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

Group I

Group Number :	1
Group Id :	64065316190
Group Maximum Duration :	0
Group Minimum Duration :	90
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	715
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 :	64065348499

Section Number :	1
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
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 :	640653100782
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 640653689392 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 TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532306320. ✔ YES

6406532306321. ✖ NO

Question Number : 2 Question Id : 640653689393 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

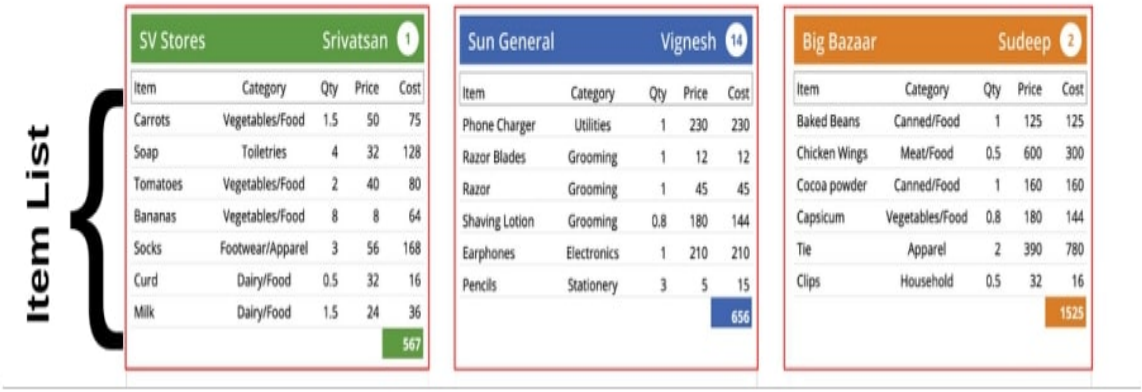
Library

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 :

6406532306322. ✔ Useful Data has been mentioned above.

6406532306323. ✖ This data attachment is just for a reference & not for an evaluation.

Sub-Section Number :	2
Sub-Section Id :	640653100783
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 3 Question Id : 640653689394 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 values of **mList** after execution of the following pseudocode?

```
L = [[1, 100, 'A'], [2, 99, 'B'], [3, 98, 'C'], [4, 97, 'D'], [5, 96, 'E']]
mList = []
foreach element in L{
    z = DoSomething(element)
    mList = mList ++ [z]
}
Procedure DoSomething(X)
    a = rest(X)
    return(first(a)*2)
End DoSomething
```

Options :

6406532306324. ✖

```
[2, 4, 6, 8, 10]
```

6406532306325. ✖

```
[1, 200, 'A', 2, 198, 'B', 3, 196, 'C', 4, 194, 'D', 5, 192, 'E']
```

6406532306326. ✔

```
[200, 198, 196, 194, 192]
```

6406532306327. ✖

```
[2, 100, 'A', 4, 99, 'B', 6, 98, 'C', 8, 97, 'D', 10, 96, 'E']
```

Question Number : 4 Question Id : 640653689401 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"** dataset. What will the values of **A** and **B** represent at the end of the execution of the below pseudocode?

```
A=[]
B=[]
while(Table 1 has more rows){
    Read the top row X from Table 1
    if(X.PartOfSpeech == "Verb"){
        A = A ++ [X.SerialNumber]
        if(X.LetterCount > 5){
            B = B ++ [X.SerialNumber]
        }
    }
    Move X to Table 2
}
```

Options :

6406532306345. ✖ **A** contains serial numbers of all verbs, while **B** contains serial numbers of other words

6406532306346. ✖ **A** contains serial numbers of all verbs, while **B** contains serial numbers for other words with letter count greater than 5

6406532306347. ✔ **A** contains serial numbers of all verbs, while **B** contains serial numbers of all verbs with letter count greater than 5

6406532306348. ✖ **A** contains serial numbers of all verbs and **B** contains serial numbers of words other than verbs

Question Number : 5 Question Id : 640653689403 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 "**Shopping Bills**" dataset. What will **d** represent at the end of the execution of the below pseudocode?

```
d={}
while(Table 1 has more rows){
    Read the first row X in Table 1
    d = doSomething(X, d, "SV Stores")
    d = doSomething(X, d, "Big Bazaar")
    d = doSomething(X, d, "Sun General")
    Move X to Table 2
}
Procedure doSomething(Y, D, S)
    if(isKey(D, S)){
        D[S] = D[S] ++ [Y.TotalBillAmount]
    }
    else{
        D[S] = [Y.TotalBillAmount]
    }
    return D
End doSomething
```

Options :

6406532306355. ✖ The dictionary **d** represents the sum of all total bill amounts with respect to the shop name parameter.

6406532306356. ✔ The dictionary **d** represents a list of total bill amounts with respect to the shop name parameter.

6406532306357. ✖ The dictionary **d** represents the count of bills with respect to the shop name parameter.

6406532306358. ✖ The dictionary **d** represents a list of shop names with respect to the total bill amount.

Question Number : 6 Question Id : 640653689404 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**" dataset. What will be the values of **B** and **C** represent at the end of the execution of the below pseudocode?

```
A={}
while(Table 1 has more rows){
    Read the first row X in Table 1
    A = doSomething(A, X.PartOfSpeech)
    Move X to Table 2
}
B = 0
C = None
foreach k in keys(A){
    if(A[k] > B) {
        B = A[k]
        C = k
    }
}
Procedure doSomething(Y, P)
    if(isKey(Y, P)){
        Y[P] = Y[P] + 1
    }
    else{
        Y[P] = 1
    }
    return Y
End doSomething
```

Options :

6406532306359. ✖ **B** contains the minimum frequency count of part of speech and **C** contains the corresponding part of speech

6406532306360. ✖ **C** contains the minimum frequency count of part of speech and **B** contains the corresponding part of speech

6406532306361. ✖ **C** contains the maximum frequency count of part of speech and **B** contains the corresponding part of speech

6406532306362. ✔ **B** contains the maximum frequency count of part of speech and **C** contains the corresponding part of speech

Sub-Section Number : 3

Sub-Section Id : 640653100784

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 7 Question Id : 640653689395 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

Alex and Elena play a game every time they meet. They write the score of each round in the form **[i,j]** where **i** stores the score for Alex and **j** stores the score for Elena. The results of the series of rounds are recorded in **scoreList** (which is a list of lists).

For example, **scoreList** = [[20,18],[15,19],[8,19],[12,7]] records that in the first round Alex scored 20 and Elena scored 18, in the second round Alex scored 15 and Elena scored 19, and so on. The person with the higher total score is the winner.

To determine the winner, a procedure **findGameWinner(x)** is called that accepts **scoreList** as a parameter and returns **winner**. If Alex is the winner, then **winner** = 1; if Elena is the winner, then **winner** = 2 ; and if it is a draw then **winner** = 0.

Which of the following procedure(s) correctly identify/identifies the winner?

Options :

6406532306328. ✔

```
Procedure findGameWinner(scoreList)
    alex_Score = 0
    elena_Score = 0
    winner = 0
    foreach roundScore in scoreList{
        alex_RoundScore = first(roundScore)
        elena_RoundScore = last(roundScore)
        alex_Score = alex_Score + alex_RoundScore
        elena_Score = elena_Score + elena_RoundScore
    }
    if( alex_Score > elena_Score ){
        winner = 1
    }
    else if( elena_Score > alex_Score ){
        winner = 2
    }
    return(winner)
end findGameWinner
```

6406532306329. ✖

```
Procedure findGameWinner(scoreList)
    alex_Score = 0
    elena_Score = 0
    winner = -1
    foreach roundScore in scoreList{
        alex_RoundScore = last(roundScore)
        elena_RoundScore = first(roundScore)
        alex_Score = alex_Score + alex_RoundScore
        elena_Score = elena_Score + elena_RoundScore
    }
    if( alex_Score > elena_Score ){
        winner = 1
    }
    else if( elena_Score > alex_Score ){
        winner = 2
    }
    return(winner)
end findGameWinner
```

6406532306330. ✖

```
Procedure findGameWinner(scoreList)
    alex_Score = 0
    elena_Score = 0
    winner = 0
    foreach roundScore in scoreList{
        alex_RoundScore = first(roundScore)
        elena_RoundScore = last(roundScore)
        alex_Score = alex_Score + alex_RoundScore
        elena_Score = elena_Score + elena_RoundScore
    }
    if( alex_Score > elena_Score ){
        winner = 2
    }
    else if( elena_Score >= alex_Score ){
        winner = 1
    }
    return(winner)
end findGameWinner
```

```
Procedure findGameWinner(scoreList)
    alex_Score = 0
    elena_Score = 0
    winner = 0
    foreach roundScore in scoreList{
        alex_RoundScore = first(roundScore)
        elena_RoundScore = last(roundScore)
        alex_Score = alex_Score + alex_RoundScore
        elena_Score = elena_Score + elena_RoundScore
    }
    if( alex_Score > elena_Score ){
        winner = 1
    }

    else{
        winner = 2
    }
    return(winner)
end findGameWinner
```

6406532306331. ✖

Sub-Section Number : 4

Sub-Section Id : 640653100785

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 8 Question Id : 640653689396 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

Let **Z** be a row in the "Words" table such that Z.Word = "reluctant". What will be the value of **alphaDict**['t'] at the end of the execution of the following pseudocode?

```
alphaDict = {'t':2, 'c':1, 'a':1, 's':0}
alphaDict = updateDict(Z, alphaDict)
Procedure updateDict(Z, Dict)
    i = 1
    while(i <= Z.LetterCount){
        x = ith letter of Z.Word
        if(not isKey(Dict, x)){
            Dict[x] = 1
        }
        else{
            Dict[x] = Dict[x] + 1
        }
        i = i + 1
    }
    return(Dict)
End updateDict
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

4

Question Number : 9 Question Id : 640653689407 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

Statement

Let **explode**(**W**) return the list of letters in the word **W**. For example **explode**("common") will return ['c', 'o', 'm', 'm', 'o', 'n']. What will be the value of **count** at the end of the execution of the following pseudocode?

```
count = 0, letterList = []
wordList = ["beekeeper", "inspects", "hives", "choose"]
foreach word in wordList{
    letterList = explode(word)
    lastLetter = '', flag = False
    foreach letter in letterList{
        if(letter is a vowel and letter == lastLetter){
            flag = True
        }
        lastLetter = letter
    }
    if(flag){
        count = count + 1
    }
}
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Sub-Section Number :	5
Sub-Section Id :	640653100786
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 10 Question Id : 640653689397 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 given pseudocode based on "**Scores**" dataset, which has total **30** cards. What does variable **countT** represent at the end of execution of the following pseudocode?

(Please note that all 30 cards in the "**Scores**" dataset do not have the same city.)

```
count = 0, countT = 0
sumT = 0, averageT = 0
while(Table 1 has more rows){
    Read the first row X in Table 1
    Move X to Table 2
    if(X.CityTown == "Vellore"){
        count = count + 1
    }
    else{
        sumT = sumT + X.Total
    }
}
Restore cards to Table 1
if(count < 30){
   averageT = sumT/(30 - count)
}
while(Table 1 has more rows){
    Read the first row X in Table 1
    Move X to Table 2
    if(X.Total > averageT){
       countT = countT + 1
    }
}
```

Options :

6406532306333. ✖ Total number of students whose total marks is more than average total marks of students who are from Vellore

6406532306334. ✔ Total number of students whose total marks is more than average total marks of students who are not from Vellore

6406532306335. ✖ Total number of students whose total marks is less than average total marks of students who are from Vellore

6406532306336. ✖ Total number of students whose total marks is less than average total marks of students who are not from Vellore

Question Number : 11 Question Id : 640653689405 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

Statement

The **topChem** and **topPhy** are lists of cards having Chemistry marks and Physics marks greater than 75 respectively. Each entry in both lists has the same fields as the **"Scores"** table. What will the value of the list **someList** represent at the end of the execution of the below pseudocode?

```
someList = []
foreach X in topChem{
    foreach Y in topPhy{
        if(X.SeqNo == Y.SeqNo and X.Mathematics > 75){
            someList = someList ++ [X.Name]
        }
    }
}
```

Options :

6406532306363. ✖ It stores the names of students who have scored above 75 in Mathematics

6406532306364. ✖ It stores the names of students who have scored above 75 in both Chemistry and Physics

6406532306365. ✖ It stores the names of students who have scored above 75 in at least one subject

6406532306366. ✔ It stores the names of students who have scored above 75 in all three subjects

Question Number : 12 Question Id : 640653689406 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

Statement

The given pseudocode is executed on the "**Words**" dataset. **C** stores the number of nouns which have at least one verb adjacent to it. Choose the correct code fragment to complete the pseudocode.

```
A = [], B = [], C = 0
while(Table 1 has more rows){
    Read the first row X in Table 1
    **********
    * Fill the code *
    **********
    Move X to Table 2
}
foreach Y in B{
    if(member(A, Y - 1) or member(A, Y + 1)){
        C = C + 1
    }
}
```

Options :

6406532306367. ✖

```
if(X.PartOfSpeech == "Verb" or X.PartOfSpeech == "Noun"){
    B = B ++ [X.SeqNo]
}
if(X.PartOfSpeech == "Verb" or X.PartOfSpeech == "Noun"){
    A = A ++ [X.SeqNo]
}
```

6406532306368. ✖

```
if(X.PartOfSpeech == “Verb” or X.PartOfSpeech == “Noun”){
    A = A ++ [X.SeqNo]
    if(X.PartOfSpeech == “Noun”){
        B = B ++ [X.SeqNo]
    }
}
```

```
if(X.PartOfSpeech == “Verb”){
    B = B ++ [X.SeqNo]
}
if(X.PartOfSpeech == “Noun”){
    A = A  ++ [X.SeqNo]
}
```

6406532306369. ✖

```
if(X.PartOfSpeech == “Verb”){
    A = A ++ [X.SeqNo]
}
if(X.PartOfSpeech == “Noun”){
    B = B ++ [X.SeqNo]
}
```

6406532306370. ✔

Sub-Section Number :	6
Sub-Section Id :	640653100787
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653689398 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

Consider the following pseudocode.

```
M = [0]
MA = [[9],[9,8],[9,8,7]]
MB = [], MC = []
foreach A in MA {
    foreach B in A {
        MB = [B] ++ MB
        M = [last(MB) + B]
    }
    MC = [MB] ++ MC
    MB = []
}
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 13 Question Id : 640653689399 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 value of **M** at the end of execution of the given pseudocode?

Options :

6406532306337. ✖

```
[14]
```

6406532306338. ✖

```
[17]
```

6406532306339. ✔
```
[16]
```

6406532306340. ✖
```
[18]
```

Question Number : 14 Question Id : 640653689400 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 value of **MC** at the end of execution of the given pseudocode?

Options :

6406532306341. ✔
```
[[7, 8, 9], [8, 9], [9]]
```

6406532306342. ✖
```
[7, 8, 9, 8, 9, 9]
```

6406532306343. ✖
```
[[9, 8, 7], [9, 8], [9]]
```

6406532306344. ✖

```
[9, 8, 7, 9, 8, 9]
```

Sub-Section Number : 7

Sub-Section Id : 640653100788

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 15 Question Id : 640653689402 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 below procedure is to build a list of serial numbers of specific parts of speech in the **Words** dataset. But the procedure may have mistakes. Identify all such mistakes (if any). [MSQ]

```
1:  Procedure BuildList(field)
2:      L = 0
3:      while(Table 1 has more rows){
4:          Read the first row X in Table 1
5:          if(X.partofspeech == field){
6:              L = L ++ [[X.SerialNumber, field]]
7           }
8:          Move X to Table 2
9:      }
10:     return(field)
11: End BuildList
12: L1 = BuildList("Pronoun")
13: L2 = BuildList("Verb")
```

Options :

6406532306349. ✔ Line 2

6406532306350. ✖ Line 3

6406532306351.

✖ Line 4

6406532306352. ✖ Line 5

6406532306353. ✔ Line 10

6406532306354. ✖ Line 12

Sub-Section Number :	8
Sub-Section Id :	640653100789
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 16 Question Id : 640653689408 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Statement

Let **X** be a row from the **"Words"** table. Consider the following procedure.

```
Procedure CheckVowels(X)
    vDict = {}
    i = 1
    while(i <= X.LetterCount){
        A = ith letter in X.Word
        if(A is a vowel){
            vDict[A] = True
        }
        i = i + 1
    }
    if(length(keys(vDict)) >= 3){
        return(True)
    }
    return(False)
End CheckVowels
```

The return value of **CheckVowels**(Y) will be False if

Options :

6406532306372. ✔ **Y**.*Word* = "perseverance"

6406532306373. ✖ **Y**.*Word* = "determination"

6406532306374. ✔ **Y**.*Word* = "diligence"

6406532306375. ✖ **Y**.*Word* = "online"

Maths1

Section Id :	64065348500
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	13
Number of Questions to be attempted :	13
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 :	640653100790
Question Shuffling Allowed :	No
Is Section Default? :	null