Programming Techniques Using Python

Appendix G: Objective Questions

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Appendix G

Objective Questions

Topic-1 Perform Operations using Data Types and Operators

Q1. Consider the following python code :-

```
myint_var = 1
mybool_var = True
mystr_var = 'python'
```

The data types of variables **myint_var, mybool_var and mystr_var** respectively are: -

a) float, bool, str
b) int, bool, char
c) int, bool, str
d) bool, bool, str

Option: C

Q2. Consider the following python code :-

```
myweight_var = 80.1
myzipcode_var = '500055'
myvalue_var = +123E2
```

The data types of variables **myweight_var, myzipcode_var and myvalue_var** respectively are: -

a) float, char, str
b) float, str, str
c) float, char, float
d) float, str, float

Option: D

Q3. We are writing a python code to read 3 integer values from the keyboard and display the sum.

```
mynum1 = input("Enter the first number: ")
mynum2 = input("Enter the second number: ")
mynum3 = input("Enter the third number: ")
# Code to display the sum of given numbers assuming user will enter only digit
s between 0 to 9 and does not leave it blank.
```

Identify the code which is to be inserted in the comment to display the sum of given numbers. Assuming user will enter only digits between 0 to 9 and does not leave it blank.

a) print("The sum of 3 numbers is : " + str((int(mynum1) + int(mynum2) + int(mynum3))))

b) print("The sum of 3 numbers is : " + (int(mynum1) + int(mynum2) + int(mynum3)))
c) print("The sum of 3 numbers is : " + (int(mynum1 + mynum2 + mynum3)))
d) None of the above

Option: A

Q4. Observe the code .

```
myprofession_start = input("I joined XYZ company at the age of: ")
myage_now = input("How old I am: ")
```

Identify the code which will display the message of **number of years of service**. Assuming user will enter only digits between 0 to 9 and does not leave it blank.

a) print(f"My number of years of service is : {int(myage_now) - int(myprofession_start)} years")
b) print("My number of years of service is : " + str(int(myage_now) - int(myprofession_start)) + " years")
c) print('My number of years of service is :', (str(int(myage_now) - int(myprofession_start)) + " years"))
d) All of the above

Option: D

Q5. In the python code inserted, it is required to handle data types properly. Just observe the following code segment:

```
mynum1 = 100+200
mynum2 = '100' + '200'
mynum3 = '100'*3
```

Identify the types of mynum1, mynum2 and mynum3

Options	mynum1	mynum2	mynum3
A	int	str	int
B	**int**	**str**	**str**
C	int	int	int
D	int	int	str

Option: B

Q6: Suppose we are developing a python application for our company.
There is a list named employees containing 300 employee names , the last 4 being HR executives. Our task is to slice employees to display all employees excluding HR executives. Which of the following code segments we should use?

Options	Code segment
A	employees[1:-3]
B	employees[:-4]
C	employees[1:-4]
D	employees[0:-3]
E	employees[0:-4]

Option: B, E

Q7: Suppose we are developing a python application for our company.
There is a list named employees containing 300 employee names , the last 4 being HR executives. Our task is to display HR executives only. Which of the following code segments we should use?

Options	Code segment
A	employees[296:]
B	employees[-4:]
C	employees[296:300]
D	All of the above

Option: D

Q8: Suppose we are developing a python application for our company.
There is a list named employees containing 300 employee names . Find out the case when we will be getting Index error while accessing employee data.

Options	Code
A	employees[1:600]
B	employees[-20:20]
C	employees[0:301]
D	None of the above

Option: D

Q9: Suppose we are developing a python application for our company
There is a list named employees containing 5 employee names . Find out the case when we will be getting Index error while accessing employee data.

Options	Code
A	employees[0]
B	employees[5]
C	employees[-1]
D	None of the above

Option: B

Q10: Consider the list:
mylist = [“Litchi”,”Mango”,”Pears”,”Banana”,”Papaya”]
What are the following valid ways of accessing Papaya?

Options	Code
A	mylist [0]
B	mylist [5]
C	mylist [-1]
D	mylist[4]

Option: C and D

Q11: Consider the following list:
myl1 = [1,2,3,4,5,6]
myl2 = [1,2,3,4,5,6]
print(myl1 is myl2)
print(myl1 == myl2)

Predict the output.

Options	Code segment
A	False True
B	True False
C	True True
D	False False

Option: A

Q12: Consider the following list:
myl1 = [1,2,3,4,5,6]
myl2 = [1,2,3,4,5,6]
print(myl1 is myl2)
print(myl1 == myl2)
myl1 = myl2
print(myl1 is myl2)
print(myl1 == myl2)
Predict the output.

Options	Code segment
A	False True False True
B	False True True False
C	False True True True
D	False True False False

Option: C

Q13: Consider the following lists:
mynum = [1,2,3,4,5,6]
myalphabets = [‘a’,’b’,’c’,’d’,’e’,’f’]
print(mynum is myalphabets)
print(mynum == myalphabets)
mynum = myalphabets
print(mynum is myalphabets)
print(mynum == myalphabets)

Predict the output.

Options	Code segment
A	False False False True
B	False False True False
C	False False True True
D	False False False False

Option: C

Q14: Consider the code:
mynum = 30
mydiv = 6
print(mynum /mydiv)
Predict the output.

Options	Code segment
A	5
B	5.0
C	0
D	0.0

Option: B

Q15: Consider the code:
mynum1 = 33
mynum2 = 6
print(mynum1 /mynum2)

print(mynum1 //mynum2)
print(mynum1%mynum2)

Predict the output.

Options	Code segment
A	5.5 5 3
B	5 5 3
C	5.5 5.5 3
D	5.5 5.5 3.0

Option: A

Q16: Consider the statement and predict the valid expression for the requirement mentioned?

There is a requirement to write a python program which evaluates an arithmetic expression. The expression is described as Y is equals X multiplied by negative one, then raised to the third power where X is the value which will be input and Y is the result.

X = eval(input("Entering a number for evaluating the expression"))

Predict the output.

Options	Expression
A	Y = X**(-3)
B	Y = (-X)**3
C	Y =-(X)**3
D	Y =(X-)**3

Option: B

Q17: Consider the following expression:
myans = (3*(4+2)**2 – (4**2)*2)

Predict the correct output.

Options	Expression
A	74
B	292
C	76
D	294

Option: C

Q18: Consider the following expression mentioned here:
myans = W – X*Y + Z

Predict the correct expression which will be valid.

Options	Expression
A	The above expression is equivalent to W- (X*Y) + Z
B	First X * Y will be evaluated followed by subtraction and addition
C	First X * Y will be evaluated followed by addition and subtraction
D	First X-Y will be evaluated followed by multiplication and addition

Option: A and B

Q19: Consider the following python code segments:
# Code Segment-1
mynum1 = '12'
mynum2=2
mynum3 = mynum1*mynum2
# Code Segment-2
mynum4 = 12
mynum5=2
mynum6 = mynum4/mynum5
# Code Segment-3
mynum7 = 15.5
mynum8=2
mynum9 = mynum7/mynum8

After executing python code segments 1,2 and 3, the result types of mynum3, mynum6 and mynum9 are

Options	Expression
A	mynum3→ str type, mynum6→ float type, mynum9→int type
B	mynum3→ str type, mynum6→ float type, mynum9→float type
C	mynum3→ str type, mynum6→int type, mynum9→ int type
D	mynum3→ str type, mynum6→int type, mynum9→float type

Option: B

Q20. Identify valid python operator precedence order?
A)

Parenthesis f(args) Exponentiation Unary Positive,Negative and Bitwise Not Addition and Subtraction Multiplication and Division BOOLEAN AND Lambda Expression

B)

Parenthesis f(args) Exponentiation

Unary Positive,Negative and Bitwise Not
Multiplication and Division
Addition and Subtraction
BOOLEAN AND
Lambda Expression

C)

Parenthesis
Exponentiation
f(args)
Unary Positive,Negative and Bitwise Not
Multiplication and Division
Addition and Subtraction
Lambda Expression
BOOLEAN AND

D)

Parenthesis
Exponentiation
f(args)
Unary Positive,Negative and Bitwise Not
Addition and Subtraction
Multiplication and Division
BOOLEAN AND
Lambda Expression

Option: B

Q21. Predict the output of the following python code.

```
print(bool([True]))
print(bool(10))
print(bool(' '))
print(bool(''))
```

A)

True
True
False
False

B)

True
True
False
True

C)

True
True
True
False

D)

True
True
True
True

Option: C

Q22. Consider the following python code.

```
w = 6
x = 10
w += 3**2
w -= x//4//3
print(w)
```

Predict the value of w
A.14
B.15
C.16
D.17

Option: B

Q23. Consider the following python code.

```
myexpression=16//12%10+3**2-2
print(myexpression)
```

Predict the value of myexpression
A. 7
B. 8
C. 9
D. 10

Option: B

Q24. Which of the following expression will yield minimum value output.

```
print(16%6*3)
print(16-6*3)
print(16//6*3)
print(16/6*3)
```

A. print(16%6*3)
B. print(16-6*3)
C. print(16//6*3)
D. print(16/6*3)

Option: B

Q25. Consider the following python code

```
x=1
x += 1
# Line-3
```

To make a value as 4,which expression required to place at Line-3
A) x*=2
B) x**=2

C) x+=2
D) x-=2

A. Option A
B. Option A,B
C. Option A,B,C
D. All of the above

Option: C

Q26. Consider the following python code

```
num1 = 1
num2 = 4
num3 = 6
num4 = 8
```

In which of the following expressions we will see output as 0?

```
print(num1 + num2/2) # Option A
print(num1 % num3 -1) # Option B
print(num1 - num2/num3) # Option C
print(num1**num4 -1) # Option D
```

A. OptionB
B. Option D
C. Option B,Option D
D. Option A,Option B,Option C,Option D

Option: C

Q27. Consider the following python code

```
num1 = 1
num2 = 4
num3 = 6
num4 = 8
```

Predict the output of the following expressions .

```
print((num1+num2)//num3%num4)
print((num2+num3)//num1%num4)
print((num1+num2)//num3*num4)
print((num1+num2)//num4-num3)
```

A)

```
0
0
2
-6
```

B)

```
0
2
```

0
-6

C)

0
0
-6
2

D)

0
-6
0
2

Option: B

Q28. Consider the following python code

```
num1=[10,11,12,13]
num2=0
```

Predict the output of the Code segments-A,B,C and D.

```
# Code Segment-A
for i in (11,12,13):
    if i in num1:
        num2=num2+5
print(num2)

# Code Segment-B
for i in (11,12,15):
    if i not in num1:
        num2=num2+5
print(num2)

# Code Segment-C
for i in (10,15):
    if i in num1:
        num2=num2+10
print(num2)

# Code Segment-D
for i in (10,11):
    if i not in num1:
        num2=num2+10
print(num2)
```

A)

0
10
20
30

B)

30
20
0
10

C)

20
30
0
10

D)

15
5
10
0

Option: D

Q29. Which of the following python code will produce the output
Rat
Mat
Bat

A)

```
myl1= ['Glad','Rat','Mat','Bat']
for loop in myl1:
    if len(loop) == 3:
        print(loop)
```

B)

```
myl1= ['Glad','Rat','Mat','Bat']
for loop in myl1:
    if len(loop) != 3:
        print(loop)
```

C)

```
myl1= ['Glad','Rat','Mat','Bat']
for loop in myl1:
    print(loop)
```

D)

```
myl1= ['Glad','Rat','Mat','Bat']
myl1 = myl1[1:]
for loop in myl1:
    print(loop)
```

Option: A and D

Q30. Consider the following python code:

```
num1 = 10
num2 = 20
num3 = 4
num4 = True

myres1=num1+num2*num3
myres2=num1+num2/num4
```

```
if(Condition):
    print(1)
else:
    print(0)
```

Now, in order to print 1 to the console which condition we have to take it for if statement

A) myres1<myres2
B) myres1<=myres2
C) myres1>myres2
D) myres1==myres2

Option: C

Q31. Consider the following python code:

```
mystr1 = 'python'
mystr2 = 'python'
myresult = condition
print(myresult)
```

For which of the following condition False will be displayed to the console

A) mystr1 is mystr2
B) mystr1> mystr2
C) mystr1 is not mystr2
D) mystr1 != mystr2

Option: B,C and D

Q32. Consider the following python code.

```
num1 = 16
num2 = 5
myresult= num1//3*3/2+num2%3**3
print(myresult)
```

Predict the value of myresult
A. 10.5
B. 11.5
C. 12.5
D. 13.5

Option: C

Q33. Consider the following python code:

```
mystr = "WX YZ"
mylist=list(mystr)
mylist.append('EF')
print(mylist)
```

Predict the output displayed to the console

A. ['W', 'X', ' ', 'Y', 'Z', 'EF']
B. ['W', 'X', 'Y', 'Z', 'EF']
C. ['W', 'X', ' ', 'Y', 'Z', 'E', 'F']
D. ('W', 'X', ' ', 'Y', 'Z', 'EF')

Option: A

Q34. Consider the following python code:

```
mystr1 = "PANDEMONIUM"
mystr2 = "PULCHITUDRINOUS"
mystr3 = "DILAPIDATED"
```

Which of the following expression won't print 'PAT' to the console

A. print(mystr1[0] + mystr1[1] +mystr3[-3])
B. print(mystr2[0] + mystr3[-4] +mystr3[-3])
C. print(mystr2[0] + mystr3[-4] +mystr3[-5])
D. print(mystr2[0] + mystr3[3] +mystr3[8])

Option: C

Q35. Consider the following python code:

```
mystr='Python is Interesting'
mystr1=mystr[-14:]
mystr2=mystr[-11:]
print(mystr1+mystr2)
```

Predict the output displayed in the console.
A.is InterestingInteresting
B.is InterestingInteresting
C.isInterestingInteresting
D.s InterestingInteresting

Option: A

Q36. Consider the following python code:

```
mystr1 = "I am studying"
mystr2 = mystr1[-12:-8]
# Line-3
print(len(mystr3))
```

To print 3 as the output in the console which code we have to insert at Line-3
A.mystr3 = mystr2.lstrip()
B.mystr3 = mystr2.rstrip()
C.mystr3 = mystr2.strip()
D.mystr3 = mystr2[1:]

Option: A, B and D

Q37. Consider the following code:

```
myl1 = [(1,2),'Hello',3.4,8,True]
```

Which line of the code assigns <class 'tuple'>to the object mydtype.
A) mydtype = type(myl1)
print(mydtype)
B)mydtype = type(myl1[0])
print(mydtype)
C)mydtype = type(myl1[1])
print(mydtype)
D)mydtype = type(myl1[1:])
print(mydtype)

Option: B

Q38. Consider the following code:

```
mystr = 'NAKAMA'
```

1. print(mystr[1] + mystr[-1])
2. print(mystr[1] + mystr[3])
3. print(mystr[-1] + mystr[-3])
4. print(mystr[1] + mystr[5])

Which of the following options will provide output 'AA' from these print statements?

A. 1
B. 1,2
C. 1,2,3
D. 1,2,3,4

Option: D

Q39. Consider the following python code

```
mynum1 = 'a'
mynum2 = '3'
```

Which of the following expressions will result in TypeError.
A. mynum1 + mynum2
B. mynum1 * mynum2
C. mynum1 / mynum2
D. mynum1 * 2

Option: B and C

Q40. Which of the following python code returns False in the console ?
A.

```
mynum1=45
mynum2=45
```

```
print(mynum1 is not mynum2)
```

B.

```
mystr1 = "lower"
mystr2 = "LOWER".lower()
print(mystr1 is mystr2)
```

C.

```
print("some" in "Someone had Had something to say")
```

D.

```
mystr1 = "lower"
mystr2 = "LOWER".lower()
print(mystr1 == mystr2)
```

Option: A and B

Q41. Consider the following python code:

```
num1=2
num2=16
num1 *=2**3
num1=num1//num2//2//3
print(num1)
```

Predict the output displayed to the console

A. 16
B. 8
C. 6
D. 0

Option: D

Q42. Consider the following python code:

```
mynum=4/4+4**4-4//4
print(mynum)
```

Predict the output displayed to the console

A. 256
B. 256.0
C. 257
D. 257.0

Option: B

Q43. Which of the following options are valid statements ?
A. True * False evaluates to 0.
B. True and False evaluates to True.
C. True or False evaluates to True.
D. True + False evaluates to 1.

Option: A, C and D

Q44. Which of the following python code provides output
Python
is
easy

A.
```
mystr1 = 'Python\nis\neasy'
print(mystr1)
```

B.
```
mystr2 = '''Python
is
easy
'''
print(mystr2)
```

C. Both A and B
D.
```
mystr3 = 'Python\n
is\n
easy
'
print(mystr3)
```

Option: C

Q45. Consider the following python code:
```
myval = input('Enter any value:')
print(type(myval))
```

If the user enters 5, 5.0,'5' for every run individually, predict the output ?
A.<class 'int'>, <class 'str'>, <class 'float'>
B.<class 'str'>,<class 'str'>,<class 'str'>
C.<class 'int'>, <class 'str'>, <class 'str'>
D.<class 'int'>, <class 'float'>, <class 'str'>

Option: B

Q46. Consider the following python code:
```
myval = type(eval(input('Enter any value:')))
print(myval)
```

If the user enters 5, 5.0,'5' for every run individually, predict the output ?
A. <class 'int'>, <class 'str'>, <class 'float'>
B. <class 'str'>,<class 'str'>,<class 'str'>

C. <class 'int'>, <class 'str'>, <class 'str'>
D. <class 'int'>, <class 'float'>, <class 'str'>

Option: D

Q47. Consider the statements which are valid.
A. mystr = “Saurabh and Nilesh Sir’s python contents are very good“ .
It is a valid statement because we can use single quotes inside double quotes and vice-versa.
B. myoutput = 3 + 3.0 .
The type is <class ‘float’>
C. The following expression evaluated to 9

```
myres = (True or False) + (True and False)/3 + ((True)*3)**2 - 1
print(myres)
```

D. The following expression evaluates to 10

```
myres = (True and False) + (True or False)%3 + True*3**2
print(myres)
```

Option: A, B and D

Q48. Consider the following python code:

```
mynum1 = float('2.2')

print(bool(mynum1)+2)
print(int(mynum1)+2)
print(str(mynum1))
print(int(bool(mynum1)))
```

Predict the output of the above code.
A.

```
3
4
2.2
2
```

B.

```
4
3
3.2
1
```

C.

```
3
4
2.2
1
```

D.

```
4
4
1.2
1
```

Option: C

Q49. Consider the following python code:

```
print(1==1 or 2!=2)
print(1==1 and 2!=2)
print( not 2==2)
```

Predict the output of the above code.

A.

True False False

B.

True True False

C.

True False True

D.

True True True

Option: A

Q50. Consider the following python code:

```
myl1 = [1,2,3]
myl2 = myl1[:]
print(myl1 is myl2)
print(myl1 == myl2)
```

Predict the output of the above code.

A.

False False

B.

False True

C.

True False

D.

True True

Option: B

Q51. Consider the following python code:

```
mynum1 = 0
mynum2 = 1
mynum3 = mynum1 & mynum2
mynum4 = mynum1 | mynum2
mynum5 = mynum3 ^ mynum4
print(mynum5)
```

Predict the output of the above code.

A.

1

B.

0

C.

3

D.

2

Option: A

Q52. Predict the output of the following python code

```
myl1=['A','B','C']
for loop in myl1:
    myl1.append(loop.lower())
print(myl1)
```

A. [‘A’,’B’,’C’,’a’,’b’,’c’]
B. [’a’,’b’,’c’,‘A’,’B’,’C’]
C. Memory Error thrown at Runtime as it is infinite loop
D. [’a’,’b’,’c’]

Option: C

Q53. Consider the following python code

```
mystr1 = "PY TH ON "
```

Which of the following expression will assign value 6 ?

A.

```
print(len(mystr1.rstrip()))
```

B.

```
print(len(mystr1.lstrip()))
```

C.

```
print(len(mystr1.strip()))
```

D.

```
print(len(mystr1.replace(' ', '')))
```

Option: D

Topic-2Perform Input and Output Operations

Q54. Suppose you are a programmer in ABC Electronicscompany and your boss asks you to write a code for an electronic device which converts degree intoFahrenheit. So, consider the following python code

```
# get input from the user
mycelsius = xxx(input('Enter temperature in Celsius: '))

# Display of temperature in Fahrenheit
myfahrenheit = (mycelsius * 1.8) + 32
yyy
```

To get the most precise output in the console to the programmer, which modifications are to be done in xxx and yyy ?

A. xxx should be replaced with float and yyy should be replaced with

```
print('%0.1f  Celsius is equal to %0.1f degree Fahrenheit',
%(mycelsius,myfahrenheit))
```

B. xxx should be replaced with int and yyy should be replaced with

```
print('%0.1f  Celsius is equal to %0.1f degree Fahrenheit'%(mycelsius,m
yfahrenheit))
```

C. xxx should be replaced with float and yyy should be replaced with

```
print('%0.1f  Celsius is equal to %0.1f degree Fahrenheit'%(mycelsius,m
yfahrenheit))
```

D. xxx should be replaced with str and yyy should be replaced with

```
print('%0.1f  Celsius is equal to %0.1f degree Fahrenheit',
%(mycelsius,myfahrenheit))
```

Option: C

Q55. Suppose you are developing a python application in your company and task is to prompt input from the user and display that information to the console.
Consider the following python code

```
myemp_name = print("Enter your name: ")
# Line-2
print(myemp_name)
```

At what code we need to write at Line-2
A) myemp_name=input
B) input('myemp_name ')
C) input("myemp_name")
D) myemp_name =input()

Option: D

Q56. Suppose in your company it is required to write a code which asks the user for a value. But the value is to be used as a whole number in a calculation, even if the user enters a decimal or float value. Which of the following code will meet your expression ?

A.

```
total_items=int((input('How many items you required?'))
```

B.

```
total_items=str(input('How many items you required?'))
```

C.

```
total_items=float(input('How many items you required?'))
```

D.

```
total_items=int(float(input('How many items you required?')))
```

Option: D

Q57. Suppose user enters 567 as input value. In which of the following python code, output 570 will be displayed to the console.

A.

```
myval=input('Enter the value:')
print(myval+1)
```

B.

```
myval=input('Enter the value:')
print(int(myval)+3)
```

C.

```
myval=int(input('Enter the value:') )
print(myval+3)
```

D.

```
myval=eval(input('Enter the value:') )
print(myval+3)
```

Option: B, C and D

Q58. We can access command line arguments using

A. sys.arg
B. sys.args
C. sys.argv
D. sts.argsv

Option: C

Q59. Consider the following python code

```
import sys
xxx
yyy
zzz
print(prog_name) # -- Cmd1
print(args) # -- Cmd2
print(count) # -- Cmd3
```

Given the command invocation
python super_prog59.py hello python
will yield output
super_prog59.py
['hello', 'python']
2
What shall be the code in xxx, yyy and zzz ?
A.

```
prog_name = sys.argv[0]
args = sys.argv[:1]
count = len(args)
```

B.

```
prog_name = sys.argv[0]
args = sys.argv[1:]
count = len(args)
```

C.

```
prog_name = sys.argv[0]
args = sys.argv[1]
count = len(args)
```

D.

```
prog_name = sys.argv[0]
args = sys.argv[1:3]
count = len(args)
```

Option: B and D

Q60. Consider the following python code

```
import sys
for x in sys.argv:
    print(f"Argument: {x}")
```

Given the command invocation
python super_prog60.py hello python
predict the correct output
A.

```
Argument:  super_prog60.py
Argument:  python
Argument:  hello
```

B.

```
Argument:  python
Argument:  hello
Argument:  super_prog60.py
```

C.

```
Argument:  super_prog60.py
Argument:  hello
Argument:  python
```

D.

```
Argument:  hello
Argument:  python
Argument:  super_prog60.py
```

Option: C

Q61. Consider the following python code

```
import sys
print(sys.argv[1] + sys.argv[2])
```

Given the command invocation
python super_prog61.py 30 40
predict the correct output
A.3040
B.70
C. SyntaxError will be thrown at runtime
D. IndexError will be thrown at runtime

Option:A

Q62. Consider the following python code

```
import sys
print(int(sys.argv[1]) + int(sys.argv[2]))
```

Given the command invocation
python super_prog62.py 30 40
predict the correct output
A. 3040
B. 70
C. SyntaxError will be thrown at runtime
D. IndexError will be thrown at runtime

Option: B

Q63. Consider the following python code

```
import sys
mytotal=0
for loop in range(2,len(sys.argv)):
    mytotal += float(sys.argv[loop])
```

```
print("The Average of 1 Night Stay regarding HotelCost is {0:.3f}".format(myto
tal/(len(sys.argv)-3)))
```

Given the command invocation
python super_prog63.py 1000 2000 3000
predict the correct output
A. The Average of 1 Night Stay regarding HotelCost is 1000.000
B. The Average of 1 Night Stay regarding HotelCost is 2000.000
C. The Average of 1 Night Stay regarding HotelCost is 3000.000
D. The Average of 1 Night Stay regarding HotelCost is 5000.000

Option: D

Q64. In your company an app is developed in which employee will provide their name and staff number as input. If employee writes name as Priyanka and Staff Number as 6201490, then your app should display following greeting message
Welcome Priyanka! Your Staff Number is 6201490.

Which of the following code can be used for this requirement?
A.

```
myemployee_name=read('Enter Employee Name:')
my_staffno=read('Enter Your Staff No.:')
print('Welcome {}! Your Staff number is {}'.format(myemployee_name,my_staffno)
)
```

B.

```
myemployee_name=eval('Enter Employee Name:')
my_staffno=eval('Enter Your Staff No.:')
print('Welcome {}! Your Staff number is {}'.format(myemployee_name,my_staffno)
)
```

C.

```
myemployee_name=input('Enter Employee Name:')
my_staffno=input('Enter Your Staff No.:')
print('Welcome {}! Your Staff number is {}'.format(myemployee_name,my_staffno)
)
```

D.
None of the above.

Option: C

Chapter-3 Flow Control

Q65. Consider the following python code where the user is prompted to enter the number.

```
mytotal=mycount=myinput=0
myaverage=0.0
while(myinput != -1):
    mynum=float(input('Enter the number: '))
    if mynum == 0:
        break
    mytotal+=mynum
    mycount+=1
myaverage=float(mytotal/mycount)
# Line-10
```

What code must be inserted in Line-10 such that the output must be rounded upto 3 decimal numbers.

A.

```
print('The average of all the numbers entered by the user is:{:.3d}'.format(my
average))
```

B.

```
print('The average of all the numbers entered by the user is:{:3.3d}'.format(m
yaverage))
```

C.

```
print('The average of all the numbers entered by the user is:{:.3f}'.format(my
average))
```

D.

```
print('The average of all the numbers entered by the user is:{:.3x}'.format(my
average))
```

Option: C

Q66. Consider the following statements:
Which of the following statements are Valid?
Statement1:

```
print('A:{:.2f}'.format(987.5674321)) # will print to the console A: 987.57
```

Statement2:

```
print('B:{:.2f}'.format(987.5)) # will print to the console B: 987.50
```

Statement3:

```
print('C:{:6.2f}'.format(7.12345)) # will print to the console C:   7.12
```

Statement4:

```
print('D:{:06.2f}'.format(7.12345)) # will print to the console D:007.12
```

A. Statement1

B. Statement1,2
C.Statement1,2,3
D.Statement1,2,3,4

Option: D

Q67. We are developing an **average salary application** for all the employees of our company ABC. The code should allow employees to enter their name and in-hand salary and display the name and average salary. The following requirements must be met in the output:-

The employee name must be left aligned . If the employee name is fewer than 25 characters , then additional space must be added to the right side. The average salary must be 5 places to the left of decimal point and 2 place to the right of decimal point (say AAAAA.AA)

Consider the following python code:

```
myemployee_name=input('Enter Full Employee Name:')
myscore=0
mycount=0
mytotal=0
while(myscore != -1):
    myscore=int(input('Enter your salary: (0 to end)'))
    if myscore==0:
        break
    mytotal+=myscore
    mycount+=1
myaverage_myscore=mytotal/mycount
#Line-12
```

What shall be the print statement which is to be inserted in Line-12 to meet the requirement.
A.

```
print('%-
25s,Your average salary is: %5.2f' %(myemployee_name,myaverage_myscore))
```

B.

```
print('%-
25f,Your average salary is: %5.2f' %(myemployee_name,myaverage_myscore))
```

C.

```
print('%-
25s,Your average salary is: %2.5f' %(myemployee_name,myaverage_myscore))
```

D.

```
print('%-
25s,Your average salary is: %5.2s' %(myemployee_name,myaverage_myscore))
```

Option-A

Q68. Consider the following python code:

```
myl1=[10,11,12,13,14,15,16,17,18,19]
myindex=0
while(myindex <10) #Line-3
    print(myl1[myindex])
    if myl1(myindex) = 16: #Line-5
        break
    else:
        myindex += 1
```

In order to display the output from 10 to 16, what changes are to be done in Line-3 and Line-5

A. Line-3 must be replaced with while(myindex<10): and no change in Line-5
B. Line-3 must be replaced with while(myindex<10): and ifmyl1(index) == 16 in Line-5
C. Line-3 must be replaced with while(myindex<10): and if myl1[index] == 16 in in Line-5
D. No change in Line-3 and if myl1(index) == 16 in Line-5

Option: C

Q69. There is a requirement to write a python code to validate employee staffnumbers . The employee staff number must have the format XX:XXXX:XXXXXX and must contain only numbers and colons. The code must return if the format is correct else must return message "Wrong Format" wherever format is wrong.

Consider the following python code:

```
employee_staff_number=input('Enter Your Employee Number(XX:XXXX:XXXXXX):')
myformat_parts=employee_staff_number.split(':')
myboolchk=False
if len(myformat_parts) == 3:
    if len(myformat_parts[0])==2 and len(myformat_parts[1])==4 and len(myforma
t_parts[2])==6:
        if myformat_parts[0].isdigit() and myformat_parts[1].isdigit() and myf
ormat_parts[2].isdigit():
            myboolchk=True
        else:
            print("Wrong Format as only digits are allowed")
    else:
        print("Wrong format as employee is not in the format XX:XXXX:XXXXXX")
else:
    print("Wrong format as length of parts is not 3")
print(myboolchk)
```

Which of the following option is correct about the code mentioned ?

A. There is no problem in the code and can meet the requirements to check for all the if conditions.
B. Error will be thrown at runtime about the misuse of split() method.
C. Error will be thrown at runtime about the misuse of isdigit() method.
D. No Error in the code but it cannot meet the requirements to check for all the if conditions.

Option: A

Q70. There is a requirement to write a python code about a math utility. A function is being inserted to compute roots. The following requirements must be met by the function: -
If object X is negative and odd, return “Imaginary number”.
If object X is negative and even, return -(-X)**(1/Y).
If object X is non-negative, return X**(1/Y).
Which of the following python code for the user defined function will be used ?
A.

```
def myroot(X,Y):
    if X>=0:
        myanswer=X**(1/Y)
    elif X%2 == 0:
        myanswer="Imaginary number"
    else:
        myanswer=-(-X)**(1/Y)
return myanswer
```

B.

```
def myroot(X,Y):
    if X>0:
        myanswer=X**(1/Y)
    elif X%2 == 0:
        myanswer="Imaginary number"
    else:
        myanswer=-(-X)**(1/Y)
    return myanswer
```

C.

```
def myroot(X,Y):
    if X>=0:
        myanswer=X**(1/Y)
    elif X%2 == 0:
        myanswer=-(-X)**(1/Y)
    else:
        myanswer= "Imaginary number"
    return myanswer
```

D.

```
def myroot(X,Y):
    if X>0:
        myanswer=X**(1/Y)
    elif X%2 = 0:
        myanswer=-(-X)**(1/Y)
    else:
        myanswer= "Imaginary number"
return myanswer
```

Option: C

Q71. A python code is being inserted to convert an engineering student marks of Maths Subject into grade. The grades based on the marks are defined as follows:-

S No.	Marks Range	Grade
1	Between 90 and 100	A plus
2	Between 80 and 89	A
3	Between 70 and 79	B plus
4	Between 60 and 69	B
5	Between 45 and 59	C
6	Between 0 and 44	D

Consider the following python code:

```
# Maths Subject Grade converter
myengineering_marks=int(input('Enter Marks obtained in Maths subject:'))
if myengineering_marks >=90: #Line-3
    mygrade='A plus'
elif myengineering_marks>=80: #Line-5
    mygrade='A'
elif myengineering_marks>=70: #Line-7
    mygrade='B plus'
elif myengineering_marks>=60: # Line-9
    mygrade='B'
elif myengineering_marks>=45: # Line-11
    mygrade='C'
else:
    mygrade='D'
print('Your grade is:',mygrade)
```

Which of the following changes should be done in the code to fulfil the requirement ?

A. Line-11 must be replaced with elif myengineering_marks >=45 and myengineering_marks <60: . Rest No change in any Lines.
B. Line-9 must be replaced with elif myengineering_marks >=60 and myengineering_marks <70: . Rest No change in any Lines.
C. Line-5 must be replaced with elif myengineering_marks >=80 and myengineering_marks <90: . Rest No change in any Lines.
D. No changes are required in any of the Lines.

Option: D

Q72. Consider the following python code :

```
mydict = {'1':"Hello",2:"Everyone"}

myinput = eval(input("Enter the number to display the message: "))
```

```
if not myinput in mydict:
    print("Not present in dictionary :) ")
else:
    print("Value is: ", mydict[myinput])
```

Predict the output when user will enter 1 and 2 in myinput?

A.Value is: Everyone, Not present in dictionary :)
B.Not present in dictionary :), Value is: Hello
C.Not present in dictionary :), Value is: Everyone
D. None of the above

Option: C

Q73. The ABC Bicycle Company needs a way to determine the cost that a customer will pay for renting a Bicycle.
The Cost is dependent on the time of the Bicycle is returned.
However, there are also special rates on Sunday and Saturday.

The Fee Structure is as follows:
The cost is Rs100 per night.
If the bicycle is returned after 7PM, the customer will be charged an extra day.
If the bicycle is rented on Sunday,the customer will get 40% off for as long as they keep the bicycle.
If the bicycle is rented on a Saturday,the customer will get 20% off for as long as they keep the bicycle.
Now, consider the following python code

```
#  ABC Bicycle Rented Amount Code

myusagetime=input('Was bicycle returned before 7 pm? Yes or No:').lower()
mytotaldays_bicycle_rented=int(input('How many days was bicycle rented?'))
myday_rented=input('What day the bicycle rented?').capitalize()
usage_cost_per_day= 100
if myusagetime == 'no':
    mytotaldays_bicycle_rented=mytotaldays_bicycle_rented+1
if myday_rented=='Sunday':
    total=(mytotaldays_bicycle_rented*usage_cost_per_day)*0.6
elif myday_rented=='Saturday':
    total=(mytotaldays_bicycle_rented*usage_cost_per_day)*0.8
else:
    total=(mytotaldays_bicycle_rented*usage_cost_per_day)
print('The Cost of bicycle Rental is:Rs',total)
```

Case-I: If the bicycle rented on ‘Saturday’, number of days rented is 4 and bicycle returned after 7 pm.
Case-II: If the bicycle rented on ‘Sunday’, number of days rented is 5 and bicycle returned after 7 pm.

What will be the cost of bicycle Rental for 2 cases ?

A. Case-1: Rs 400.0, Case-2: Rs 380.0
B. Case-1: Rs 400.0, Case-2: Rs 360.0
C. Case-1: Rs 420.0, Case-2: Rs 360.0
D. Case-1: Rs 420.0, Case-2: Rs 380.0

Option: B

Q74. A college automation application is getting displayed .If the student marks is between 70 and 80, then we have to offer 'B' grade. Identify the code block we need to use.

A.

```
mymarks = int(input("Enter the marks: "))
if mymarks>=70 and mymarks>=80:
    mygrade='B'
print(mygrade)
```

B.

```
mymarks = int(input("Enter the marks: "))
if mymarks>70 or mymarks>80:
    mygrade='B'
print(mygrade)
```

C.

```
mymarks = int(input("Enter the marks: "))
if 70<=mymarks<=80:
    mygrade='B'
print(mygrade)
```

D.

```
mymarks = int(input("Enter the marks: "))
if 70<mymarks:
    mygrade='B'
print(mygrade)
```

Option: C

Q75. A XYZ company is developing an application for Mega Offer Sale.
Consider the following code

```
myday =input('Enter the day: ')
mydiscount_percent = 5

if myday== 'Monday':
```

```
    mydiscount_percent+=10
elif myday== 'Tuesday':
    mydiscount_percent+=8
elif myday== 'Wednesday':
    mydiscount_percent+=9
elif myday== 'Saturday':
    mydiscount_percent+=12
else:
    mydiscount_percent+= 3
print(mydiscount_percent)
```

Now, to get a discount percentage of 8, identify the input provided to the user?

A. Monday
B. Sunday
C. Thursday
D. Tuesday

Option: B and C

Q76. For your company, it is required to design an application for leave.

Consider the following python code:

```
mydays=int(input('Enter the total number of days for leave:'))
myreason=input('Enter the reason:')
if mydays==1:
    print('Immediate approval for leave')
elif mydays>1 and mydays<=2:
    if myreason=='BadHealth':
        print('Immediate approval for leave')
    else:
        print('Needs Sr. Manager Approval')
elif mydays>=3 and mydays<=5:
    if myreason=='BadHealth':
        print('Needs Lab Manager Approval')
    else:
        print('Needs GeneralManager Approval')
elif mydays>5 and mydays<=10:
    print('Needs GeneralManager Approval')
```

In which of the following cases “Needs GeneralManager Approval” will display in the console?

A. mydays = 3, myreason = ‘BadHealth’

B. mydays = 4, myreason = ‘BadHealth’

C. mydays = 4, myreason = ‘Personal

D. mydays = 5, myreason = ‘Vacation’

Option: C and D

Q77. Consider the following python code:

```
mymarks=[50,60,70,65,75,90]
myavg=sum(mymarks)//len(mymarks)
mydict_grades={11:'A plus',12:'A',13:'B',14:'C'}
if myavg>=90 and myavg<=100:
    mykeyval=11
elif myavg>=80 and myavg<90:
    mykeyval=12
elif myavg>=50 and myavg<80:
    mykeyval=13
else:
    mykeyval=14
print(mydict_grades[mykeyval])
```

In a college application program, find the grade of a student in 7th Semester based on the marks of 6 subjects.

A. A plus

B. A

C. B

D. C

Option: C

Q78. Consider the following python code:

```
num1 = 24
num2 = 8
mystr = "I  scream, you scream, we all scream for ice cream"
print(3 if None else num1/num2)
print(mystr.find('scream') if mystr else None)
print(mystr.rfind('scream') if mystr else None)
print(5 if len(mystr)>48 else 6)
```

Predict the output of the above code.

A.

3.0
3

30
5

B.

3.0
30
3
5

C.

3.0
4
30
5

D.

3.0
4
29
5

Option: A

Q79. Your company ABC are having branches at 6 different states say “cg”,”ap”,”mp”,”rj”,”gj”,”mh”.

Suppose in your company there is a “Diwali Sales Offer”. So, you develop an application so that customer of these 6 states can avail benefit to its maximum on purchasing the items. Customer can get discount charges based on the items purchased on total amount. The amount and discount charges applicable are inserted in the following python code:

```
myvalue_order=15000
mystate= input("Enter the state: ")
mydiscount_charge=0
if mystate in ['cg','ap','mp']:
    if myvalue_order<=10000:
        mydiscount_charge=1500
    elif myvalue_order>10000 and myvalue_order<20000:
        mydiscount_charge=2000
    else:
        mydiscount_charge=2500
else:
    mydiscount_charge=250

if mystate in ['rj','gj','mh']:
    if myvalue_order>10000:
        mydiscount_charge+=1000
```

```
    if myvalue_order<20000 and mystate in ['gj','mh']:
        mydiscount_charge+=3000
    else:
        mydiscount_charge+=3500
print(mydiscount_charge)
```

What will be the discount charges for each individual run when user enters state as ‘cg’ and ‘mh’ ?

A. cg→3000, mh → 4150
B. cg→ 4150, mh → 4250
C. cg→ 2000, mh → 4250
D. cg→ 3000, mh → 4350

Option: C

Q80. Predict the output displayed to the console on execution of the following python code.

```
myl1=[1,(2,),{4},{},{},[7,8],(9)]
myval_count=0
for i in range(len(myl1)):
    if type(myl1[i])==list:
        myval_count+=5
    elif type(myl1[i])==tuple:
        myval_count+=4
    elif type(myl1[i])==set:
        myval_count+=3
    elif type(myl1[i])==dict:
        myval_count+=2
    else:
        myval_count+=1
print(myval_count)
```

A. 18
B. 19
C. 20
D. 21

Option: A

Q81. Consider the following python code:

```
myt1 = (11,13,15,17,19,21)
mydict = {11:'A',12:'B',13:'C',14:'D',15:'E',16:'F'}
myans='1'
```

```
for mykeys, myvalues in mydict.items():
    if mykeys in myt1:
        myans += myvalues
print(myans)
```

Predict the output of myans.

A. ACE
B. BDF
C. 1ACE
D. 1BDF

Option: C

Q82. Consider the following python code:

```
myt1 = (11,13,15,17,19,21)
mydict = {11:'A',12:'B',13:'C',14:'D',15:'E',16:'F'}
myans='1'
for mykeys, myvalues in mydict.items():
    if mykeys in myt1:
        continue
    else:
        myans += myvalues
print(myans)
```

Predict the output of myans.

A. ACE
B. BDF
C. 1ACE
D. 1BDF

Option: D

Q83. Consider the following python code:

```
myl1 = [[1, 2, 3, 4], [10, 11, 12,9]]

myval = myl1[0][0]
for mylist in myl1:
    for myelement in mylist:
        if myval < myelement:
            myval = myelement
```

```
print(myval)
```

Predict the output myval value after the execution of the above python code ?

A. 1
B. 9
C. 12
D. 11

Option: C

Chapter-4 Functions

Q84. Consider the following code and predict the output after execution of the above code.

```
def func_list_name():
    myl1=['VIKRAAL','GABRAAL','BETAAL','TRIKAAL','PANCHAAL','VISHAAL']
    return myl1[3:]

def func_myname(elements):
    mynew_name=[]
    for myname in elements:
        mynew_name.append(myname[:4].lower())
    return mynew_name
print(func_myname(func_list_name()))
```

A.['vikr', 'gabr', 'beta']
B.['trik', 'panc', 'vish']
C.['TRIK', 'PANC', 'VISH']
D. ['beta',,'trik', 'panc']

Option: B

Q85. Consider the following python code:

```
def func_list('AAAA'):
    print(var1)
    print(mylst)
    mylst.append(var1)
    return mylst

func_list('Grapes')
func_list('Mango')
func_list('Litchi')
print(func_list('Banana'))
```

What code must be inserted inside 'AAAA' to get the output ['Grapes', 'Mango', 'Litchi', 'Banana'].

A.var1,mylst=()

B.var1,mylst={}

C. var1,mylst=[]

D.var1,mylst=''

Option: C

Q86. In the python code shown below :-

```
def func1(num1 = 0, num2 = 3):
    return num1 + num2
```

Which of the following method calls are valid ?

A.print(func1())

B.print(func1('1','2'))

C.print(func1(3,'4'))

D.print(func1('3'))

Option: A and B

Q87. In the python code shown below :-

```
def func1(num1 = 0, num2 = 3):
    return num1 * num2
```

Which of the following method calls are valid ?

A. print(func1())

B. print(func1('1','2'))

C. print(func1(3,'4'))

D. print(func1('3'))

Option: A, C and D

Q88. Consider the following python code:

```
mylist=[7,8,9,0,12,4,6,56,39]
#Some python code
print('The Minimum number from list is:{} and Maximum Number from list is:{}'.
format(mymin,mymax))
```

In the above code, what code should be insertedin # Some python code such that minimum number = 0 and maximum number = 56 must get displayed to the programmer ?

A.

```
def func_sort():
    mylist.sort()
    return mylist[0],mylist[len(mylist)]
mymin,mymax=func_sort()
```

B.

```
def func_sort():
    mylist.sort()
    return mylist[0],mylist[-1]
mymin = func_sort()
mymax= func_sort()
```

C.

```
def func_sort():
    mylist.sort()
    return mylist[-1],mylist[0]
mymin,mymax = func_sort()
```

D.

```
def func_sort():
    mylist.sort()
    return mylist[0],mylist[-1]
mymin,mymax=func_sort()
```

Option: D

Q89. Consider the following python code:

```
mylist=[7,8,9,0,12,4,6,56,39]
def func_sort():
    mylist.sort()
    return mylist[0],mylist[-1]
mymax = func_sort()
mymin = func_sort()
# Line-7
```

In the above code, what code should be inserted in # Line-7 such that output 56 and 0 must be displayed to the programmer ?

A. print(mymax,mymin)

B. print(mymax[0],mymin[0])

C. print(mymax[-1],mymin[-1])

D. print(mymax[-1],mymin[0])

Option: D

Q90. Predict the output of the following code:

```
def myfunction(num1=6,multfact=3):
    if num1 > 5 :
        return num1+multfact
    else:
        return num1+multfact*3

print(myfunction())
print(myfunction(5,9))
print(myfunction(4,9))
print(myfunction(3,9))
```

A.

```
9
32
31
30
```

B.

```
9
30
31
32
```

C.

```
10
32
30
31
```

D.

```
10
30
32
31
```

Option: A

Q91. A python code is developed for an application. A function is required to be created which will meet the following criteria:

a. The name of the function must be myfunc_add.
b. The function must accept 2 inputs. One input must be a number whereas other must be a factor. The argument gets its default value, if the function is called without the argument.
c.The function must calculate the power or exponentiation of 2 inputs.
d. The function must return the result.
e. The result must be added to 3.
f. The floor division operation is to be performed on the result with 2.
g. Display the final value.
Which of the following is a valid python code to fulfil the requirement ?

A.

```
def myfunc_add(num1 = 4, num2 = 4):
    return num1 ** num2

myval = myfunc_add(3,4)
myval += 3
myresult = myval//2
print(myresult)
```

B.

```
def myfunc_add(num1 = 4, num2 = 4):
    return num1 ** num2

myval = myfunc_add()
myval += 3
myresult = myval//2
print(myresult)
```

C.

```
def myfunc_add(num1 = 4, num2 = 4):
    pass num1 ** num2

myval = myfunc_add()
myval += 3
myresult = myval%2
print(myresult)
```

D.

```
def myfunc_add():
    return num1 ** num2

myval = myfunc_add()
myval += 3
myresult = myval//2
print(myresult)
```

Option: A and B

Q92. Consider the following python code:

```
# Line-1
    print(myname)
    print(args)
    print(funcname)
    print(kwargs)

fname('Saurabh',1,2,3,4,5,6,a1=1,name1="Hello")
```

Identify the code which is to be inserted in Line-1

A.def fname(myname, funcname = 'Undefined',**kwargs, *args):

B. def fname(myname, funcname = 'Undefined', *args,**kwargs):

C.def fname(*args, myname,funcname = 'Undefined',**kwargs):

D.def fname(myname, *args, funcname = 'Undefined',**kwargs):

Option: D

Q93. Consider the following python code:

```
def fname(myname, *args, funcname = 'Undefined',**kwargs):
    print(myname)
    print(args)
    print(funcname)
    print(kwargs)

fname('Saurabh',1,2,3,4,5,6,a1=1,name1="Hello")
```

Predict the output.

A.
Saurabh
{1, 2, 3, 4, 5, 6}
Undefined
{'a1': 1, 'name1': 'Hello'}

B.
Saurabh
[1, 2, 3, 4, 5, 6]

Undefined
(a1,1)
(name1,'Hello')

C.
Saurabh
{1, 2, 3, 4, 5, 6}
{'a1': 1, 'name1': 'Hello'}

D.
Saurabh
(1, 2, 3, 4, 5, 6)
Undefined
{'a1': 1, 'name1': 'Hello'}

Option: D

Q94. You are required to create an application using python to calculate the Body Mass Index of a person. So, consider the following code.

```
#Line-1:
    name=input('Please enter your Name:')
    return name

#Line-6:
    BMI= myweight/(myheight**2)
    return BMI

myname=myfunc_name()
weight = float(input('Please enter your weight in kgs: '))
height = float(input('Please enter your height in ms: '))
myBMI=myfunc_BMI(weight,height)
print(myname,", You BMI is about ",myBMI," kg/m2")
```

What shall be the python code such that Line-1 and Line-6 can be replaced with ?

A.def myfunc_name(), def myfunc_BMI(weight,height):

B. def myfunc_name():, def myfunc_BMI(myweight,myheight):

C.def myfunc_name(name):, def myfunc_BMI():

D.def myfunc_name(name):, def def myfunc_BMI(myweight,myheight):

Option: B

Q95. Consider the following python code:

```
def myfunc_countletter(mychar,mylist):
    mycount=1
    for myword in mylist:
        if mychar in myword:
            mycount *=2
    return mycount
mylist=['Priyanka','Banana','Pomengranate','Orange']
mychar=input('Enter some alphabet symbol:')
mycount_val =myfunc_countletter(mychar,mylist)
print(mycount_val)
```

If the user provides character ‘n’. what shall be the mycount_val ?

A. 2
B. 4
C. 8
D. 16

Option: D

Chapter-5 Exception Handling

Q96. Which of the following statements are True ?

A. A try statement can have more than one finally clauses.
B. A try statement can have more than one except clauses.
C. A try statement can have finally clause with an except clause.
D. A try statement can have finally clause without an except clause.

Option: B, C and D

Q97. Identify the exception type if we are trying to call a method on an inappropriate object?

A. Attribute Error
B. ZeroDivision Error
C. Index Error
D. Type Error

Option: A

Q98. Consider the following python code:

```
myf1 = open('file1.txt')
myf1.readany()
```

What Error we can expect from the above code ?

A. Index Error
B. Type Error
C. Attribute Error
D. No Error

Option: C

Q99. Consider the following python code:

```
def myfunc():
    a = 10
    try:
        a = 20
        return 10
    finally:
```

```
        return a + 20
print(myfunc())
```

Predict the output of the above code.

A. 20
B.30
C.40
D. Error: More than one return value is not possible.

Option: C

Q100. Which of the following statements are False ?

A. A try statement can have more than one except block.
B. A try statement can have only one finally block.
C.Else block will be executed in try-except-elseblock if there is no exception inside try block.
D. None of the above

Option: D

Q101. Identify the base class for all exceptions in python.

A. NormalException
B. ExceptionNormal
C. BaseException
D. Exception

Option: C

Q102. Consider the following python code:

```
try:
    print('Inside try block')
except:
    print('Inside except block')
else:
    print('else block')
finally:
    print('Inside finally block')
```

Predict the output of the following python code.

A.

```
Inside try block
Inside except block
else block
Inside finally block
```

B.

```
Inside try block
Inside except block
Inside finally block
```

C.

```
Inside try block
else block
Inside finally block
```

D.

```
Inside try block
Inside except block
else block
```

Option: C

Q103. Consider the following python code:

```
try:
    print('Inside try block')
    myval = 50
    myl1 = [1,2,0,4]
    for loop in myl1:
        myval = myval/loop
        print(myval)
except IndexError:
    print('Index Error')
except ZeroDivisionError:
    print('Division by Zero Exception')
```

```
else:
    print('Inside else block')
finally:
    print('Inside finally block')
```

Predict the output of the following python code.

A.

Inside try block

50

25

Division by Zero Exception

Inside else block

Inside finally block

B.

Inside try block

50

25

Division by Zero Exception

Inside finally block

C.

Inside try block

50.0

25.0

Division by Zero Exception

Inside finally block

D.

Inside try block

50.0

25.0

Division by Zero Exception

Inside else block

Inside finally block

Option: C

Q104. Consider the following python code:

```
try:
    print('Inside try block')
    myval = 50
    myl1 = [1,2,0,4]
    for loop in myl1:
        myval = myval/loop
        print(myval)
else:
    print('Inside else block')
except ZeroDivisionError:
    print('Division by Zero Exception')
finally:
    print('Inside finally block')
```

Predict the output of the following python code.

A. Syntax Error: invalid syntax

B.

Inside try block

50

25

Division by Zero Exception

Inside finally block

C.

Inside try block

50.0

25.0

Division by Zero Exception

Inside finally block

D.

Inside try block

50.0

25.0

Division by Zero Exception

Inside else block

Inside finally block

Option: A

Q105. Consider the following python code:

```
num1 = 1
num2 = 2
num3 = 4
num4 = '5'
mytotal = num1*2 + num3 + num4
```

What will be the value of mytotal ?

A. 65

B. 245

C. AttributeError

D.TypeError

Option: D

Q106. Consider the following python code:

```
myt1 = (1,'2',11,'12')
mytotal = 0
for element in myt1:
    mytotal += element
```

```
print(mytotal)
```

On execution of the above code, we are getting following error
TypeError: unsupported operand type(s) for +=: 'int' and 'str'

By which python code segment, we can fix the above error.

A. mytotal = mytotal + element
B. mytotal += int(element)
C. mytotal += float(element)
D.Both B and C Option

Option: D

Q107. A KeyError is found on the following python code:

```
myfruits={100:'Apple',101:'Mango',102:'Orange',103:'Litchi'}
for loop in range(100,105):
    print(myfruits[loop])
```

What shall be the python code segment to fix the above problem ?

A.
```
myfruits={100:'Apple',101:'Mango',102:'Orange',103:'Litchi'}
for loop in range(100,105):
    if loop in myfruits:
        print(myfruits[loop])
```

B.
```
myfruits={100:'Apple',101:'Mango',102:'Orange',103:'Litchi'}
for loop in myfruits:
    print(myfruits[loop])
```

C.
```
myfruits={100:'Apple',101:'Mango',102:'Orange',103:'Litchi'}
for loop in range(100,104):
    print(myfruits[loop])
```

D. Option A, B and C.

Option: D

Q108. Consider the following python code:

```
def func_perimeter_rectangle(l,w):
    return 2*(L+W)
print(func_perimeter_rectangle(3,4))
```

Predict the output ?

A. 14
B. IndentError
C. ArithmeticError
D.NameError

Option: D

Q109. Consider the following python code:

```
def function1(mynum1=0,mynum2=0):
    myoutput=int(mynum2)/int(mynum1)
    return myoutput
```

Predict the option where we will get error.

A.print(function1(20,5))

B.print(function1(20))

C.print(function1('20','5'))

D.print(function1(0,6))

Option: D

Q110. Consider the following python code:

```
mydata=[]
def func_data_creation():
    for i in range(0,5):
        myval=int(input('Enter the value:'))
        mydata.append(myval)

def func_find_multiply():
    mytotal=1
    for mark in mydata:
        mytotal *= mark
    return mytotal/len(mydata)
```

```
func_data_creation()
print(func_find_multiply())
```

Predict the output of the following code when user enter the value as 1,2,3,4,5 .

A. 24
B. 24.0
C. 25.0
D.At runtime, we will get TypeError.

Option: B

Q111. Which of the following statement displays the exception names?

A.e.__class__.__name__
B.type(e).__name__
C. Both option A and B.
D. None of these

Option: C

Q112. Which of the following statement/s regarding custom exceptions are True ?

A. It is optional to create child class for BaseException either directly or indirectly.
B.It is mandatory to create child class for BaseException either directly or indirectly.
C. It is impossible to create custom exceptions in python.
D. None of these

Option: B

Q113. **Question Regarding Best Fit option and Valid Syntax.**

1) **Which of the following is the best fit option for the except blockon the above code shown below?**

```
try:
    num1= int(input(" Enter the first number: "))
    num2= int(input(" Enter the second number: "))
    total = num1 / num2
    print("The division result is ", total)
except :
    print(f"The type of exception is {type(msg1)}")
```

a) (ValueError)as msg1

b) (ZeroDivisionError as msg1)

c) (ZeroDivisionError,ValueError) as msg1

d) (ZeroDivisionError,ValueError as msg1)

Option: C

2) **Which of the following is a valid syntax for the except block?**

a) except (ValueError as msg1):

b) except ValueError,ZeroDivisionError:

c) except (ValueError,ZeroDivisionError as msg1):

d) except (ValueError,ZeroDivisionError):

Option: D

Chapter-6 File I/O

Q114. Consider the following python code:

```
import os
def func_data_read(myfile_name,my_mode):
    if os.path.isfile(myfile_name):
        with open(myfile_name,my_mode) as myfile:
            return myfile.readline()
    else:
        return "File does not exist"

print(func_data_read('file1.txt', 'r'))
```

Which of the following options are correct about the above code ?

A. The above code will return the last line of the file.
B. The above code will return the first line of the file.
C. The above code will return the total data present in the file.
D. The above code will display “File does not exist” if the file is not created or present.

Option: B and D

Q115. A python code is required to meet following conditions:-

There is a requirement to read each line data of the file and get it displayed.
If any line is blank, the message “Blank line” must be displayed.
When all the line data have been read, then close the file.

Consider the following python code:

```
myfile=open('file2.txt','r')
boolchk_EOF=False
while boolchk_EOF == False:
    myline=myfile.readline()
    #Line-5
        #Line-6
            print(myline,end = '')
        else:
            print("Blank Line ")
    else:
        print('File Pointer reached at the end')
        boolchk_EOF=True
myfile.close()
```

What shall be the python code to be written at Line-5 and Line-6 ?

A.
Line-5: if len(myline) != 0:
Line-6: if myline != '\n':

B.
Line-6: if len(myline) != 0:
Line-5: if myline != '\n':

C.
Line-6: if len(myline) == 0:
Line-5: if myline != '\n':

D.
Line-6: if len(myline) != 0:
Line-5: if myline == '\n':

Option: A

Q116. There is a python application in your project.
First we need to read and then write data to a text file . The file pointer must be positioned at the beginning of the file. The old data in the file will not be deleted. Which mode we have to use ?

A. r
B. r+
C. w
D. w+

Option: B

Q117. Consider the following python code :

```
import sys
try:
    myinpfile=open('inpfile.txt','r')
    myoutfile=open('outpfile.txt','w+')
except IOError:
    print('File Cannot be opened',file_name)
else:
    count=1
    for myline in myinpfile:
        print(myline.rstrip())
        myoutfile.write(myline)
```

```
        count += 1
finally:
    myinpfile.close()
    myoutfile.close()
```

Predict the valid statement from the above code ?

A. The code inside try-except-finally block will be executed if the file ‘inpfile.txt’ is present.
B. The above code will copy data from file ‘inpfile.txt’ and create a new file ‘outpfile.txt’having same data as that of ‘inpfile.txt’.
C.We will get NameError: name 'myinpfile' is not defined if file ‘inpfile.txt’ is absent.
D. All options are Correct

Option: B and C

Q118. Consider the file ‘data.txt’. The contents inside this file is as follows:-
Saurabh:A
Priyanka:B
Ramesh:C
Divya:3

Now, consider the following python code:

```
myoutput=''
try:
    myfile=open('data.txt','r')
    content=myfile.readlines()
    for myline in content:
        if((myline.replace('\r', '').replace('\n', '').split(':')[1]).isdigit(
)):
            myoutput *=int(myline.replace('\r', '').replace('\n', '').split(':
')[1])
        elif(type(myline.replace('\r', '').replace('\n', '').split(':')[1]) is
 str):
            myoutput += myline.replace('\r', '').replace('\n', '').split(':')[
1]
    myfile.close()
except Exception:
    print('Unable to open the file')
print(myoutput)
```

Predict the output of the following code.

A. 3ABC
B. ABC3
C. ABCABCABC
D. None of the above.

Option: C

Q119. Consider the file 'data.txt'. The contents inside this file is as follows:-
Saurabh:A
Priyanka:B
Ramesh:C
Divya:3

Now, consider the following python code.

```
try:
    myfile=open('data.txt','r')
    #Line-3
except:
    print('File cannot be opened due to some X reason')
print(mydata)
```

What code should be written in Line-3 such that the total data can be read and display to the console.

A. mydata = myfile.readline()
B. mydata = myfile.readlines()
C. mydata = myfile.read()
D. mydata = myfile.readall()

Option: C

Q120. To write 'Welcome! Everyone' to a text file, what shall be the python code.

A.

```
myfile=open('filewrite.txt','b')
myfile.write('Welcome Everyone')
myfile.close()
```

B.

```
myfile=open('filewrite.txt','r')
myfile.write('Welcome Everyone')
myfile.close()
```

C.

```
myfile=open('filewrite.txt','w')
myfile.write('Welcome Everyone')
myfile.close()
```

D.

```
myfile=open('filewrite.txt')
myfile.write('Welcome Everyone')
myfile.close()
```

Option: C

Q121. You are developing a python project for reading data from the database and then writing into a file. You are writing data to a file mydata2.txt and add new data into it and display total data to the console.

Now, Consider the following python code.

```
with open('mydata2.txt','a+') as myfile:
myfile.write('Nilesh')
    myfile.write('New Data Addition')
    #Line-3
    mydata=myfile.read()
    print(mydata)
```

What code shall be written in Line-3 to display the total data to the console ?

A. myfile.start()
B. myfile.begin
C. myfile.read()
D. myfile.seek(0)

Option: D

Chapter-7 Built In Modules

Q122. A function is being created which manipulates a number. The function meets the following requirements:-

1. A float value is being passed to the function.
2. A function is required to take absolute value of the float value.
3. A function is required to return the largest integer greater than or equal to that of (2).

Which math functions are to be used ?

A. math.fabs(value)
B. math.floor(value)
C. math.ceil(value)
D. math.funcmod(value)

Option: A and C

Q123. An application is being written which uses the pow function. The reference variable used is pw. Identify the import statement to be used ?

A. import math.pow as pw
B. from math import pow as pw
C. from math.pow as pw
D. import pow from math as pw

Option: B

Q124. Consider the following python code and predict the output.

```
import math
myval =[str(round(math.e)) for i in range (1, 5)]
print(myval)
```

A.['2', '2', '2', '2']
B.['3', '3', '3', '3']
C.['1', '2', '3', '4']
D.['2.71', '2.71', '2.71', '2.71']

Option: B

Q125. Which of the following functions will be used to generate a random integer with minimum value as 10 and maximum value as 20.

A.

```
import random
print(random.randint(10,21))
```

B.

```
import random
print(random.randint(10,20))
```

C.

```
import random
print(random.randrange(10,20,1))
```

D.

```
import random
print(random.randrange(10,21,1))
```

Option: B and D

Q126. Consider the following python code:

```
import random
mygames=('Cricket','Hockey','VolleyBall','LawnTennis')
# Line-3
```

Which of the following will display some random value from the tuple in Line-3?

A.print(random.sample(mygames))

B.print(random.sample(mygames,3)[0])

C.print(random.choice(mygames))

D.print(random.choice(mygames)[0])

Option: B and C

Q127. An application is being developed for your project where a list is required to be created of 4 random integers between 1 and 4 inclusive.
Which of the following code is to be used ?

A.

```
import random
myrandint_num=[random.randint(1,4) for loop in range(1,5)]
print(myrandint_num)
```

B.

```
import random
myrandint_num=[random.randint(1,5) for loop in range(1,5)]
print(myrandint_num)
```

C.

```
import random
myrandint_num=[random.randrange(1,4)]
print(myrandint_num)
```

D.

```
import random
myrandint_num=[random.randint(1,4)]
print(myrandint_num)
```

Option: A

Q128. Consider the following python code:

```
import random
mygames=['Cricket','Hockey','Badminton','Chess']
myrand_list=[random.choice(mygames)[:3] for i in range(4)]
print(''.join(myrand_list))
```

Determine the possible outputs ?

A.HocHocCriCri
B.CheCriBadChe
C.BadBaCriChe
D.BadBadCriCri

Option: A, B and D

Q129. A mathematical function is defined in python to find the volume of a cone. If 'r' is the radius and 'h' is the height , then volume is (pi*r**2*h)/3 .
Which of the following python code will meet the criteria ?

A.

```
import math
def find_area(r,h):
    return (math.pi*math.fmod(r,2) * h )/3
```

B.

```
import math
def find_area(r,h):
    return (math.pi*math.sqrt(r,2) * h )/3
```

C.

```
import math
def find_area(r,h):
    return (math.pi*math.pow(r,2) * h )/3
```

D. None of the above.

Option: C

Q130. Consider the following python code and predict the correct output.

```
import random
print(float(random.random()*4))
```

A. A random float value will be generated from 0 to 4.
B. A random float value will be generated from 1 to 4.
C. A random float value will be generated from 0 to 5.
D.None of the above.

Option: A

Q131. Consider the following python code and predict the correct output.

```
import random
print(random.sample(range(5), 3))
```

A) It will print list of 5 unique random numbers from 0 to 3
B) It will print list of 3 unique random numbers from 0 to 5
C) It will print list of 3 unique random numbers from 0 to 4
D) It will print list of 3 unique random numbers from 1 to 5

Option: C

Chapter-8 Document and Structure Code

Q132.There is a requirement to add comments to a code so that other colleagues of your organization can understand it. What shall we do ?

A. The comments must be inserted before the start of the code.
B. The comments must be inserted after the last line of the code.
C. The comments must be inserted after the # sign anywhere on the code.
D. The comments must be inside any parenthesis, square or curly brackets.

Option: C

Q133. A function is created to compute the product of 2 numbers using python code. The function is well documented with comments.

Consider the following python code

```
# Line-1 ---> The func_product function calculates product of 2 numbers
# Line-2 ---> num1 is the first number
# Line-3 ---> num2 is the second number
# Line-4 ---> num1 multiplied with num2
def func_product(num1, num2):
    mymessage="#Return the  product of 2 numbers" # Line-6
    return num1*num2
print(func_product(2,3))
```

Which of the following statements are False ?

A. There is a presence of single line comment from Line-1 to Line-4.
B. Line-1 to Line-4 will be ignored for syntax checking.
C. The above function will compute the product of 2 numbers.
D. Error will be thrown at runtime in Line-6.

Option: D