.  
**D.** The \_\_init\_\_ method of class A gets invoked and it displays “i from B is 90”.

Click to check the answer.

**Q-15. Which of the following statements can be used to check, whether an object “obj” is an instance of class A or not?**

**A.** obj.isinstance(A)  
**B.** A.isinstance(obj)  
**C.** isinstance(obj, A)  
**D.** isinstance(A, obj)

**Q-16. What relationship correctly fits for University and Professor?**

**A.** association  
**B.** composition  
**C.** inheritance   
**D.** All of the above

**Q-17. What relationship is suited for Course and Faculty?**

**A.** association  
**B.** composition  
**C.** inheritance  
**D.** None of the above

**Q-18. What relationship is best suited for Employee and Person?**

**A.** association  
**B.** composition  
**C.** inheritance  
**D.** None of the above

**Q-19. What relationship is best suited for House and Door?**

**A.** association -Y  
**B.** composition  
**C.** inheritance  
**D.** All of the above

**Q-20. What relationship is appropriate for Fruit and Papaya?**

**A.** association  
**B.** composition  
**C.** inheritance  
**D.** All of the above

**Q-1. What is the default return value for a function that does not return any value explicitly?**

**A.** None   
**B.** int  
**C.** double  
**D.** public  
E. null

**Q-2. Which of the following items are present in the function header?**

**A.** function name  
**B.** function name and parameter list   
**C.** parameter list  
**D.** return value

**Q-3. Which of the following enclose the input parameters or arguments of a function?**

**A.** brackets  
**B.** parentheses   
**C.** curly braces  
**D.** quotation marks

**Q-4. Which of the following keywords marks the beginning of the function block?**

**A.** fun   
**B.** define  
**C.** def  
**D.** function

**Q-5. What is the name given to that area of memory, where the system stores the parameters and local variables of a function call?**

**A.** a heap -Y  
**B.** storage area  
**C.** a stack  
**D.** an array

**Q-6.  Which of the following function definition does not return any value?**

**A.** a function that prints integers from 1 to 100.  
**B.** a function that returns a random integer from 1 to 100.  
**C.** a function that checks whether the current second is an integer from 1 to 100. -Y  
**D.** a function that converts an uppercase letter to lowercase.

**Q-7.  Which of the following statements correctly represent the function body in the given code snippet?**

def f(number):

# Missing function body

print(f(5))

**A.** return “number”  
**B.** print(number)  
**C.** print(“number”)  
**D.** return number -Y

**Q-8.  What is the output of the following code snippet?**

def func(message, num = 1):

print(message \* num)

func('Welcome')

func('Viewers', 3)

**A.** Welcome  
Viewers  
**B.** Welcome  
ViewersViewersViewers  
**C.** Welcome  
Viewers,Viewers,Viewers -Y  
**D.** Welcome

**Q-9.  What is the output of the following code snippet?**

def myfunc(text, num):

while num > 0:

print(text)

num = num - 1

myfunc('Hello', 4)

**A.** HelloHelloHelloHelloHello  
**B.** HelloHelloHelloHello -Y  
**C.** invalid call  
**D.** infinite loop

**Q-10. Which of the following would you relate to a function call made with an argument passed as its parameter?**

**A.** function invocation  
**B.** pass by value   
**C.** pass by reference -Y  
**D.** pass by name

**Q-11. What is the output of the following code snippet?**

def func(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

func(y = 2, x = 1)

**A.** 1 3  
**B.** 2 3  
**C.** The program has a runtime error because x and y are not defined.  
**D.** 3 2  
**E.** 3 3 -Y

**Q-12. What is the output of the following code snippet?**

num = 1

def func():

num = 3

print(num)

func()

print(num)

**A.** 1 3  
**B.** 3 1 -Y  
**C.** The program has a runtime error because x is not defined.  
**D.** 1 1  
**E.** 3 3

**Q-13. What is the output of the following code snippet?**

num = 1

def func():

num = num + 3

print(num)

func()

print(num)

**A.** 1 4  
**B.** 4 1  
**C.** The program has a runtime error because the local variable ‘num’ referenced before assignment. -Y  
**D.** 1 1  
**E.** 4 4

**Q-14. What is the output of the following code snippet?**

num = 1

def func():

global num

num = num + 3

print(num)

func()

print(num)

**A.** 1 4  
**B.** 4 1  
**C.** The program has a runtime error because the local variable ‘num’ referenced before assignment.  
**D.** 1 1  
**E.** 4 4 -Y

**Q-15. What is the output of the following code snippet?**

def test(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

test()

**A.** 1 3  
**B.** 3 1  
**C.** The program has a runtime error because x and y are not defined.  
**D.** 1 1  
**E.** 3 3

**Q-16. What is the output of the following code snippet?**

def test(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

test(2, 1)

**A.** 1 3  
**B.** 2 3  
**C.** The program has a runtime error because x and y are not defined.  
**D.** 3 2 -Y  
**E.** 3 3

**Q-17. What is the output of the following code snippet?**

def test(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

test(y = 2, x = 1)

**A.** 1 3  
**B.** 2 3  
**C.** The program has a runtime error because x and y are not defined.  
**D.** 3 2  
**E.** 3 3 -Y

**Q-18. Which of the following function headers is correct?**

**A.** def f(a = 1, b):  
**B.** def f(a = 1, b, c = 2):  
**C.** def f(a = 1, b = 1, c = 2):   
**D.** def f(a = 1, b = 1, c = 2, d):

**Q-19. What is the output of the following code snippet?**

exp = lambda x: x \*\* 3

print(exp(2))

**A.** 6  
**B.** 222  
**C.** 8   
**D.** None of the above

**Q-20. What is the output of the following code snippet?**

myList = [lambda x: x \*\* 2,

lambda x: x \*\* 3,

lambda x: x \*\* 4]

for f in myList:

print(f(3))

**A.** 27  
81  
343  
**B.** 6  
9  
12  
**C.** 9   
27  
81  
**D.** 8  
27  
64