**MCQ Test – 1**

**Python**

1. Is Python case sensitive when dealing with identifiers or variable names?  
   a. Yes  
   b. No  
   c. Machine Dependent  
   d. None of the above  
  
2. Which of the following is an invalid statement?  
   a. abc = 1000000  
   b. a b c = 1000 200 3000  
   c. a,b,c = 1000,200, 3000  
   d. a\_b\_c = 1,000,000  
  
3. Which of the following cannot be variable?  
   a. \_\_init\_\_  
   b. in  
   c. it  
   d. on  
  
4. What is output of below code?  
   myStr = "Hello"  
   print(myStr[:2])  
  
   a. He  
   b. llo  
   c. llohe  
   d. Index Error  
  
5 What will be the output of the following code :  
    print(type(type(int))) #MetaClass  
    a. type 'int'  
    b. type 'type'  
    c. Error  
    d. 0  
     
6. What is the output of the following program :  
y = 8  
z = lambda x : x \* y  
print z(6)  
A. 48  
B. 14  
C. 64  
D. None of the above

7. What is the output of the following program :  
import re  
sentence = 'horses are fast'  
regex = re.compile('(?P<animal>w+) (?P<verb>w+) (?P<adjective>w+)')  
matched = re.search(regex, sentence)  
print(matched.groupdict())  
A  
{‘animal’: ‘horses’, ‘verb’: ‘are’, ‘adjective’: ‘fast’}  
B  
(‘horses’, ‘are’, ‘fast’)  
C  
‘horses are fast’  
D  
‘are'  
  
8. What is the output of the following program :  
print("Hello World"[::-1])  
A. dlroW olleH  
B. Hello Worl  
C. d  
D. Error  
  
9. What is the output of the following program :  
print(0.1 + 0.2 == 0.3)  
(A) True  
(B) False  
(C) Machine dependent  
(D) Error  
  
10. Given a string s = “Welcome”, which of the following code is incorrect?  
A. print(s[0])  
B. print(s.lower())  
C. s[1] = ‘r’  
D. print(s.strip())

11. Which of the following Python code will print True?

a = foo(2)

b = foo(3)

print(a < b)

a)

class foo:

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

self.x = x

def \_\_lt\_\_(self, other):

if self.x < other.x:

return False

else:

return True

b)

class foo:

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

self.x = x

def \_\_less\_\_(self, other):

if self.x > other.x:

return False

else:

return True

c)

class foo:

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

self.x = x

def \_\_lt\_\_(self, other):

if self.x < other.x:

return True

else:

return False

d)

class foo:

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

self.x = x

def \_\_less\_\_(self, other):

if self.x < other.x:

return False

else:

return True  
  
12. What is the output of the following program :

def myfunc(a):  
    a = a + 2  
        a = a \* 2  
    return a  
   
print(myfunc(2))

(A) 8  
(B) 16  
(C) Indentation Error  
(D) Runtime Error

13.What is the output of the following program :

print('{0:.2f}'.format(1 / 3))  
(A) 0.33  
(B) 33.3333%  
(C) 0.333333  
(D) 33.33  
  
14. Which function overloads the >> operator?  
A. \_\_lshift\_\_()  
B. \_\_gt\_\_()  
C. \_\_ge\_\_()  
D. \_\_rshift\_\_()

15. What is the output of the following program?

D = {1 : 1, 2 : '2', '1' : 1, '2' : 3}  
D['1'] = 2  
print(D[D[D[str(D[1])]]])

a) 2  
b) 3  
c) ‘2’  
d) KeyError  
  
16. What is the output of the following of code?  
dict ={}  
print(all(dict))

a) { }  
b) False  
c) True  
d) An exception is thrown  
  
17. What is the output of the following program?

L1 = list()  
L1.append([1, [2, 3], 4])  
L1.extend([7, 8, 9])  
print(L1[0][1][1] + L1[2])

a) Type Error: can only concatenate list (not “int”) to list  
b) 12  
c) 11  
d) 38

18. What will be the output of the following Python code?  
  
def f(x):  
    def f1(a, b):  
        print("hello")  
        if b==0:  
            print("NO")  
            return  
        return x(a, b)  
    return f1

@f  
def f(a, b):  
    return a%b

>>> f(4,0)

a)  
  
    hello  
    NO

b)  
  
    hello  
    Zero Division Error

c) NO  
d) hello  
  
19. What will be the output of the following Python code?  
  
l = [2, 3, [4, 5]]  
l2 = l.copy()  
l2[0] = 88  
>>> l  
>>> l2

a)  
[88, 2, 3, [4, 5]]  
[88, 2, 3, [4, 5]]

b)  
[2, 3, [4, 5]]  
[88, 3, [4, 5]]

c)  
[88, 2, 3, [4, 5]]  
[2, 3, [4, 5]]

d)  
[2, 3, [4, 5]]  
[2, 3, [4, 5]]  
  
  
20. What will be the output of the following Python code and state the type of copy that is depicted?  
  
l1=[2, 4, 6, 8]  
l2=[1, 2, 3]  
l1=l2  
>>> l2

a) [2, 4, 6, 8], shallow copy  
b) [2, 4, 6, 8], deep copy  
c) [1, 2, 3], shallow copy  
d) [1, 2, 3], deep copy

21. What will be the output of the following Python code?  
  
l1 = [10, 20, 30]  
l2 = l1  
print(id(l1)==id(l2))  
   
l2 = l1.copy()  
print(id(l1)==id(l2))

a) False, False  
b) False, True  
c) True, True  
d) True, False  
  
22. What will be the output of the following Python code?  
class fruits:  
    def \_\_init\_\_(self, price):  
        self.price = price

obj=fruits(50)   
obj.quantity=10  
obj.bags=2  
print(obj.quantity+len(obj.\_\_dict\_\_))

a)12  
b)52  
c)13  
d)60

23. What will be the output of the following Python code?  
  
def foo():  
    try:  
        return 1  
    finally:  
        return 2  
k = foo()  
print(k)

a) 1  
b) 2  
c) 3  
d) error, there is more than one return statement in a single try-finally block  
  
24. What will be the output of the following Python code, if the time module has already been imported?

>>> 4 + '3'

a) NameError  
b) IndexError  
c) ValueError  
d) TypeError  
  
25. What will be the output of the following Python code?  
  
x = [12, 34]  
print(len(list(map(len, x))))  
a) 2  
b) 1  
c) error  
d) none of the mentioned

26. What will be the output of the following Python code?

class Demo:

def \_\_new\_\_(self):

self.\_\_init\_\_(self)

print("Demo's \_\_new\_\_() invoked")

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

print("Demo's \_\_init\_\_() invoked")

class Derived\_Demo(Demo):

def \_\_new\_\_(self):

print("Derived\_Demo's \_\_new\_\_() invoked")

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

print("Derived\_Demo's \_\_init\_\_() invoked")

def main():

obj1 = Derived\_Demo()

obj2 = Demo()

>>> main()

a)

Derived\_Demo’s \_\_init\_\_() invoked

Derived\_Demo's \_\_new\_\_() invoked

Demo's \_\_init\_\_() invoked

Demo's \_\_new\_\_() invoked

b)

Derived\_Demo's \_\_new\_\_() invoked

Derived\_Demo's \_\_init\_\_() invoked

Demo's \_\_init\_\_() invoked

Demo's \_\_new\_\_() invoked

c)

Derived\_Demo's \_\_new\_\_() invoked

Demo's \_\_new\_\_() invoked

d)

Derived\_Demo’s \_\_init\_\_() invoked

Demo's \_\_init\_\_() invoked

27. What will be the output of the following Python code?

class Test:

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

self.x = 0

class Derived\_Test(Test):

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

self.y = 1

def main():

b = Derived\_Test()

print(b.x,b.y)

>>>main()

a) 0 1

b) 0 0

c) Error because class B inherits A but variable x isn’t inherited

d) Error because when object is created, argument must be passed like Derived\_Test(1)

28. What will be the output of the following Python code?

class A():

def disp(self):

print("A disp()")

class B(A):

pass

obj = B()

obj.disp()

a) Invalid syntax for inheritance

b) Error because when object is created, argument must be passed

c) Nothing is printed

d) A disp()

29. Suppose B is a subclass of A, to invoke the \_\_init\_\_ method in A from B, what is the line of code you should write?

a) A.\_\_init\_\_(self)

b) B.\_\_init\_\_(self)

c) A.\_\_init\_\_(B)

d) B.\_\_init\_\_(A)

30. Let A and B be objects of class Foo. Which functions are called when print(A + B) is executed?

a) \_\_add\_\_(), \_\_str\_\_()

b) \_\_str\_\_(), \_\_add\_\_()

c) \_\_sum\_\_(), \_\_str\_\_()

d) \_\_str\_\_(), \_\_sum\_\_()  
  
**SQL**

31. Which SQL function is used to count the number of rows in a SQL query?

a) COUNT()

b) NUMBER()

c) SUM()

d) COUNT(\*)

32. With SQL, how do you select all the records from a table named “Persons” where the value of the column “FirstName” ends with an “a”?

a) SELECT \* FROM Persons WHERE FirstName=’a’

b) SELECT \* FROM Persons WHERE FirstName LIKE ‘a%’

c) SELECT \* FROM Persons WHERE FirstName LIKE ‘%a’

d) SELECT \* FROM Persons WHERE FirstName=’%a%’

33. With SQL, how can you return all the records from a table named “Persons” sorted descending by “FirstName”?

a) SELECT \* FROM Persons SORT BY ‘FirstName’ DESC

b) SELECT \* FROM Persons ORDER FirstName DESC

c) SELECT \* FROM Persons SORT ‘FirstName’ DESC

d) SELECT \* FROM Persons ORDER BY FirstName DESC

34. How can you change “Hansen” into “Nilsen” in the “LastName” column in the Persons table?

a) UPDATE Persons SET LastName=’Hansen’ INTO LastName=’Nilsen’

b) MODIFY Persons SET LastName=’Nilsen’ WHERE LastName=’Hansen’

c) MODIFY Persons SET LastName=’Hansen’ INTO LastName=’Nilsen’

d) UPDATE Persons SET LastName=’Nilsen’ WHERE LastName=’Hansen’

35. Which of the following command makes the updates performed by the transaction permanent in the database?

a) ROLLBACK

b) COMMIT

c) TRUNCATE

d) DELETE

36. SQL query to find the temperature in increasing order of all cities.

a) SELECT city FROM weather ORDER BY temperature

b) SELECT city, temperature FROM weather

c) SELECT city, temperature FROM weather ORDER BY temperature

d) SELECT city, temperature FROM weather ORDER BY city

37. Find the names of these cities with temperature and condition whose condition is neither sunny nor cloudy.

a) SELECT city, temperature, condition FROM weather WHERE condition NOT IN (‘sunny’, ‘cloudy’)

b) SELECT city, temperature, condition FROM weather WHERE condition NOT BETWEEN (‘sunny’, ‘cloudy’)

c) SELECT city, temperature, condition FROM weather WHERE condition IN (‘sunny’, ‘cloudy’)

d) SELECT city, temperature, condition FROM weather WHERE condition BETWEEN (‘sunny’, ‘cloudy’)

38. Find all the cities with temperature, condition and humidity whose humidity is in the range of 63 to 79.

a) SELECT \* FROM weather WHERE humidity IN (63 to 79)

b) SELECT \* FROM weather WHERE humidity NOT IN (63 AND 79)

c) SELECT \* FROM weather WHERE humidity BETWEEN 63 AND 79

d) SELECT \* FROM weather WHERE humidity NOT BETWEEN 63 AND 79

39. The command to remove rows from a table ‘CUSTOMER’ is 'Andrew'

a) DROP FROM CUSTOMER

b) UPDATE FROM CUSTOMER

c) REMOVE FROM CUSTOMER

d) DELETE FROM CUSTOMER WHERE customer='Andrew'

40. Syntax for creating views is \_\_\_\_\_\_\_\_\_\_

a) CREATE VIEW AS SELECT

b) CREATE VIEW AS UPDATE

c) DROP VIEW AS SELECT

d) CREATE VIEW AS UPDATE

**UNIX**

41. To run the script, we should make it executable first by using \_\_\_\_\_

a) chmod +x

b) chmod +r

c) chmod +w

d) chmod +rwx

42. To spawn a child of our own choice for running the script, we can use \_\_\_ command.

a) ps

b) pr

c) sh

d) $$

43. To know the exit status of a command, we can use \_\_\_\_

a) $$

b) $\*

c) $?

d) $-

44. Which command is used to display the documentation of commands in UNIX?

a) help

b) search

c) whatis

d) man

45. Which command is used for displaying date and calendar in UNIX?

a) date and cal

b) DATE and CAL

c) date and calendar

d) dt and cl

46. What is the output of who command?

a) display information about users who are currently logged in.

b) display file hierarchy

c) display administrator information

d) display processes

47. Which command is used for displaying date in the format dd/mm/yyyy ?

a) date +%m

b) date +%h

c) date +”%d/%m/%Y”

d) date +”%h %m”

48. Which option is used with ls command for long listing of files with seven attributes?

a) -a

b) -l

c) -x

d) –i

49. Apart from displaying file contents, cat command is also used for \_\_\_\_\_ files.

a) displaying

b) deleting

c) copying

d) creating

50. Which of the following symbol(s) can be used to redirect the output to a file or another program?

a) |

b) >

c) >>

d) |, > and >>