

Sem2 Intro to Python

Section Id :	64065330307
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	14
Number of Questions to be attempted :	14
Section Marks :	50
Display Number Panel :	Yes
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 :	64065367510
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 84 Question Id : 640653469426 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"**

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 :

6406531560152. ✓ YES

6406531560153. ✗ NO

Sub-Section Number : 2

Sub-Section Id : 64065367511

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 85 Question Id : 640653469427 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

E is a Boolean variable. Consider the following sequence of expressions:

```
1 not E
2 not not E
3 not not not E
4 not not not not E
5 .
6 .
7 .
```

This pattern keeps repeating for a thousand lines. If line number 500 evaluates to False, what is the value of E?

Options :

6406531560154. ✗ True

6406531560155. ✓ False

6406531560156. ✗ Cannot be determined

Question Number : 86 Question Id : 640653469428 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 block. `E_1`, `E_2` and `E_3` are all Boolean variables that have already been defined. `x` is a variable that has **NOT** been defined before.

```
1 if E_1:
2     x = 1
3 if E_2:
4     x = 2
5 if E_3:
6     x = 3
7 print(x)
```

When will this code throw an error?

Options :

6406531560157. ✖ When all three Boolean variables are `True`

6406531560158. ✔ When all three Boolean variables are `False`

6406531560159. ✖ When at least one of the three Boolean variables is `True`

6406531560160. ✖ When at least one of the three Boolean variables is `False`

6406531560161. ✖ This code will never throw an error

Sub-Section Number :

3

Sub-Section Id :

64065367512

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 87 Question Id : 640653469429 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

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

```
1 L = []
2 for i in range(1, 10):
3     if len(L) == 0:
4         value = i + 1
5     else:
6         value = i % 2
7     L.append(value)
8 print(L)
```

Options :

1 | [1, 0, 1, 0, 1, 0, 1, 0, 1]

6406531560162. ✖

1 | [2, 0, 1, 0, 1, 0, 1, 0, 1]

6406531560163. ✔

1 | [2, 1, 0, 1, 0, 1, 0, 1, 0]

6406531560164. ✖

1 | [1, 1, 0, 1, 0, 1, 0, 1, 0]

6406531560165. ✖

Sub-Section Number :

4

Sub-Section Id :

64065367513

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 88 Question Id : 640653469430 Question Type : MSQ Is Question

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

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following snippet of code:

```
1 word = input()
2 match = False
3 if word.count('(') == word.count(')'):
4     if word.count('[') == word.count(']'):
5         if word.count('{') == word.count('}'):
6             match = True
7 if match:
8     print('PERFECT!')
9 else:
10    print('IMPERFECT!')
```

Select all possible inputs for which this code prints `PERFECT!` as output.
It is a Multiple Select Question (MSQ).

Options :

6406531560166. ✓

1 | (a{b[c]})

6406531560167. ✓

1 | abcd

6406531560168. ✓

1 |)()[]{

6406531560169. ✗

1 | a(db]

Sub-Section Number :

5

Sub-Section Id :

64065367514

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 89 Question Id : 640653469431 Question Type : MSQ Is Question

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

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

Select all correct implementations of a program that prints the first 10 positive even numbers to the console, one number on each line. It is a Multiple Select Question (MSQ).

Options :

6406531560170. ✖

```
1 for num in range(1, 11):  
2     if num % 2 == 0:  
3         print(num)
```

6406531560171. ✖

```
1 for num in range(1, 20):  
2     if num % 2 == 0:  
3         print(num)
```

6406531560172. ✔

```
1 for num in range(1, 21):  
2     if num % 2 == 0:  
3         print(num)
```

6406531560173. ✔

```
1 for num in range(2, 21, 2):  
2     print(num)
```

6406531560174. ✔

```
1 count = 0  
2 num = 2  
3 while count < 10:  
4     print(num)  
5     num += 2  
6     count += 1
```

6406531560175. ✖

```
1 count = 0  
2 num = 2  
3 while count <= 10:  
4     print(num)  
5     num += 2  
6     count += 1
```

Question Number : 90 Question Id : 640653469432 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following snippet of code:

```
1 word = input()
2 valid = True
3 for i in range(len(word)):
4     char = word[i]
5     if i % 2 == 0 and char not in 'aeiou':
6         valid = False
7 print(valid)
```

Assume that a 10 letter word is passed as input to the code. If the output is `True`, then which of the following statements about the input word are `True`? It is a Multiple Select Question (MSQ).

Options :

6406531560176. ✖ The word has exactly five vowels

6406531560177. ✔ The word has at least five vowel

6406531560178. ✔ The letters at even indices are vowels (indexing starts from 0)

6406531560179. ✖ Every vowel in the word appears only at even indices (indexing starts from 0)

Question Number : 91 Question Id : 640653469433 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

`nums` is a list of positive integers. Select all correct implementations of a program that copies all the even numbers in `nums` to a list `even_nums` and stores them in the order in which they appear in `nums`. It is a Multiple Select Question (MSQ).

Options :

6406531560180. ✔

```
1 even_nums = []
2 for x in nums:
3     if x % 2 == 0:
4         even_nums.append(x)
```

6406531560181. ✖

```
1 even_nums = []
2 for i in range(len(nums)):
3     if i % 2 == 0:
4         even_nums.append(i)
```

6406531560182. ✖

```
1 even_nums = []
2 for i in range(len(nums)):
3     if i % 2 == 0:
4         even_nums.append(nums[i])
```

6406531560183. ✔

```
1 even_nums = []
2 for i in range(len(nums)):
3     if nums[i] % 2 == 0:
4         even_nums.append(nums[i])
```

Question Number : 92 Question Id : 640653469434 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

Assume `L` is a list of distinct positive integers. Consider the following code:

```
1 s = 0
2 for x in L:
3     s += x
4
5 flag = False
6 y = -1
7 for x in L:
8     if x * len(L) == s:
9         flag = True
10        y = x
11        break
```

If flag is `True` at the end of execution of the code given above, which of the following statements are `True`? It is a Multiple Select Question (MSQ).

Options :

6406531560184. ✓ `y` is an element in the list `L`

6406531560185. ✗ `y` is the smallest number in the list `L`

6406531560186. ✗ `y` is the greatest number in the list `L`

6406531560187. ✓ `y` is the average (arithmetic mean) of the numbers in the list `L`

6406531560188. ✗ `y` is the element at index `len(L) // 2` in the list `L`

Sub-Section Number : 6

Sub-Section Id : 64065367515

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 93 **Question Id :** 640653469435 **Question Type :** MSQ **Is Question**

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

Correct Marks : 5 **Selectable Option :** 0

Question Label : Multiple Select Question

Which of the following options swaps the first and the last value of a list `L` with more than 2 elements. It is a Multiple Select Question (MSQ).

Options :

```
1 temp = L[0]
2 L[0] = L[len(L)]
3 L[len(L)] = temp
```

6406531560189. ✖

```
1 temp = L[0]
2 L[0] = L[len(L) - 1]
3 L[len(L) - 1] = temp
```

6406531560190. ✔

```
1 temp = L[0]
2 L[0] = L[-1]
3 L[-1] = temp
```

6406531560191. ✔

```
1 L[0], L[len(L) - 1] = L[len(L) - 1], L[0]
```

6406531560192. ✔

Sub-Section Number :

7

Sub-Section Id :

64065367516

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 94 Question Id : 640653469436 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

What is the output of the following snippet of code? Each entry in the matrix `M` has one of these two characters: `'x'` or `'o'`.

```
1 M = [['x', 'x', 'o', 'x'],
2       ['o', 'x', 'o', 'o'],
3       ['o', 'x', 'o', 'o'],
4       ['o', 'o', 'o', 'o']]
5 n = len(M)
6 for i in range(n):
7     index = i
8     for j in range(1, n):
9         if M[i][j] != M[i][j - 1]:
10             index = -1
11             break
12         if M[j][i] != M[j - 1][i]:
13             index = -1
14             break
15     if index >= 0:
16         break
17 print(index)
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

-1

Sub-Section Number : 8

Sub-Section Id : 64065367517

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 95 **Question Id :** 640653469437 **Question Type :** SA **Calculator :** None

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

Correct Marks : 5

Question Label : Short Answer Question

What is the output of the following snippet of code?

```
1 p = 3
2 n = 25
3 count = 0
4 answer = 0
5 while p <= n:
6     flag = True
7     for i in range(2, p):
8         if p % i == 0:
9             flag = False
10    if flag:
11        count += 1
12        if flag and (count % 2 != 0):
13            answer += p
14    p += 1
15 print(answer)
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

42

Sub-Section Number : 9

Sub-Section Id : 64065367518

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653469438 **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 : (96 to 98)

Question Label : Comprehension

Answer the given subquestions.

Sub questions

Question Number : 96 Question Id : 640653469439 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

What will be the type of the following expression?

```
1 | 20 % 5 // 2 * 50 ** 3
```

Options :

6406531560195. ✖ float

6406531560196. ✔ int

6406531560197. ✖ str

6406531560198. ✖ bool

Question Number : 97 Question Id : 640653469440 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

What will be the type of the following expression?

```
1 | '#Python'
```

Options :

6406531560199. ✔ str

6406531560200. ✖ char

6406531560201. ✖ bool

6406531560202. ✖ Syntax error

Question Number : 98 Question Id : 640653469441 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

What will be the type of the following expression?

```
1 | 100 ** 3 / 300 + 10 - 25
```

Options :

6406531560203. ✓ float

6406531560204. ✗ int

6406531560205. ✗ str

6406531560206. ✗ bool

Sub-Section Number : 10

Sub-Section Id : 64065367519

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653469442 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 : (99 to 102)

Question Label : Comprehension

Consider the following code block. **A** and **B** are Boolean variables that have already been defined.

```
1 | if A:
2 |     print(A or B)
3 | elif B:
4 |     print(not(A or not B))
5 | else:
6 |     print(not(A and B))
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 99 Question Id : 640653469443 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

Which of the following output is correct
for `A = True` and `B = True` ?

Options :

6406531560207. ✓ True

6406531560208. ✗ False

6406531560209. ✗ Cannot be determined

Question Number : 100 Question Id : 640653469444 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

Which of the following output is correct
for `A = True` and `B = False` ?

Options :

6406531560210. ✓ True

6406531560211. ✗ False

6406531560212. ✗ Cannot be determined

Question Number : 101 Question Id : 640653469445 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

Which of the following output is correct
for A = False and B = True ?

Options :

6406531560213. ✓ True

6406531560214. ✗ False

6406531560215. ✗ Cannot be determined

**Question Number : 102 Question Id : 640653469446 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

Which of the following output is correct
for A = False and B = False ?

Options :

6406531560216. ✓ True

6406531560217. ✗ False

6406531560218. ✗ Cannot be determined

Sem2 English2

Section Id :	64065330308
Section Number :	6
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	37
Number of Questions to be attempted :	37
Section Marks :	50
Display Number Panel :	Yes
Group All Questions :	No