

6406532041856. ✖ $a \rightarrow 2$

Question Number : 71 Question Id : 640653611437 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Choose the correct entries from columns B and C in table M2ES2 corresponding to the critical point $(-1, 0)$.

Options :

6406532041857. ✖ $b \rightarrow 2$

6406532041858. ✖ $c \rightarrow 1$

6406532041859. ✖ $b \rightarrow 3$

6406532041860. ✔ $a \rightarrow 2$

Sem2 Intro to Python

Section Id :	64065341322
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	15

Number of Questions to be attempted :	15
Section Marks :	50
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065388156
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 72 Question Id : 640653611438 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "FOUNDATION LEVEL : SEMESTER 2: INTRODUCTION TO PYTHON (COMPUTER BASED EXAM)"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?

CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532041861.  YES

6406532041862.  NO

Sub-Section Number :	2
Sub-Section Id :	64065388157

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 73 Question Id : 640653611439 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the following snippet of code where some functions are defined:

```
1 def func(L):
2     if L == []:
3         return 0
4     if L[0] % 2 == 0:
5         return 1 + func(L[1:])
6     else:
7         return func(L[1:])
8
```

Based on the above snippet of code what is the output of the function call `func([1, 2, 3, 4, 5])`?

Options :

6406532041863. ✖ 1

6406532041864. ✔ 2

6406532041865. ✖ 3

6406532041866. ✖ 4

6406532041867. ✖ 5

Question Number : 74 Question Id : 640653611444 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the following Python code:

```
1 def calculate(n):
2     if n < 10:
3         return n
4     else:
5         return calculate(n // 10) + (n % 10)
6
7 result = calculate(987654321)
8 print(result)
```

What will be the output of the code?

Options :

6406532041884. ✖ 1

6406532041885. ✖ 9

6406532041886. ✔ 45

6406532041887. ✖ 55

Sub-Section Number : 3

Sub-Section Id : 64065388158

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 75 Question Id : 640653611440 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following code snippet that writes student details to a CSV file named "scores.csv":

```

1 def write_to_file(L):
2     f = open('scores.csv', 'w')
3     f.write('Name,Python\n')
4     for i in range(len(L)):
5         name, marks = L[i]
6         line = f'{name},{marks}'
7         if i != len(L) - 1:
8             line = line + '\n'
9         f.write(line)
10    f.close()
11
12 L = [('John', 90), ('Jane', 85), ('Michael', 92), ('Sarah', 88), ('David',
95)]

```

If the `write_to_file(L)` function is called with the list `L` as shown above, what will be the contents of the file "scores.csv"?

Select the correct option that represents the contents of the "scores.csv" file after calling the `write_to_file(L)` function with the provided list `L`.

Options :

```

1 Name,Python
2 John,90
3 Jane,85
4 Michael,92
5 Sarah,88
6 David,95

```

6406532041868. ✓

```

1 John,90
2 Jane,85
3 Michael,92
4 Sarah,88
5 David,95

```

6406532041869. ✖

```

1 Python,Name
2 John,90
3 Jane,85
4 Michael,92
5 Sarah,88
6 David,95

```

6406532041870. ✖

1	Name
2	Python
3	John,90
4	Jane,85
5	Michael,92
6	Sarah,88
7	David,95

6406532041871. ✖

Question Number : 76 Question Id : 640653611441 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following Python code snippet:

```

1  x = 5
2  y = 10
3  z = 15
4  result = []
5  for i in range(1, 6):
6      if i % 2 == 0:
7          result.append(x + y)
8      else:
9          result.append(y - z)
10     x += 1
11     y += 2
12     z -= 1
13 print(result)

```

Choose the correct option that represents the output produced by the given code.

Options :

6406532041872. ✖ [5, 9, 17, 21, 17]

6406532041873. ✔ [-5, 18, 1, 24, 7]

6406532041874. ✖ [10, 5, 20, 15, 10]

6406532041875. ✖ [10, 8, 6, 4, 2]

Question Number : 77 Question Id : 640653611443 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following snippet of code. `x` is a real number. When `minmax(x, x)` is called, which return statement in the function is executed?

```
1 def minmax(a, b):  
2     if a <= b:  
3         return a, b  
4     return b, a
```

Options :

6406532041880. ✔ The return statement in line 3 which is inside the if-block

6406532041881. ✖ The return statement in line 4 which is outside the if-block

6406532041882. ✖ Both the return statements are executed

6406532041883. ✖ Neither return statement is executed

Question Number : 78 Question Id : 640653611445 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

What will be the output of the code snippet given below?

```

1 D = {101: 'Anand', 102: 'Suman', 103: '2400', 104: 'samuel', 105: 'sundar'}
2 for key in D:
3     value = D[key]
4     try:
5         if value.isdigit():
6             raise 'Error'
7         print(f'{key}:{value}')
8     except:
9         print('value should not contain digits')

```

Options :

```

1 101:Anand
2 102:Suman
3 103:2400
4 104:samuel
5 105:sundar

```

6406532041888. ✖

```

1 101:Anand
2 102:Suman

```

6406532041889. ✖

```

1 value should not contain digits

```

6406532041890. ✖

```

1 101:Anand
2 102:Suman
3 value should not contain digits
4 104:samuel
5 105:sundar

```

6406532041891. ✔

Sub-Section Number :

4

Sub-Section Id :

64065388159

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 79 Question Id : 640653611442 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Choose the correct option that represents the code block which will correctly calculate the sum of the digits for the given number.

Options :

6406532041876. ✓

```
1 num = int(input())
2 total = 0
3 while num > 0:
4     total += num % 10 # Please take a closer look at this line
5     num = num // 10
6 print(total)
```

6406532041877. ✖

```
1 num = int(input())
2 total = 0
3 while num > 0:
4     total -= num % 10 # Please take a closer look at this line
5     num = num // 10
6 print(total)
```

6406532041878. ✖

```
1 num = int(input())
2 total = 1
3 while num > 0:
4     total += num % 10 # Please take a closer look at this line
5     num = num // 10
6 print(total)
```

6406532041879. ✖

```
1 num = int(input())
2 total = 1
3 while num > 0:
4     total *= num % 10 # Please take a closer look at this line
5     num = num // 10
6 print(total)
```

Sub-Section Number :

5

Sub-Section Id :

64065388160

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 80 Question Id : 640653611446 Question Type : MSQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Max. Selectable Options : 0

Question Label : Multiple Select Question

We want to accept three integers from user, each on different line. Select all code snippets that run without any error and prints the greatest and smallest integer separated by single space among the three integers.

Sample Input

```
1 | 8
2 | 12
3 | 5
```

Sample Output:

```
1 | 12 5    #there is single space between 12 and 5
```

Options :

```
1 | a,b,c = int(input()) # Please take a closer look at this line
2 | if (a > b) and (a > c):
3 |     if b >= c:
4 |         print(a,c)
5 |     else:
6 |         print(a,b)
7 | elif (b > c) and (b > a):
8 |     if c>=a:
9 |         print(b,a)
10 |     else:
11 |         print(b,c)
12 | else:
13 |     if b>=a:
14 |         print(c,a)
15 |     else:
16 |         print(c,b)
```

6406532041892. ✖

```

1  a = int(input()) # Please take a closer look at this line
2  b = int(input()) # Please take a closer look at this line
3  c = int(input()) # Please take a closer look at this line
4  if (a > b) and (a > c):
5      if b >= c:
6          print(a,c)
7      else:
8          print(a,b)
9  elif (b > c) and (b > a):
10     if c>=a:
11         print(b,a)
12     else:
13         print(b,c)
14 else:
15     if b>=a:
16         print(c,a)
17     else:
18         print(c,b)

```

6406532041893. ✓

```

1  a,b,c = int(input())
2  L = [a,b,c]
3  L.sort()
4  print(L[-1],L[0])

```

6406532041894. ✖

```

1  a = int(input())
2  b = int(input())
3  c = int(input())
4  L = [a,b,c]
5  L.sort()
6  print(L[-1],L[0])

```

6406532041895. ✓

Question Number : 81 Question Id : 640653611447 Question Type : MSQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Correct Marks : 4 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following snippet of code:

```

1 def f(word, n):
2     a = 0
3     P = dict()
4     for c in word:
5         if c not in P:
6             P[c] = 0
7             P[c] += 1
8     for c in P:
9         if P[c] >= n:
10            a += 1
11            break
12
13     if a == 1:
14         print(f"some element occurs at least {n} times.")
15     else:
16         print(f"Every element occurs less than or equal to {n-1} times.")
17
18
19 if some_word.isnumeric():
20     print(True)
21 else:
22     print(False)
23 f(some_word,2)

```

`some_word` is a string variable that has already been defined. The above code runs without any errors.

The output when the code given above is executed is as follows:

```

1 True
2 Every element occurs less than or equal to 1 times.

```

Which of the following statements are True? Note that your answer should hold for any value of the string `some_word` that results in the above output.

Options :

6406532041896. ✓ `some_word` is only made up of numeric elements

6406532041897. ✗ `some_word` could also contain alphabets

6406532041898. ✗ First element of `some_word` occur exactly two times

6406532041899. ✓ All elements of some_word occur exactly one time

6406532041900. ✖ All elements in some_word occur at least two times.

Sub-Section Number :	6
Sub-Section Id :	64065388161
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 82 Question Id : 640653611448 Question Type : SA Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4
Question Label : Short Answer Question

`subject.csv` is a CSV file that has the following contents:

```
1 Regno,Name,year ,sub1,sub2,sub3
2 0,Ram,2002,Python,DBMS,CT
3 1,Seetha,2001,DBMS,JAVA,CT
4 2,Ritik,2003,Python,CT,JAVA
5 3,Sam,2001,JAVA,Perl,CT
6 4,Prachi,2002,Perl,Python,DBMS
7 5,Ahmed,2001,CT,Python,JAVA
8 6,Andrya,2002,JAVA,Perl,Python
9 7,Sahif,2001,DBMS,CT,Perl
10 8,Krish,2003,JAVA,CT,DBMS
11 9,Bindu,2003,Perl,JAVA,DBMS
```

What is the output of the following snippet of code?

```
1 def do_something(filename, sub):
2     f = open(filename, 'r')
3     f.readline()
4     sub_len = 0
5     count = 0
6
7     for line in f:
8         sno, name, year, s1, s2, s3 = line.strip().split(',')
9         if sub == s1:
10             sub_len = sub_len+len(s2)
11         elif sub == s2:
12             sub_len = len(s1+s2)
13         elif sub == s3:
14             sub_len = len(s2+s3)
15         count = count+1
16     f.close()
17     return sub_len
18 print(do_something('subject.csv', 'CT'))
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

6

Sub-Section Id : 64065388162

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 83 Question Id : 640653611449 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

Consider the following snippet of code:

```
1 L = [1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 15]
2 s = []
3 i = 0
4 while i < len(L):
5     if (L[i] % 3) != 0:
6         s.append(L[i])
7     i += 1
```

What will be the value of `len(s)` at the end of the execution of the above code?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

8

Sub-Section Number : 8

Sub-Section Id : 64065388163

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 84 Question Id : 640653611450 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

What is the output of the following snippet of code?

```
1 def log_func(x, y):
2     if x < y:
3         return 1
4     return 1 + log_func(x // 2, y)
5
6 log1 = log_func(32, 16)
7 log2 = log_func(2, 16)
8 log3 = log_func(16, 8)
9
10 print(log1 + log2 + log3)
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

7

Sub-Section Number : 9

Sub-Section Id : 64065388164

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653611451 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (85 to 88)

Question Label : Comprehension

Assume the values of Boolean variables A, B, and C are True, False, and True respectively. What will be output of the given code snippets in the subquestions?

Sub questions

Question Number : 85 Question Id : 640653611452 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

```
1 | print(not (A and (B or C)), (not(A) or B) and C)
```

Options :

6406532041904. ✓

```
1 | False False
```

6406532041905. ✗

```
1 | True False
```

6406532041906. ✗

```
1 | False True
```

6406532041907. ✗

```
1 | True True
```

Question Number : 86 Question Id : 640653611453 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

```
1 | print((A or B or C) and not(A and B and C))
```

Options :

6406532041908. ✗

```
1 | False
```

6406532041909.



1 | True False

6406532041910. ✖

1 | False True

6406532041911. ✔

1 | True

Question Number : 87 Question Id : 640653611454 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

1 | `print(not(C or B), not(A) or C)`

Options :

6406532041912. ✖

1 | False False

6406532041913. ✖

1 | True False

6406532041914. ✔

1 | False True

6406532041915. ✖

1 | True True

Question Number : 88 Question Id : 640653611455 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

```
1 | print((not(A) and B) or (A and C))
```

Options :

6406532041916. ✖ 1 | False

6406532041917. ✖ 1 | True False

6406532041918. ✖ 1 | False True

6406532041919. ✔ 1 | True

Sub-Section Number : 10

Sub-Section Id : 64065388165

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653611456 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (89 to 90)

Question Label : Comprehension

Consider the class `vehicle`:

```
1 class vehicle:
2     def __init__(self, model_name, price, vehicle_type):
3         self.model_name = model_name
4         self.price = price
5         self.type = vehicle_type #electric or petrol or diesel
6
7     def change_price(self, price):
8         self.price = price
9
10    def print_info(self):
11        print(f'vehicle model: {self.model_name}')
12        print(f'vehicle price: {self.price}')
13        print(f'vehicle type: {self.type}')
```

car is a sub-class of vehicle:

```
1 class Car(vehicle):
2     wheels = 4
3     def __init__(self, model_name, price, vehicle_type, car_type, gears):
4         super().__init__(model_name, price, vehicle_type)
5         self.car_type = car_type
6         self.gears = gears #number of gears in car.
7         self.speed = 0
8         self.gear = 0 # zero gear is neutral
9
10    def set_speed(self, speed):
11        self.speed = speed
12        self.set_gear(speed)
13
14    def set_gear(self, speed):
15        if speed == 0:
16            self.gear = 0
17        elif speed < 20:
18            self.gear = 1
19        elif speed < 40:
20            self.gear = 2
21        elif speed < 60:
22            self.gear = 3
23        elif speed < 80:
24            self.gear = 4
25        else:
26            self.gear = 5
27    def stop_car(self):
28        self.set_speed = 0
29    def change_gear(self, gear):
30        self.gear = gear
31        self.set_speed((gear-1)*20)
32    def get_speed(self):
33        return (self.speed, self.gear)
34
35    def print_info(self):
36        super().print_info()
37        print(f'car is {self.car_type} with {self.gears} gears.')
38        print(f'Current speed and gear is {self.speed} and {self.gear}
    respectively.')
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 89 Question Id : 640653611457 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Correct Marks : 5

Question Label : Multiple Choice Question

What is the output of the following snippet of code?

```
1 kwid = Car('Renault Kwid', 430000, 'Diesel', 'Hatchback', 5)
2 kwid.set_speed(60)
3 kwid.print_info()
```

Options :

6406532041920. ✖

```
1 Car is Hatchback with 5 gears.
2 Current speed and gear is 60 and 3 respectively.
```

6406532041921. ✖

```
1 Car is Hatchback with 5 gears.
2 Current speed and gear is 60 and 4 respectively.
```

6406532041922. ✔

```
1 Vehicle model: Renault Kwid
2 Vehicle price: 430000
3 Vehicle type: Diesel
4 Car is Hatchback with 5 gears.
5 Current speed and gear is 60 and 4 respectively.
```

6406532041923. ✖

```
1 Vehicle model: Renault Kwid
2 Vehicle price: 430000
3 Vehicle type: Diesel
4 Car is Hatchback with 5 gears.
5 Current speed and gear is 60 and 3 respectively.
```

6406532041924. ✖

```
1 Vehicle model: Renault Kwid
2 Vehicle price: 430000
3 Vehicle type: Diesel
4 Car is Hatchback with 5 gears.
5 Current speed and gear is 60 and 0 respectively.
```

Question Number : 90 Question Id : 640653611458 Question Type : SA Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4

Question Label : Short Answer Question

Consider the following snippet of code.

```
1 kwid = Car('Renault kwid', 430000, 'Diesel', 'Hatchback', 5)
2 kwid.set_speed(50)
3 kwid.change_gear(4)
```

What is the speed of the `kwid` car after the above snippet of code is executed? Enter the answer as integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

60

Sem2 English2

Section Id :	64065341323
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	27
Number of Questions to be attempted :	27
Section Marks :	100
Display Number Panel :	Yes
Section Negative Marks :	0