

Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Group I

Group Number :	1
Group Id :	64065318430
Group Maximum Duration :	0
Group Minimum Duration :	90
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	974
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No
Revisit allowed for group Instructions? :	Yes
Maximum Instruction Time :	0
Minimum Instruction Time :	0
Group Time In :	Minutes
Navigate To Group Summary From Last Question? :	No
Disable Submit Button During Assessment? :	No
Section Selection Time? :	0
No of Optional sections to be attempted :	0

Section Id :	64065356651
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	17
Number of Questions to be attempted :	17
Section Marks :	100
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 :	640653118629
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 640653814914 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 I:
COMPUTATIONAL THINKING (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 :

6406532730503. ✓ YES

6406532730504. ✗ NO

Question Number : 2 Question Id : 640653814915 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

Scores								
SeqNo	Name	Gender	DateOfBirth	TownCity	Mathematics	Physics	Chemistry	Total
0	Bhuvanesh	M	7 Nov	Erode	68	64	78	210
■ ■ ■								
29	Naveen	M	13 Oct	Vellore	72	66	81	219

Words			
SeqNo	Word	PartOfSpeech	LetterCount
0	It	Pronoun	2
■ ■ ■			
64	cane.	Noun	4

Library							
SeqNo	Name	Author	Genre	Language	Pages	Publisher	Year
0	Igniting Minds	Kalam	Nonfiction	English	178	Penguin	2002
■ ■ ■							
29	Malgudi Days	Narayan	Fiction	English	150	Indian Thought	1943

Olympics							
SeqNo	Name	Gender	Nationality	Host country	Year	Sport	Medal
0	Karnam Malleswari	F	Indian	Australia	2000	Weightlifting	Bronze
- - -							
49	Michael Phelps	M	American	China	2008	Swimming	Gold

Three sample cards out of 30 for Shopping Bills dataset

Item List

SV Stores		Srivatsan 1		
Item	Category	Qty	Price	Cost
Carrots	Vegetables/Food	1.5	50	75
Soap	Toiletries	4	32	128
Tomatoes	Vegetables/Food	2	40	80
Bananas	Vegetables/Food	8	8	64
Socks	Footwear/Apparel	3	56	168
Curd	Dairy/Food	0.5	32	16
Milk	Dairy/Food	1.5	24	36
				567

Sun General		Vignesh 14		
Item	Category	Qty	Price	Cost
Phone Charger	Utilities	1	230	230
Razor Blades	Grooming	1	12	12
Razor	Grooming	1	45	45
Shaving Lotion	Grooming	0.8	180	144
Earphones	Electronics	1	210	210
Pencils	Stationery	3	5	15
				656

Big Bazaar		Sudeep 2		
Item	Category	Qty	Price	Cost
Baked Beans	Canned/Food	1	125	125
Chicken Wings	Meat/Food	0.5	600	300
Cocoa powder	Canned/Food	1	160	160
Capsicum	Vegetables/Food	0.8	180	144
Tie	Apparel	2	390	780
Clips	Household	0.5	32	16
				1525

Options :

6406532730505.  Useful Data has been mentioned above.

6406532730506.  This data attachment is just for a reference & not for an evaluation.

Sub-Section Number :

2

Sub-Section Id :

640653118630

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 3 Question Id : 640653814917 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

The following pseudocode is executed using the "Shopping Bills" dataset. Assume that customer names are distinct.

```
1  A = 0, N = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      Move X to Table 2
5      while(Table 1 has more rows) {
6          Read the first row Y in Table 1
7          if(X.CustomerName == Y.CustomerName){
8              A = A + 1
9              Move Y to Table 2
10         }
11         else{
12             Move Y to Table 3
13         }
14     }
15     if(A > N){
16         N = A
17     }
18     A = 0
19     Move all rows from Table 3 to Table 1
20 }
```

What will **N** represent at the end of the execution?

Options :

6406532730512. ✖ Minimum number of bills issued to a single customer

6406532730513. ✔ Maximum number of bills issued to a single customer

6406532730514. ✖ Number of distinct customers in the dataset

6406532730515. ✖ Maximum number of customers who purchased items from the same shop

Question Number : 4 Question Id : 640653814923 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

The following pseudocode is executed using the "Scores" dataset. At the end of execution of below pseudocode, **first(D[c]) - last(D[c])** will represent the difference between highest and lowest Mathematics marks of the city **c**. Choose the correct code fragment.

```
1 D = {}
2 while(Table 1 has more rows){
3     Read the first row X in Table 1
4     if(isKey(D, X.TownCity)){
5         *****
6         ***** Fill the code*****
7         *****
8     }
9     else{
10        D[X.TownCity] = [X.Mathematics, X.Mathematics]
11    }
12    Move X to Table 2
13 }
```

Options :

```
1 if(first(D[X.TownCity]) > X.Mathematics){
2     D[X.TownCity] = [X.Mathematics, last(D[X.TownCity])]
3 }
4 if(last(D[X.TownCity]) < X.Mathematics){
5     D[X.TownCity] = [first(D[X.TownCity]), X.Mathematics]
6 }
```

6406532730529. ✖

```
1 if(first(D[X.TownCity]) < X.Mathematics){
2     D[X.TownCity] = [X.Mathematics, last(D[X.TownCity])]
3 }
4 if(last(D[X.TownCity]) > X.Mathematics){
5     D[X.TownCity] = [first(D[X.TownCity]), X.Mathematics]
6 }
```

6406532730530. ✔

```

1  if(last(D[X.TownCity]) < X.Mathematics){
2      D[X.TownCity] = [X.Mathematics, last(D[X.TownCity])]
3  }
4  if(first(D[X.TownCity]) > X.Mathematics){
5      D[X.TownCity] = [first(D[X.TownCity]), X.Mathematics]
6  }

```

6406532730531. ✖

```

1  if(last(D[X.TownCity]) > X.Mathematics){
2      D[X.TownCity] = [X.Mathematics, last(D[X.TownCity])]
3  }
4  if(first(D[X.TownCity]) < X.Mathematics){
5      D[X.TownCity] = [first(D[X.TownCity]), X.Mathematics]
6  }

```

6406532730532. ✖

Sub-Section Number :	3
Sub-Section Id :	640653118631
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 5 Question Id : 640653814918 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 6

Question Label : Multiple Choice Question

Let X and Y be two rows in the "Scores" table. We call X and Y partially matching if student X and Y either have the same gender or are from the same city, but not both.

Let $\text{partialMatch}(X, Y)$ be a procedure to find whether X and Y are partially matching. Choose the correct implementation of the procedure partialMatch .

Options :

6406532730516. ✖

```
1 Procedure partialMatch(X, Y)
2   A = False, B = False
3   if (X.Gender == Y.Gender){
4     A = True
5   }
6   if(X.TownCity == Y.TownCity){
7     B = True
8   }
9   if (A and B){
10    return(True)
11  }
12  return(False)
13 End partialMatch
```

```
1 Procedure partialMatch(X, Y)
2   A = False, B = False
3   if (X.Gender == Y.Gender){
4     A = True
5   }
6   if(X.TownCity == Y.TownCity){
7     B = True
8   }
9   if (A or B){
10    return(True)
11  }
12  return(False)
13 End partialMatch
```

6406532730517. ✖

6406532730518. ✔


```

1 Procedure partialMatch(X, Y)
2   A = False, B = False
3   if (X.Gender == Y.Gender){
4     A = True
5   }
6   if(X.TownCity == Y.TownCity){
7     B = True
8   }
9   if(not(A and B) and (A or B)){
10    return(True)
11  }
12  return(False)
13 End partialMatch

```

```

1 Procedure partialMatch(X, Y)
2   A = False, B = False
3   if (X.Gender == Y.Gender){
4     A = True
5   }
6   if(X.TownCity == Y.TownCity){
7     B = True
8   }
9   if((A and B) and not(A or B)){
10    return(True)
11  }
12  return(False)
13 End partialMatch

```

6406532730519. ✖

Question Number : 6 Question Id : 640653814924 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 6

Question Label : Multiple Choice Question

We call two sentences similar if both of them have the same number of words and satisfy the following conditions:

- The i^{th} word in the first sentence has the same part of speech as the i^{th} word in the second sentence, for $1 \leq i \leq L$, where L is the total number of words in either sentence.
- **aList** and **bList** are lists that contain the part of speech of words in two sentences **A** and **B** respectively.
- **isSimilar** is a procedure that accepts these two lists as parameters and checks for the similarity of **A** and **B**.

Choose the correct implementation of the procedure **isSimilar**.

Options :

```
1 Procedure isSimilar(aList, bList)
2   if(length(aList) != length(bList)){
3     return(False)
4   }
5   cList = bList
6   foreach x in aList{
7     if(x != first(cList)){
8       return (False)
9     }
10    cList = rest(cList)
11  }
12  return(True)
13 End isSimilar
```

6406532730533. ✓

```
1 Procedure isSimilar(aList, bList)
2   if(length(aList) != length(bList)){
3     return(False)
4   }
5   cList = bList
6   foreach x in aList{
7     if(x == first(cList)){
8       return (False)
9     }
10    cList = rest(cList)
11  }
12  return(True)
13 End isSimilar
```

6406532730534. ✖

```

1 Procedure isSimilar(aList, bList)
2   if(length(aList) != length(bList)){
3     return(False)
4   }
5   cList = bList
6   foreach x in aList{
7     if(x != first(cList)){
8       return (True)
9     }
10    cList = rest(cList)
11  }
12  return(False)
13 End isSimilar

```

6406532730535. ✖

```

1 Procedure isSimilar(aList, bList)
2   if(length(aList) != length(bList)){
3     return(False)
4   }
5   cList = bList
6   foreach x in aList{
7     if(x == last(cList)){
8       return (False)
9     }
10    cList = init(cList)
11  }
12  return(True)
13 End isSimilar

```

6406532730536. ✖

Question Number : 7 Question Id : 640653814925 Question Type : MCQ Is Question

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

Correct Marks : 6

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Words" dataset. Assume that the rows in the table are sorted in ascending order of sequence number.

```
1  inList = [], count = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      inList = inList ++ [[X.Word, X.PartOfSpeech]]
5      Move X to Table 2
6  }
7  *****
8  *****
9  *****Fill the code*****
10 *****
11 *****
```

Choose the correct code fragment so that, after executing the pseudocode above, **count** represents the number of nouns in the paragraph and **someVar** represents the number of words in the paragraph.

Options :

```
1  someVar = length(inList)
2  foreach x in inList{
3      if (first(x) == "Noun"){
4          count = count + 1
5      }
6  }
```

6406532730537. ✖

```
1  someVar = length(inList)
2  foreach x in inList{
3      if (last(x) == "Noun"){
4          count = count + 1
5      }
6  }
```

6406532730538. ✔

6406532730539. ✖

```

1 someVar = 0
2 foreach x in inList{
3     if (last(x) == "Noun"){
4         count = count + 1
5     }
6     someVar = someVar + length(x)
7 }

```

```

1 somevar = 0
2 foreach x in inList{
3     if (last(x) == "Noun"){
4         count = count + 1
5         someVar = someVar + length(x)
6     }
7 }

```

6406532730540. ✖

Sub-Section Number : 4

Sub-Section Id : 640653118632

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 8 **Question Id :** 640653814916 **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

Let **D** be a dictionary whose keys are strings and values are integers. For each key **A** in **D**, **D[A]** is the letter count of **A**. Choose the correct statement(s) about dictionary **D**.

Options :

6406532730507. ✖ For any two different keys **X** and **Y** in **D**, **D[X] != D[Y]** is always true

6406532730508. ✖ **isKey(D, 1)** is True

6406532730509. ✓ `keys(D)` returns a list of strings

6406532730510. ✓ `D["cricket"] = 7`

6406532730511. ✖ `keys(D)` may have duplicate elements

Sub-Section Number :	5
Sub-Section Id :	640653118633
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 9 Question Id : 640653814919 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 5 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following pseudocode is executed using the "Words" dataset.

```
1  A = 0, flag = True
2  inList = [], outList = []
3  while(Table 1 has more rows){
4      Read the first row X in Table 1
5      if(flag){
6          inList = [X.Word]
7          flag = False
8      }
9      if(X.Word ends with a full stop){
10         outList = outList ++ [inList ++ [X.Word]]
11         A = A + 1
12         inList = []
13         flag = True
14     }
15     Move X to Table 2
16 }
```

At the end of the execution of above pseudocode, which of the following statements will be true?

Options :

6406532730520. ✓ The value of **length(outList)** and **A** will be same.

6406532730521. ✗ **outList** represents list of lists of first word of each sentence

6406532730522. ✗ The value of **length(outList)** and **A** will be different.

6406532730523. ✓ **outList** represents list of lists of first and last word of each sentence in that order

Question Number : 10 Question Id : 640653814926 Question Type : MSQ Is Question

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

Correct Marks : 5 Max. Selectable Options : 0

Question Label : Multiple Select Question

The following pseudocode is executed using the "Library" dataset. At the end of the execution, **N** captures the name of a book written in the 'Non-Fiction' genre with the maximum number of pages, and **A** captures the number of pages in the book.

```
1  A = 0, N = "None"
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      if(X.Genre == "Non-Fiction" and X.Pages > A){
5          A = X.Pages
6          N = X.Name
7      }
8      Move X to Table 2
9  }
```

Suppose that the rows of the table are shuffled. Choose the **incorrect** options.

Options :

6406532730541. ✔ There might be a change in the value of **A**, based on the order of rows

6406532730542. ✔ The value of **N** does not depend on the order of rows.

6406532730543. ✔ There will be NO change in the values of both **A** and **N**, based on the order of rows

6406532730544. ✖ There might be a change in the value of **N**, based on the order of rows

Sub-Section Number :

6

Sub-Section Id :

640653118634

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 11 Question Id : 640653814930 Question Type : MSQ Is Question

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

Correct Marks : 6 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following pseudocode for inserting an element into a sorted list in descending order. The pseudocode may have mistakes. Identify all such mistakes (if any).

```
1 Procedure SortedListInsert(l,x)
2   newList = []
3   inserted = True
4   foreach z in l{
5     if(not(inserted)){
6       if(x < z){
7         newList = newList ++ [x]
8         inserted = True
9       }
10    }
11    newList = [z] ++ newList
12  }
13  if(not(inserted)){
14    newList = newList ++ [x]
15  }
16  return(newList)
17 End SortedListInsert
```

Options :

6406532730553. ✓ Line 3: variable 'inserted' is initialised to True so it will never enter the nested if block for comparison.

6406532730554. ✗ Line 6: inside if statement condition should be 'x > z'.

6406532730555. ✓ Line 11: [z] needs to be appended to the end of newList

6406532730556. ✗ Line 14: 'x' is appended to the end of the list instead of the beginning.

Question Number : 12 Question Id : 640653814931 Question Type : MSQ Is Question

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

Correct Marks : 6 Max. Selectable Options : 0

Question Label : Multiple Select Question

Let **LA** be a non-empty list of integers. A list **LB** is constructed using the following pseudocode.

```
1  LA = [10, 20, 30, 40, 50]
2  LC = LA
3  LB = [LA]
4  while(length(LC) > 1){
5      LC = rest(LC)
6      LB = LB ++ [LC]
7  }
```

Which of the following will return **true** after the execution of above pseudocode?

Options :

6406532730557. ✖ `length(LB) == length(LA) - 1`

6406532730558. ✖ `LC == [10]`

6406532730559. ✖ `last(LB) == LA`

6406532730560. ✔ `init(first(rest(LB))) == [20, 30, 40]`

6406532730561. ✔ `first(last(LB)) == [50]`

6406532730562. ✖ `first(init(LB)) == [20, 30, 40, 50]`

Sub-Section Number :

7

Sub-Section Id :

640653118635

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 640653814927 **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 : (13 to 14)

Question Label : Comprehension

The following pseudocode is executed using the "Scores" dataset.

```
1  A = 0, B = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      Flag = False
5      if(X.Gender != 'F' or X.Physics <= 90){
6          Flag = True
7      }
8      if(not Flag){
9          A = A + 1
10         if(X.Chemistry > 85){
11             B = B + 1
12         }
13     }
14     Move X to Table 2
15 }
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 13 Question Id : 640653814928 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 **A** represent at the end of the execution?

Options :

6406532730545. ✓ Number of female students whose Physics marks are at least 91

6406532730546. ✗ Number of male students whose Physics marks are at least 90

6406532730547. ✗ Number of female students whose Physics marks are at least 90

6406532730548. ✗ Number of male students whose Physics marks are at most 91

Question Number : 14 Question Id : 640653814929 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 **B** represent at the end of the execution?

Options :

6406532730549. ✖ Number of students whose Physics marks are at most 90 and Chemistry marks are at least 86

6406532730550. ✔ Number of female students whose Physics marks are at least 91 and Chemistry marks are at least 86

6406532730551. ✖ Number of female students whose Physics marks are at least 90 and Chemistry marks are at most 85

6406532730552. ✖ Number of male students whose Physics marks are at least 91 and Chemistry marks are at least 86

Sub-Section Number :	8
Sub-Section Id :	640653118636
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653814920 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 : (15 to 16)

Question Label : Comprehension

Consider the pseudocode given below where **intA** is a positive integer and **listL** is a non-empty list of positive integers.

```
1  X = calculate(intA, listL)
2  Procedure calculate(A, L)
3      if(length(L) == 0){
4          return(A)
5      }
6      else{
7          if(A > first(L)){
8              A = first(L)
9          }
10         return(calculate(A, rest(L)))
11     }
12 End calculate
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 15 Question Id : 640653814921 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

How many times will the procedure **calculate** be called, including the initial call in line 1?

Options :

6406532730524. ✖ length(listL)

6406532730525. ✖ length(listL) - 1

6406532730526. ✔ length(listL) + 1

6406532730527. ✖ Depends on the elements in listL

Question Number : 16 Question Id : 640653814922 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

If `intA = 6` and `listL = [4,7,3,8,5]` then, what will the value of X be at the end of the execution of given pseudocode?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Question Id : 640653814935 **Question Type :** COMPREHENSION **Sub Question Shuffling**

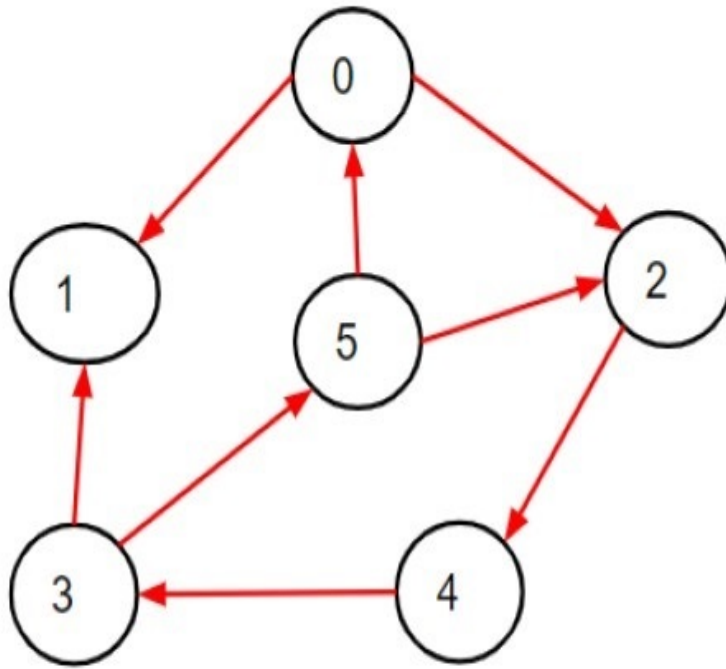
Allowed : No **Group Comprehension Questions :** No **Question Pattern Type :** NonMatrix

Calculator : None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

Question Numbers : (17 to 18)

Question Label : Comprehension

Let **M** be the adjacency matrix of the graph G as shown below and consider the procedure **Dosomething** given below.



```
1 Procedure Dosomething(M, q)
2   count = 0
3   foreach i in rows(M){
4     if(M[i][q] == 1 or M[q][i] == 1){
5       count = count + 1
6     }
7   }
8   return(count)
9 End Dosomething
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 17 Question Id : 640653814936 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 will the value of **B** be at the end of the execution of the pseudocode given below?

B = Dosomething(M, 4)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Question Number : 18 **Question Id :** 640653814937 **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 will the value of **B** be at the end of execution of pseudocode given below?

```
1 | B = Dosomething(M, 5)
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Sub-Section Number :	9
Sub-Section Id :	640653118637
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653814932 **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 : (19 to 20)

Question Label : Comprehension

Consider the procedure **evaluate** as shown below, where **P** and **Q** are the lists of same length. If **L1** = [4, 0, 2, 4] and **L2** = [3, 1, 5, 3] then answer the given subquestions.

```
1 Procedure evaluate(P, Q)
2   if(P == []){
3     return(P)
4   }
5   else{
6     c = last(P) + last(Q)
7     return([c] ++ evaluate(init(P), init(Q)))
8   }
9 End evaluate
```

Sub questions

Question Number : 19 Question Id : 640653814933 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 will **evaluate(L1, L2)** return?

Options :

6406532730563. ✖ ☐

6406532730564. ✖ ☐ [7, 1, 7, 7]

6406532730565. ✔ ☒ [7, 7, 1, 7]

6406532730566. ✖ ☐ [7, 7, 7, 7]

Question Number : 20 Question Id : 640653814934 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 will **evaluate(L1, L2)** return if **line 6** and **line 7** is replaced with below pseudocode?

```
1 | c = first(P) + first(Q)
2 | return([c] ++ evaluate(rest(P), rest(Q)))
```

Options :

6406532730567. ✖ ☐

6406532730568. ✔ ☒ [7, 1, 7, 7]

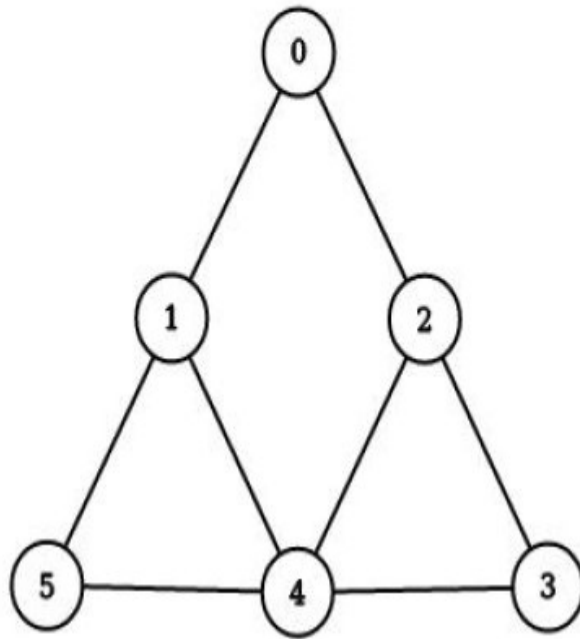
6406532730569. ✖ ☐ [7, 7, 1, 7]

6406532730570. ✖ ☐ [7, 7, 7, 7]

Question Id : 640653814938 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 : (21 to 22)

Question Label : Comprehension

Consider the following graph with six nodes. **M** is a 6 x 6 adjacency matrix corresponding to this graph. Assume that **M** has already been computed.



```
1 D = {}
2 L = []
3 D[4] = -1
4 D, L = searchPath(M, D, L, 4)
5 Procedure searchPath(graph, P, S, i)
6     S = S ++ [i]
7     foreach j in columns(graph){
8         if(graph[i][j] == 1 and not(iskey(P, j))){
9             P[j] = i
10            P, S = searchPath(graph, P, S, j)
11        }
12    }
13    return(P, S)
14 End searchPath
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 21 Question Id : 640653814939 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 will the value of **L** be after execution of the given pseudocode?

Options :

6406532730573. ✖ **L** = [4, 0, 1, 2, 3, 5]

6406532730574. ✔ **L** = [4, 1, 0, 2, 3, 5]

6406532730575. ✖ **L** = [4, 1, 2, 3, 5, 0]

6406532730576. ✖ **L** = [4, 0, 2, 3, 5, 1]

Question Number : 22 Question Id : 640653814940 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 will the value of **D** be after execution of the given pseudocode?

Options :

6406532730577. ✖ **D** = {4:-1, 1:4, 0:2, 2:0, 3:2, 5:1}

6406532730578. ✔ **D** = {4:-1, 1:4, 0:1, 2:0, 3:2, 5:1}

6406532730579. ✖ **D** = {4:-1, 2:4, 0:1, 1:5, 3:2, 5:4}

6406532730580. ✖ **D** = {4:-1, 2:4, 0:1, 2:0, 3:2, 5:4}

Sem2 Intro to Python

Section Id :

64065356652

Section Number :

2