Change Theme : No

Help Button : No

Show Reports : No

Show Progress Bar : No

Group I

Group Number : 1

Group Id : 64065317432

Group Maximum Duration : 0

Group Minimum Duration : 90

Show Attended Group? : No

Edit Attended Group? : No

Break time : 0

Group Marks : 765

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

CT

Section Id :	64065353257
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
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 :	640653112558
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 640653770393 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 : 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 <u>TOP</u> FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532577112. ✔ YES

6406532577113. ✖ NO

Sub-Section Number :   2

Sub-Section Id :   640653112559

Question Shuffling Allowed :   No

Is Section Default? :   null

Question Number : 2 Question Id : 640653770394 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

Options :

6406532577114. ✔ Useful Data has been mentioned above.

6406532577115. ✖ This data attachment is just for a reference & not for an evaluation.

Sub-Section Number :	3
Sub-Section Id :	640653112560
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 3 Question Id : 640653770395 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 the value of **mList** be at the end of the execution of below pseudocode?

```
1  L = [[10, 'apple', 5.0], [20, 'banana', 3.5], [30, 'cherry', 2.0], [40,
      'date', 1.5], [50, 'elderberry', 4.0]]
2  mList = [ ]
3  foreach element in L{
4      z = DoSomething(element)
5      mList = mList ++ [z]
6  }
7
8  Procedure DoSomething(X)
9      a = rest(X)
10     return(first(a))
11 End DoSomething
```

Options :

6406532577116. ✖ [10,20,30,40,50]

6406532577117. ✖ [10, 'apple', 5.0, 20, 'banana', 3.5, 30, 'cherry', 2.0, 40, 'date',1.5, 50, 'elderberry', 4.0]

6406532577118. ✔ ['apple', 'banana', 'cherry', 'date', 'elderberry']

6406532577119. ✖ [5.0, 3.5, 2.0, 1.5, 4.0]

Question Number : 4 Question Id : 640653770397 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 pseudocode. What will the value of **B** be at the end of the execution?

```
1   A = [3, 8, 15, 6, 10, 5]
2   B = []
3   foreach number in A{
4       if(checkCondition(number)){
5           B = B ++ [number]
6       }
7   }
8   Procedure checkCondition(X)
9       if(X == 1){
10          return(False)
11      }
12      j = 2
13      flag = True
14      while(j < X){
15          if(remainder(X, j) == 0){
16              flag = False
17          }
18          j = j + 1
19      }
20      return(flag)
21  End checkCondition
```

Options :

6406532577124. � B = [3, 15, 5]

6406532577125. ✖ B = [3]

6406532577126. ✖ B = [5]

6406532577127. ✔ B = [3, 5]

Question Number : 5 Question Id : 640653770399 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

The following pseudocode is executed on the "Words" table. Assume that the rows in Table 1 are sorted in increasing order of sequence number. What does the list **L** contain at the end of execution?

```
1   L = []
2   A = "None"
3   Read the first row X in Table 1
4   A = X.PartOfSpeech
5   Move X to Table 2
6   while(Table 1 has more rows){
7       Read the first row X in Table 1
8       if(X.PartOfSpeech == "Noun"){
9           if(A == "Article"){
10              L = L ++ [X.Word]
11          }
12      }
13      A = X.PartOfSpeech
14      Move X to Table 2
15  }
```

Options :

6406532577132. ✔ The list of nouns that come immediately after an article

6406532577133. ✖ The list of articles that come immediately after a noun

6406532577134. ✖ The list of nouns that come immediately before an article

6406532577135. ✖ The list of articles that come immediately before a noun

Question Number : 6 Question Id : 640653770400 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

The given pseudocode is executed using "Words" dataset. What does **wordCount** represent at the end of execution?

```
1    wordCount = 0
2    while(Table 1 has more rows){
3        Read the first row X in Table 1
4        if(doSomething(X) >= 3){
5            wordCount = wordCount + 1
6        }
7        Move X to Table 2
8    }
9
10   Procedure doSomething(Y)
11       A = {}, i = 1
12       while(i <= Y.LetterCount){
13           l = ith letter of Y.word
14           if(l is consonant){
15               A[l] = True
16           }
17           i = i + 1
18       }
19       return(length(keys(A)))
20   End doSomething
```

Options :

6406532577136. ✹ Number of words in which the number of distinct consonants is greater than or equal to 3 in a particular sentence.

6406532577137. ✔ Number of words in which the number of distinct consonants is greater than or equal to 3

6406532577138. ✹ Number of words in which the number of distinct consonants is less than 3

6406532577139. ✹ Number of consonants in a word

Question Number : 7 Question Id : 640653770401 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 the value of **B** be at the end of the execution of the following pseudocode?

```
1   Procedure doSomething(aList)
2       bDict = {}
3       bList = []
4       foreach a in aList{
5           if(not isKey(bDict, a)){
6               bDict[a] = True
7               bList = bList ++ [a]
8           }
9       }
10      return(bList)
11  End doSomething
12
13  A = [4, 3, 1, 3, 4, 5, 1, 2, 7]
14  B = doSomething(A)
```

Options :

6406532577140. ✖ [4, 3, 1, 3, 4, 5, 1, 2, 7]

6406532577141. ✔ [4, 3, 1, 5, 2, 7]

6406532577142. ✖ [5, 2, 7]

6406532577143. ✖ [1, 2, 3, 4, 5, 7]

Question Number : 8 Question Id : 640653770404 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

The following pseudocode is executed using the "Scores" dataset. What will the values of **A** and **B** represent at the end of the execution?

```
1   D = {}
2   while(Table 1 has more rows){
3       Read the fist row X in Table 1
4       if(isKey(D, X.Town/City)){
5           if(D[X.Town/City] > X.Physics){
6               D[X.Town/City] = X.Physics
7           }
8       }
9       else{
10          D[X.Town/City] = X.Physics
11      }
12      Move X to Table 2
13  }
14
15  A = 0, B = 100
16  foreach Y in keys(D){
17      if(B == D[Y]){
18          A = A + 1
19      }
20      if(B > D[Y]){
21          A = 1
22          B = D[Y]
23      }
24  }
```

Options :

6406532577152. ✔ A = Number of cities where students score the lowest marks in Physics
B = The lowest marks in Physics

6406532577153. ✘ A = Number of cities where students score the highest marks in Physics
B = The lowest marks in Physics

6406532577154. ✘ A = Cities where students score the highest marks in Physics
B = The highest marks in Physics

6406532577155. ✘ A = Number of cities where students score the lowest marks in Physics
B = The highest marks in Physics

Question Number : 9 Question Id : 640653770396 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

The following pseudocode is executed using the "Words" dataset and **explode(X)** returns the letters in the word **X** as a list. For example **explode**("mood") returns ['m', 'o', 'o', 'd']. What will **count** represent at the end of the execution?

```
1   count = 0, letterList = []
2   while(Table 1 has more rows){
3       Read the first row X in Table 1
4       letterList = explode(X.Word)
5       count = count + processLetters(letterList)
6       Move X to Table 2
7   }
8
9   Procedure processLetters(L)
10      prevLetter = first(L)
11      restList = rest(L)
12      foreach letter in restList{
13          if(letter == prevLetter){
14              return(0)
15          }
16          prevLetter = letter
17      }
18      return(1)
19  End processLetters
```

Options :

6406532577120. ✳ Number of words with at most two consecutive identical letters

6406532577121. ✳ Number of words with at least two consecutive identical letters

6406532577122. ✳ Number of words with consecutive identical letters

Question Number : 10 Question Id : 640653770398 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

The following pseudocode is executed using the "Words" dataset. Let **X**.*Word* and **Y**.*Word* be "computational" and "thinking" respectively. At the end of the execution of the pseudocode shown below, what will be the value of **commonDict**?

```
1
2    firstDict = {}, secondDict = {}, commonDict = {}
3    firstDict = updateDict(X, commonDict)
4    secondDict = updateDict(Y, commonDict)
5    foreach key in keys(firstDict){
6        if(isKey(secondDict, key)){
7            if(firstDict[key] > secondDict[key]){
8                commonDict[key] = firstDict[key]
9            }
10           else{
11               commonDict[key] = secondDict[key]
12           }
13       }
14   }
15
16   Procedure updateDict(Z, Dict)
17       i = 1, x = ''
18       while(i <= Z.LetterCount){
19           x = ith letter of Z.Word
20           if(not isKey(Dict, x)){
21               Dict[x] = 1
22           }
23           else{
24               Dict[x] = Dict[x] + 1
25           }
26           i = i + 1
27       }
28       return(Dict)
29   End updateDict
```

Options :

6406532577128. ✖   {'t':1, 'i': 1, 'n':1}

6406532577129. ✔ {'t':2, 'i': 2, 'n':2}

6406532577130. ✘ {'t':2, 'i': 1, 'n':1}

6406532577131. ✘ {'t':1, 'i': 2, 'n':2}

Question Number : 11 Question Id : 640653770402 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

The following pseudocode is executed using the "Olympics" dataset. What will **B** represent at the end of execution?

```
1   P = {}
2   while(Table 1 has more rows){
3       Read the first row X in Table 1
4       P = UpdateMedalCounts(P, X.Sport, X.Medal)
5       Move X to Table 2
6   }
7   B = doSomething(P)
8
9   Procedure UpdateMedalCounts(Q, Sport, Medal)
10      if(isKey(Q, Sport)){
11          Q[Sport][Medal] = Q[Sport][Medal] + 1
12      }
13      else{
14          Q[Sport] = {"Gold":0, "Silver":0, "Bronze":0}
15          Q[Sport][Medal] = 1
16      }
17      return (Q)
18  End UpdateMedalCounts
19
20  Procedure doSomething(R)
21      max = 0
22      for each sport in keys(R) {
23          if(R[sport]["Gold"] > max){
24              max = R[sport]["Gold"]
25          }
26      }
27      return (max)
28  End doSomething
```

Options :

6406532577144. ✖ Minimum number of gold medals among all the sports

6406532577145. ✔ Maximum number of gold medals among all the sports

6406532577146. ✖ Maximum number of medals among all the sports

6406532577147. ✖ Total number of gold medals in all the sports

Question Number : 12 Question Id : 640653770403 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

The following pseudocode is executed using the "Shopping bills" dataset. What will **AA** represent at the end of execution?

```
1   BB = {}, AA = "None"
2   while(Pile 1 has more cards){
3        Read the top card X in Pile 1
4        if(X.ShopName == "SV Stores"){
5             BB = UpdateDictionary(BB, X)
6        }
7        Move X to Pile 2
8   }
9   AA = GetKeyByKey(BB)
10
11  Procedure UpdateDictionary(D, Y)
12       foreach A in Y.ItemList{
13            if(isKey(D, A.Category)){
14                 D[A.Category] = D[A.Category] + 1
15            }
16            else{
17                 D[A.Category] = 1
18            }
19       }
20       return(D)
21  End UpdateDictionary
22
23  Procedure GetKeyByKey(D)
24       A = "None", B = 0
25       foreach Y in keys(D){
26            if(B < D[Y]){
27                 A = Y
28                 B = D[Y]
29            }
30       }
31       return(A)
32  End GetKeyByKey
```

Options :

6406532577148. ✷ Finds the least frequent item category from SV Stores

6406532577149. ✷ Finds the list of item categories from SV Stores

6406532577150. ✔ Finds the most frequent item category from SV Stores

6406532577151. ✷ Finds the number of items from SV Stores

Question Number : 13 Question Id : 640653770405 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

The following pseudocode is executed using the "station wise" cards of the "Train" dataset. At the end of the execution, **STN** should capture the following information: for a station **X**, and a day of a week **A**, STN[X][A] should store the number of trains running through **X** on day **A**. Choose the correct code fragment to complete the pseudocode. [Note: Assume that for each station, the train list is given in a single card.]

```
1   STN = {}
2   while(Pile 1 has more cards){
3       Read the top card X in Pile 1
4       STN[X.StationName] = getInfo(STN, X)
5       Move X to Pile 2
6   }
7
8   Procedure getInfo(STN, X)
9       *********************
10      *   Fill the code   *
11      *********************
12      return(D)
13  End getInfo
```

Options :

```
1   D = {}
2   foreach A in X.TrainList{
3       foreach B in A.Days{
4           D[B] = 1
5       }
6   }
```
6406532577156. ✖

```
1   D = {"M": 0, "Tu": 0, "W": 0, "Th": 0, "F": 0, "Sa": 0, "Su": 0}
2   foreach A in X.TrainList{
3       foreach B in A.Days{
4           D[B] = 1
5       }
6   }
```
6406532577157. ✖

```
1  D = {}
2  foreach A in X.TrainList{
3      foreach B in A.Days{
4          D[B] = D[B] + 1
5      }
6  }
```

6406532577158. ✖

```
1  D = {"M": 0, "Tu": 0, "W": 0, "Th": 0, "F": 0, "Sa": 0, "Su": 0}
2  foreach A in X.TrainList{
3      foreach B in A.Days{
4          D[B] = D[B] + 1
5      }
6  }
```

6406532577159. ✔

Question Number : 14 Question Id : 640653770406 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

The following pseudocode is executed using the "Words" dataset. What will **count** represent at the end of execution?

```
1   count = 0
2   L = []
3   while(Table 1 has more rows){
4       Read the first row X in Table 1
5       L = addSomething(L, X)
6       if(X.Word ends with a full stop){
7           if(length(L) >= 10){
8               count = count + 1
9           }
10          L = []
11      }
12      Move X to Table 2
13  }
14
15  Procedure addSomething(M, Y)
16      i = 1
17      while(i <= Y.LetterCount){
18          p = ith letter of Y.Word
19          if(not (member(M, p))){
20              M = M ++ [p]
21          }
22          i = i + 1
23      }
24      return(M)
25  End addSomething
```

Options :

6406532577160. ✱ Number of sentences having at least 10 words

6406532577161. ✱ Number of words having at least 10 distinct letters

6406532577162. ✱ Number of sentences having at least 10 letters

6406532577163. ✔ Number of sentences having at least 10 distinct letters

Sub-Section Number :   5

Sub-Section Id :   640653112562

Question Shuffling Allowed :   Yes

Is Section Default? :   null

Question Number : 15 Question Id : 640653770407 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 have a non-empty list, **Publisher** that stores the publisher name in each card from the "Library" dataset, sorted in alphabetical order. This results in many duplicates. The following procedure attempts to extract the unique list of publishers, while preserving the sorted order. The pseudocode may have mistakes. Identify all such mistakes (if any). It is a Multiple Select Question.

```
1   uniqueList = [first(Publisher)]
2   prev = last(Publisher)
3   for each x in rest(Publisher){
4       if(x != prev){
5           uniqueList = uniqueList ++ x
6       }
7       prev = x
8   }
```

Options :

6406532577164. ✔ Error in line 3

6406532577165. ✖ Error in line 4

6406532577166. ✖ Error in line 5

6406532577167. ✔ Error in line 6

6406532577168. ✖ Error in line 8

6406532577169. ✖ The pseudocode is error free

Question Number : 16 Question Id : 640653770408 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

The following pseudocode is executed using the "Library" dataset. Let **p** be a list of authors, and after the execution of pseudocode below, **dict[X]** stores the number of books having at least 200 pages and written on or after 2000 by author **X**. Choose the correct code fragment(s) to complete the pseudocode.

It is a Multiple Select Question (MSQ).

```
1   dict = { }
2   foreach author in p{
3       dict[author] = 0
4   }
5   while(Table 1 has more rows){
6       Read the first row X from Table 1
7       *********************************
8       *            Fill the Code       *
9       *********************************
10      Move X to Table 2
11  }
```

Options :

```
1   if(isKey(dict, X.Author) and (X.Pages >= 200 and X.Year >= 2000)){
2       dict[author] = dict[author] + 1
3   }
```

6406532577170. ✔

```
1   if(isKey(dict, X.Author) or (X.Pages >= 200 and X.Year >= 2000)){
2       dict[author] = dict[author] + 1
3   }
```

6406532577171. ✘

```
1   C = False, D = False
2   if(isKey(dict, X.Author) and (X.Pages >= 200)){
3       C = True
4   }
5   if(isKey(dict, X.Author) and (X.Year >= 2000)){
6       D = True
7   }
8   if(C and D){
9       dict[author] = dict[author] + 1
10  }
```

6406532577172. ✔

6406532577173. ✘

```
 1  C = False, D = False
 2  if(isKey(dict, X.Author) and (X.Pages >= 200)){
 3      C = True
 4  }
 5  if(isKey(dict, X.Author) and (X.Year >= 2000)){
 6      D = True
 7  }
 8  if(C or D){
 9      dict[author] = dict[author] + 1
10  }
```

Maths 1

Section Id :	64065353258
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	12
Number of Questions to be attempted :	12
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 :	640653112563
Question Shuffling Allowed :	No
Is Section Default? :	null