

Indian Institute of Technology, Madras - Centre for Continuing Education

Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :

IIT M QUIZ 1 FOUNDATION DIPLOMA QPC2

16 Oct 2022

Subject Name :

2022 Oct: IIT M QUIZ 1 FOUNDATION
DIPLOMA QPC2

Creation Date :

2022-10-10 18:10:32

Duration :

180

Total Marks :

355

Display Marks:

Yes

Share Answer Key With Delivery Engine :

Yes

Actual Answer Key :

Yes

Calculator :

Scientific

Magnifying Glass Required? :

No

Ruler Required? :

No

Eraser Required? :

No

Scratch Pad Required? :

No

Rough Sketch/Notepad Required? :

No

Protractor Required? :

No

Show Watermark on Console? :

Yes

Highlighter :

No

Auto Save on Console?

Yes

Change Font Color :

No

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

Group I

Group Number :	1
Group Id :	6406539329
Group Maximum Duration :	0
Group Minimum Duration :	90
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	355
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

Sem1 CT

Section Id :	64065323938
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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 :	64065355551
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 640653387472 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/DIRECT ENTRY DIPLOMA : COMPUTATIONAL THINKING "

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 :

6406531288300. ✓ Yes

6406531288301. ✗ No

Question Number : 2 Question Id : 640653387473 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	Maigudi 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

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

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

Options :

6406531288302. ✓ Useful Data has been mentioned above.

6406531288303. ✗ This data attachment is just for a reference & not for an evaluation.

Sub-Section Number : 2

Sub-Section Id : 64065355552

Question Shuffling Allowed : Yes

Question Number : 3 Question Id : 640653387474 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

Select the most appropriate datatype specific to "Scores" dataset for the left column.

Field	Data Type
a. Is Bhuvanesh's total marks > 200 ?	1. String
b. Gender	2. Character
c. TownCity	3. Boolean
d. Sequence number	4. Integer

Options :

6406531288304. ✓ a - (3), b - (2), c- (1), d - (4)

6406531288305. ✗ a - (1), b - (2), c- (4), d - (3)

6406531288306. ✗ a - (2), b - (3), c- (1), d - (4)

6406531288307. ✗ a - (3), b - (1), c- (3), d - (4)

Sub-Section Number : 3

Sub-Section Id : 64065355553

Question Shuffling Allowed : Yes

Question Number : 4 Question Id : 640653387475 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 "Words" dataset. What will **count** represent at the end of the execution?

```
1 count = 0, Flag = False
2 while(Table 1 has more rows){
3     Read the first row X in Table 1
4     if(X.PartOfSpeech == "Noun"){
5         Flag = True
6     }
7     else{
8         if(Flag and X.PartOfSpeech == "Verb"){
9             count = count + 1
10        }
11    }
12    Move X to Table 2
13 }
```

Options :

6406531288308. ❌ Number of nouns before the first verb in the dataset

6406531288309. ❌ Number of verbs before the first noun in the dataset

6406531288310. ❌ Number of nouns after the first verb in the dataset

6406531288311. ✓ Number of verbs after the first noun in the dataset

Question Number : 5 Question Id : 640653387476 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 **count** represent at the end of the execution?

```

1 count = 0, A = 0
2 while(Table 1 has more rows){
3     Read the first row X in Table 1
4     if(X.Gender == 'M' or X.Mathematics > X.Physics){
5         A = 1
6     }
7     else{
8         count = count + 1
9     }
10    Move X to Table 2
11 }
```

Options :

6406531288312. ✘ Number of male students whose Physics marks are greater than Mathematics marks

6406531288313. ✘ Number of male students whose Physics marks are greater than or equal to Mathematics marks

6406531288314. ✓ Number of female students whose Physics marks are greater than or equal to Mathematics marks

6406531288315. ✘ Number of female students whose Physics marks are less than or equal to Mathematics marks

Question Number : 6 Question Id : 640653387478 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 "Shopping Bills" dataset. Procedure **findCommon** takes pair of cards **X** and **Y** as input and returns True if the two cards share at least one common item otherwise returns False. What will **count** represent at the end of the execution?

```

1 count = 0
2 while(Pile 1 has more cards){
3     Read the top card X from Pile 1
4     Move the card X to Pile 2
5     while(Pile 1 has more Cards){
6         Read the top card Y from Pile 1
7         if(X.ShopName != Y.ShopName and findCommon(X, Y)){
8             count = count + 1
9         }
10        Move the card Y to Pile 3
11    }
12    Move all the cards from Pile 3 to Pile 1
13 }
```

Options :

6406531288320. ❌ Number of pairs of bills from the same shop with at least one common item

6406531288321. ✓ Number of pairs of bills from the different shops with at least one common item

6406531288322. ❌ Number of pairs of bills with at least two common items

6406531288323. ❌ Number of pairs of bills from the different shops with no common items

Sub-Section Number : 4

Sub-Section Id : 6406535554

Question Shuffling Allowed : Yes

Question Number : 7 Question Id : 640653387477 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 “Scores” dataset. What will **count** represent at the end of the execution?

```

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

Options :

6406531288316. ✘ Number of students with same Mathematics marks

6406531288317. ✘ Number of pairs of students with same Mathematics marks

6406531288318. ✓ Number of students with distinct Mathematics marks

6406531288319. ✘ Number of pairs of students with distinct Mathematics marks

Question Number : 8 Question Id : 640653387479 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" table. At the end of the execution, **count** stores the number of pairs of words with same letter count where both are either nouns or both end with a full stop. Choose the correct code fragment to complete the pseudocode.

```

1 count = 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         Move Y to Table 3
8         if(****Statement 1****){
9             if(X.PartOfSpeech == "Noun"){
10                 if(****Statement 2****){
11                     count = count + 1
12                 }
13             }
14             else{
15                 if(****Statement 3****){
16                     count = count + 1
17                 }
18             }
19         }
20     }
21     Move all rows from Table 3 to Table 1
22 }
```

Options :

6406531288324. ✘ Statement 1: X.PartOfSpeech == Y.PartOfSpeech

Statement 2: X.LetterCount == Y.LetterCount

Statement 3: X.Word and Y.Word end with a full stop

6406531288325. ✘ Statement 1: X.Word and Y.Word end with a full stop

Statement 2: X.PartOfSpeech == Y.PartOfSpeech

Statement 3: X.LetterCount == Y.LetterCount

6406531288326. ✘ Statement 1: X.LetterCount == Y.LetterCount

Statement 2: X.Word and Y.Word end with a full stop

Statement 3: X.PartOfSpeech == Y.PartOfSpeech

6406531288327. ✓ Statement 1: X.LetterCount == Y.LetterCount

Statement 2: X.PartOfSpeech == Y.PartOfSpeech

Statement 3: X.Word and Y.Word end with a full stop

Sub-Section Number : 5

Sub-Section Id : 64065355555

Question Shuffling Allowed : Yes

Question Number : 9 Question Id : 640653387480 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Sripriya has used a variable **min** to find the minimum total score using "Scores" dataset. There are many ways of initializing **min**. Choose the correct option(s) regarding the initialization of **min**.

It is a Multiple Select Question (MSQ)

Options :

6406531288328. ❌ Initialize **min** to 0

6406531288329. ✓ Pick any random card **X** from the dataset and **min** = **X.Total**

6406531288330. ✓ Pick the top card **X** from the dataset and **min** = **X.Total**

6406531288331. ✓ Initialize **min** with any value greater than the possible maximum total score

6406531288332. ❌ Initialize **min** with any value less than the possible minimum total score

Sub-Section Number : 6

Sub-Section Id : 64065355556

Question Shuffling Allowed : Yes

Question Number : 10 Question Id : 640653387481 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

The following pseudocode is executed using the "Scores" dataset. At the end of the execution, **count** captures the number of boys who scored at least 75 marks in Chemistry. Choose the correct code fragment(s) to complete the pseudocode.

It is a Multiple Select Question (MSQ).

```
1 count = 0
2 while(Table 1 has more rows){
3     Read the first row X in Table 1
4     ****
5     *****Fill the code*****
6     ****
7     Move X to Table 2
8 }
```

Options :

```
1 if(X.Gender == 'M' or X.Chemistry >= 75){
2     count = count + 1
3 }
```

6406531288333. ✘

```
1 if(X.Gender == 'M'){
2     A = 1
3 }
4 if(X.Chemistry >= 75){
5     B = 1
6 }
7 if((A + B) > 1){
8     count = count + 1
9 }
```

6406531288334. ✘

```
1 A = 0, B = 0
2 if(X.Gender == 'M'){
3     A = 1
4 }
5 if(X.Chemistry >= 75){
6     B = 1
7 }
8 if((A + B) > 1){
9     count = count + 1
10 }
```

6406531288335. ✓

6406531288336. ✓

```
1 A = 0, B = 1
2 if(X.Gender == 'M'){
3     A = 1
4 }
5 if(X.Chemistry < 75){
6     B = 0
7 }
8 if((A + B) > 1){
9     count = count + 1
10 }
```

Question Number : 11 Question Id : 640653387482 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

The following pseudocode is executed using the “Scores” dataset. At the end of the execution, **A** captures the number of students who are male from Bengaluru or have scored more marks in Physics than average Physics marks. Assume that **Avg** holds the value of the average Physics marks. But the pseudocode may have mistakes. Identify all such mistakes (if any). Assume that all statements not listed in the options below are free of errors.

It is a Multiple Select Question (MSQ).

```

1 A = 0
2 while(Table 1 has more rows){
3     Read the first row X in Table 1
4     C = False, D = False
5     if(X.Gender == 'F' and X.cityTown == "Bengaluru"){
6         C = True
7     }
8     if(X.Physics < Avg){
9         D = True
10    }
11    if(C or D){
12        A = A + 1
13    }
14    Move X to Table 2
15 }
```

Options :

6406531288337. ✘ Line 1

6406531288338. ✓ Line 5

6406531288339. ✓ Line 8

6406531288340. ✘ Line 12

6406531288341. ✘ No error in the code

Question Number : 12 Question Id : 640653387483 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

The following pseudocode is executed using the "Words" dataset. At the end of the execution, **count** captures the number of pairs of words with either same letter count or same part of speech but not both. Choose the correct code fragment(s) to complete the pseudocode.

It is a Multiple Select Question (MSQ).

```

1 count = 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         Move Y to Table 3
8         count = count + findPair(X, Y)
9     }
10    Move all rows from Table 3 to Table 1
11 }
12 Procedure findPair(X, Y)
13     *****
14     ***** Fill the code *****
15     *****
16 End findPair

```

Options :

```

1 A = 0, B = 0
2 if(X.LetterCount== Y.LetterCount or X.PartOfSpeech == Y.PartOfSpeech){
3     A = A + 1
4 }
5 if(X.LetterCount== Y.LetterCount and X.PartOfSpeech == Y.PartOfSpeech){
6     B = B + 1
7 }
8 return(A-B)

```

6406531288342. ✓

```

1 A = 0, B = 0
2 if(X.LetterCount== Y.LetterCount and X.PartOfSpeech == Y.PartOfSpeech){
3     A = A + 1
4 }
5 if(X.LetterCount== Y.LetterCount or X.PartOfSpeech == Y.PartOfSpeech){
6     B = B + 1
7 }
8 return(A-B)

```

6406531288343. ✘

6406531288344. ✓

```
1 A = False, B = False
2 if(X.LetterCount== Y.LetterCount){
3     A = True
4 }
5 if(X.PartOfSpeech == Y.PartOfSpeech){
6     B = True
7 }
8 if((A and not B) or (not A and B)){
9     return(1)
10}
11 return(0)
```

```
1 A = False, B = False
2 if(X.LetterCount== Y.LetterCount){
3     A = True
4 }
5 if(X.PartOfSpeech == Y.PartOfSpeech){
6     B = True
7 }
8 if((A or not B) and (not A or B)){
9     return(1)
10}
11 return(0)
```

6406531288345. *

Question Number : 13 Question Id : 640653387484 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

The following pseudocode is executed using the "Library" dataset. Assume that Table 1 contains all the books authored by "Narayan" only. Also assume that the "Year" field of each book is distinct in the Table.

```

1 Procedure groupBooks(Table 1)
2     A = 2023, B = 0
3     while(Table 1 has more rows){
4         Read the first row Z from Table 1
5         if(Z.Year < A){
6             A = Z.Year
7             B = Z.SeqNo
8         }
9         Move Z to Table 2
10    }
11    while(Table 2 has more rows){
12        Read the first row K from Table 2
13        if(K.SeqNo == B){
14            Move K to Table 3
15        }
16        else{
17            Move K to Table 4
18        }
19    }
20 End groupBooks

```

Which of the following statement(s) are correct at the end of execution of this pseudocode?

It is a Multiple Select Question (MSQ).

Options :

6406531288346. ✓ Table 2 will be empty

6406531288347. ✗ Table 3 will have one record corresponding to the most recently published book of "Narayan".

6406531288348. ✓ Table 3 will have one record corresponding to the oldest published book of "Narayan".

6406531288349. ✗ Table 4 will have one record corresponding to the oldest published book of "Narayan".

6406531288350. ✗ Table 4 will have one record corresponding to the most recently published book of "Narayan".

Question Number : 14 Question Id : 640653387485 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

The procedure **countGirls** is executed using the "Scores" dataset which counts the number of girls who have got more than the subject-wise average marks in at least one of the three subjects.

Assume that the subject-wise average marks for Physics, Chemistry and Mathematics are stored in variables **P,C** and **M** respectively. Choose the correct code fragment(s) to complete the procedure.

It is a Multiple Select Question (MSQ).

```
1 Procedure countGirls(P,C,M)
2     count = 0
3     while(Table 1 has more rows){
4         Read the first row X from Table 1
5         ****
6         ****Fill in the code****
7         ****
8         Move X to Table 2
9     }
10    return(count)
11 End countGirls
```

Options :

```
1 if(X.Gender == 'F'){
2     if(X.Mathematics > M or X.Physics > P or X.Chemistry > C){
3         count = count + 1
4     }
5 }
```

6406531288351. ✓

```
1 if(X.Gender == 'F'){
2     if(not(X.Mathematics < M and X.Physics < P and X.Chemistry < C)){
3         count = count + 1
4     }
5 }
```

6406531288352. ✗

```
1 if(X.Gender == 'F' and (X.Mathematics < M or X.Physics < P or X.Chemistry <
2     C)){
3     count = count + 1
4 }
```

6406531288353. ✗

```
1 | if(X.Gender == 'F' and (X.Mathematics > M or X.Physics > P or X.Chemistry >
2 |   C)){
3 |     count = count + 1
4 | }
```

6406531288354. ✓

Sub-Section Number : 7

Sub-Section Id : 64065355557

Question Shuffling Allowed : No

Question Id : 640653387486 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (15 to 16)

Question Label : Comprehension

Answer the given subquestions.

Sub questions

Question Number : 15 Question Id : 640653387487 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. Procedure **doSomething** accepts a Table of rows which contains rows of same player. Assume that every player has won at least two medals and only one medal in any year. What will (**A-B**) represent at the end of the execution?

```

1 Procedure doSomething(Table T1)
2     A = 0, B = 0
3     while(Table T1 has more rows){
4         Read the first row Z from Table T1
5         if(Z.Year > A){
6             B = A
7             A = Z.Year
8         }
9         if(Z.Year < A and Z.Year > B){
10            B = Z.Year
11        }
12        Move the row Z to Table T2
13    }
14    return((A - B))
15 End doSomething

```

Options :

6406531288355. ❌ Year gap between first and second medal won by a player

6406531288356. ❌ Year gap between first and latest medal won by a player

6406531288357. ✓ Year gap between latest and second latest medal won by a player

6406531288358. ❌ Year gap between first and second latest medal won by a player

Question Number : 16 Question Id : 640653387488 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 on the "Olympics" dataset. Use the procedure

doSomething in the previous question. What will **count** represent at the end of the execution?

Assume that every player has won at least two medals and only one medal in a year.

```

1 count = 0, max = 0
2 while(Table 1 has more rows){
3     Read the first row X from Table 1
4     Move the row X to Table 2
5     while(Table 1 has more rows){
6         Read the first row Y from Table 1
7         if(X.Name == Y.Name){
8             Move the row Y to Table 2
9         }
10        else{
11            Move the row Y to Table 3
12        }
13    }
14    diff = doSomething(Table 2)
15    if(diff == max){
16        count = count + 1
17    }
18    if(diff > max){
19        max = diff
20        count = 1
21    }
22    Delete all the rows from Table 2
23    Move all the rows from Table 3 to Table 1
24 }
```

Options :

6406531288359. ✘ Number of players with maximum year gap between first and second medal
6406531288360. ✘ Number of players with minimum year gap between first and second medal
6406531288361. ✓ Number of players with maximum year gap between latest and second latest medal
6406531288362. ✘ Number of players with minimum year gap between latest and second latest medal

Sem1 English1

Section Id : 64065323939

Section Number : 2

Section type : Online

Mandatory or Optional : Mandatory

Number of Questions : 27

Number of Questions to be attempted :	27
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 :	64065355558
Question Shuffling Allowed :	No

Question Number : 17 Question Id : 640653387489 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 1: ENGLISH 1"

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 :

6406531288363. ✓ Yes

6406531288364. ✗ No

Sub-Section Number :	2
Sub-Section Id :	64065355559
Question Shuffling Allowed :	No

Question Id : 640653387490 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (18 to 22)

Question Label : Comprehension

Nature is an infinite source of beauty. Sunrise and sunset, mountains and rivers, lakes and glaciers, forests and fields provide joy and bliss to the human mind and heart for hours together. Everything in nature is splendid and divine. Every day and every season of the year has a peculiar beauty to unfold. Only one should have eyes to behold it and heart to feel it like the English poet William Wordsworth who after seeing daffodils said; "*And then my heart with pleasure fills and dances with the daffodils*". Nature is a great teacher. The early man was thrilled with beauty and wonders of nature. The Aryans worshipped nature. One can learn the lessons in the vast school of nature.

Unfortunately, the strife, the stress and the tension of modern life have made people immune to beauties of nature. Their life is so full of care that they have no time to stand and stare. They cannot enjoy the beauty of flowing rivers, swinging trees, flying birds and majestic mountains and hills. There is however, a cry to go back to village from the concrete and artificial jungle of cities. Hence the town planners of today pay special attention to provide enough number of natural scenic spots in town planning. To develop a balanced personality, one needs to have a healthy attitude which can make us appreciate and enjoy the beauty of nature.

There is other balm to soothe our tired soul and listless mind than the infinite nature all around us. We should enjoy it fully to lead a balanced and harmonious life, full of peace and tranquillity.

Based on the above data, answer the given subquestions

Sub questions

Question Number : 18 Question Id : 640653387491 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 word which is most OPPOSITE in meaning of the word '*unfold*' as used in the passage?

Options :

6406531288365. ✘ Perpetuate

6406531288366. ✘ Describe

6406531288367. ✓ Conceal

6406531288368. ✘ Declare

Question Number : 19 Question Id : 640653387492 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

What is needed to develop a balanced personality?

Options :

6406531288369. ✘ Going back to villages

6406531288370. ✓ Healthy attitude

6406531288371. ✘ Reading poetry

6406531288372. ✘ Interpersonal skills

Question Number : 20 Question Id : 640653387493 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

What should we do to enjoy tranquil life?

Options :

6406531288373. ✓ Enjoy the nature around us.

6406531288374. ✘ Lead a disciplined and dedicated life.

6406531288375. ✘ Believe that nature is infinite source of beauty.

6406531288376. ✘ Get totally immersed in our daily routine.

Question Number : 21 Question Id : 640653387494 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

According to the author of the passage, Nature:

Options :

6406531288377. ✓ Is abundantly glorious and divine

6406531288378. ✗ Brings uniformity in all seasons

6406531288379. ✗ Is the creator of this universe

6406531288380. ✗ Is the ultimate salvation of man

Question Number : 22 Question Id : 640653387495 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

What are the town planners doing today?

Options :

6406531288381. ✗ Making efforts to inculcate healthy attitude among people

6406531288382. ✗ Supporting the cry to go back to villages

6406531288383. ✗ Establishing balance between concrete and artificial jungle of cities

6406531288384. ✓ Providing facilities for enjoying nature

Question Id : 640653387496 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (23 to 27)

Question Label : Comprehension

Listen to the audio sample and answer the subquestions.



885_640653_0_1984128_hs1001fdqz1e2s1q6.mp3

Sub questions

Question Number : 23 Question Id : 640653387497 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

Apple acquired NeXT

Options :

6406531288385. ✓ TRUE

6406531288386. ✗ FALSE

Question Number : 24 Question Id : 640653387498 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

According to Steve Jobs, '*the only way to do great work*' is ____.

Options :

6406531288387. ✗ To remain focused

6406531288388. ✓ To love what you do

6406531288389. ✗ To be disciplined

6406531288390. ✗ To remain calm

Question Number : 25 Question Id : 640653387499 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

At what age did Steve Jobs read the quote '*if you live each day as if it was your last, someday you'll most certainly be right*'.

Options :

6406531288391. ✗ 14 years

6406531288392. ✘ 15 years

6406531288393. ✘ 16 years

6406531288394. ✓ 17 years

Question Number : 26 Question Id : 640653387500 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

What does the phrase '*to get one's affairs in order*' mean?

Options :

6406531288395. ✓ Prepare for one's death

6406531288396. ✘ Criticize someone repeatedly

6406531288397. ✘ Throw away something

6406531288398. ✘ Have a good relationship

Question Number : 27 Question Id : 640653387501 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

Identify the word that means '*instrument used to view internal body parts*'.

Options :

6406531288399. ✘ Telescope

6406531288400. ✘ Stethoscope

6406531288401. ✘ Horoscope

6406531288402. ✓ Endoscope

Sub-Section Number : 3

Sub-Section Id : 64065355560

Question Shuffling Allowed : No

**Question Id : 640653387502 Question Type : COMPREHENSION Sub Question Shuffling
Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A
Think Time : N.A Minimum Instruction Time : 0**

Question Numbers : (28 to 32)

Question Label : Comprehension

Read the following telephonic conversation and fill in the blank with appropriate responses:

Tina: Hello. Good morning. Is this Meridian hotel?

Receptionist: Good morning. Yes. (i) _____

Tina: I would like to book a suite for New Year's eve.

Receptionist: (ii) _____. Let me check the availability.

Tina: Sure. Please let me know about other services on that day.

Receptionist: (iii)____ that we have no suite rooms available on that day.

Tina: Could you please (iv) ____ me to the manager

Receptionist: Sure, (v) ____ for a second. I am connecting to the manager.

Tina: Thank you.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 28 Question Id : 640653387503 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

Complete blank (i) with an appropriate response.

Options :

6406531288403. ❌ What can I do for you?

6406531288404. ✓ How may I help you?

6406531288405. ❌ What do you want to know?

6406531288406. ❌ This is hotel Meridian

Question Number : 29 Question Id : 640653387504 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

Complete blank (ii) with an appropriate response.

Options :

6406531288407. ❌ Wait for a second

6406531288408. ❌ Could you call after sometime

6406531288409. ✓ Please hold down for a second

6406531288410. ❌ Wait

Question Number : 30 Question Id : 640653387505 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

Complete blank (iii) with an appropriate response.

Options :

6406531288411. ✓ Sorry to inform you

6406531288412. ❌ Sorry

6406531288413. ❌ We are sorry

6406531288414. ❌ I apologise

Question Number : 31 Question Id : 640653387506 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

Complete blank (iv) with an appropriate response.

Options :

6406531288415. ✓ Connect

6406531288416. ✘ Call

6406531288417. ✘ Message

6406531288418. ✘ Ask

Question Number : 32 Question Id : 640653387507 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

Complete blank (v) with an appropriate response.

Options :

6406531288419. ✘ Wait

6406531288420. ✓ Please hold down

6406531288421. ✘ Hold

6406531288422. ✘ Please wait

Sub-Section Number : 4

Sub-Section Id : 64065355561

Question Shuffling Allowed : No

Question Id : 640653387510 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (33 to 35)

Question Label : Comprehension

Match Column A with suitable options in Column B. (Hint: Word collocation)

A	B
Surprised	a) With
Rely	b) At
Blessed	c) On

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 33 Question Id : 640653387511 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

Surprised _____

Options :

6406531288427. ✘ With

6406531288428. ✓ At

6406531288429. ✘ On

Question Number : 34 Question Id : 640653387512 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

Rely _____

Options :

6406531288430. ✘ With

6406531288431. ✘ At

6406531288432. ✓ On

Question Number : 35 Question Id : 640653387513 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

Blessed _____

Options :

6406531288433. ✓ With

6406531288434. ✗ At

6406531288435. ✗ On

Sub-Section Number : 5

Sub-Section Id : 64065355562

Question Shuffling Allowed : Yes

Question Number : 36 Question Id : 640653387508 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

'She hates her mother having to suffer so badly// she moved out//'' has the same meaning as 'She hates her mother// having to suffer so badly/ she moved out///'.

Options :

6406531288423. ✗ TRUE

6406531288424. ✓ FALSE

Question Number : 37 Question Id : 640653387509 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

Pause is like a punctuation mark to spoken language.

Options :

6406531288425. ✓ TRUE

6406531288426. ✗ FALSE

Question Number : 38 Question Id : 640653387514 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 is the meaning of the phrasal verb 'dig in'?

Options :

6406531288436. ✗ To become extinct

6406531288437. ✗ To want something a lot

6406531288438. ✗ To become quieter or inaudible

6406531288439. ✓ To start eating greedily

Question Number : 39 Question Id : 640653387515 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

Choose the correct option.

_____ we leave now or do you want to wait?

Options :

6406531288440. ✗ Will

6406531288441. ✓ Shall

Question Number : 40 Question Id : 640653387516 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

'Rocky was *furious* about the results'. Here the word '*furious*' can be replaced appropriately with

_____.

Options :

6406531288442. ❌ Fuming

6406531288443. ❌ Sad

6406531288444. ✓ Angry

6406531288445. ❌ Disappointed

Question Number : 41 Question Id : 640653387517 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

Choose the odd one out from the following:

Flood, Delusion, Inundation, Downpour

Options :

6406531288446. ❌ Flood

6406531288447. ✓ Delusion

6406531288448. ❌ Inundation

6406531288449. ❌ Downpour

Question Number : 42 Question Id : 640653387518 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

I have _____ interest in sports.

Options :

6406531288450. ❌ Some

6406531288451. ✓ Little

6406531288452. ✗ Few

6406531288453. ✗ A few

Question Number : 43 Question Id : 640653387519 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

The officer showed __ sentiments towards the grievances.

Options :

6406531288454. ✓ Cold

6406531288455. ✗ Dark

6406531288456. ✗ Active

6406531288457. ✗ None of these

Question Number : 44 Question Id : 640653387520 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

Identify the conjunction in the following sentence.

The shop specializes in exotic vegetables, such as cherry tomatoes, baby corn, and parsley.

Options :

6406531288458. ✗ Specializes

6406531288459. ✗ Exotic

6406531288460. ✓ Such as

6406531288461. ✗ Vegetables

Question Number : 45 Question Id : 640653387521 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

Choose the appropriate option.

I can't live on _____ 600 dollars a month.

Options :

6406531288462. ✗ A

6406531288463. ✗ An

6406531288464. ✗ The

6406531288465. ✓ No article

Question Number : 46 Question Id : 640653387522 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

Identify the preposition in the following sentence:

Thirty years have passed away since they met.

Options :

6406531288466. ✗ Thirty

6406531288467. ✗ Years

6406531288468. ✓ Since

6406531288469. ✗ They

Question Number : 47 Question Id : 640653387523 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

Identify the part of speech of the underlined word.

The movie is starting now.

Options :

6406531288470. ❌ Preposition

6406531288471. ❌ Conjunction

6406531288472. ✓ Adverb

6406531288473. ❌ Adjective

Question Number : 48 Question Id : 640653387524 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

Select the appropriate option.

The adjective formed from the word 'hope' is ____.

Options :

6406531288474. ❌ Hopefully

6406531288475. ✓ Hopeful

Question Number : 49 Question Id : 640653387525 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

Choose the correct answer.

Much of the information found online _____ often misleading.

Options :

6406531288476. ❌ Has

6406531288477. ❌ Have

6406531288478. ❌ Are

6406531288479. ✓ Is

Question Number : 50 Question Id : 640653387526 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

Identify the part of speech of the underlined word.

He is the best football player in the team.

Options :

6406531288480. ✘ Noun

6406531288481. ✘ Adjective

6406531288482. ✓ Pronoun

6406531288483. ✘ Adverb

Question Number : 51 Question Id : 640653387527 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

Fill in the blanks with an appropriate article:

We were not in ____ hurry to go to school

Options :

6406531288484. ✓ A

6406531288485. ✘ An

6406531288486. ✘ The

6406531288487. ✘ None of these

Question Number : 52 Question Id : 640653387528 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

Fill in the blanks with an appropriate article:

Alisha knows how to play ____ Guitar.

Options :

6406531288488. ✘ A

6406531288489. ✘ An

6406531288490. ✓ The

6406531288491. ✘ None of these

Question Number : 53 Question Id : 640653387529 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 among the following is a word without a diphthong?

Options :

6406531288492. ✘ Loiter

6406531288493. ✓ Stew

6406531288494. ✘ Maiden

6406531288495. ✘ None of these

Question Number : 54 Question Id : 640653387530 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 among the following has /k/ sound ?

Options :

6406531288496. ✘ Cathartic

6406531288497. ✘ Kitten

6406531288498. ✓ Both Cathartic and Kitten

Question Number : 55 Question Id : 640653387531 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

Choose the word with /i:/ sound from the following:

Options :

6406531288499. ✓ Mean

6406531288500. ✗ Jane

6406531288501. ✗ Mare

6406531288502. ✗ Both Jane and Mare

Question Number : 56 Question Id : 640653387532 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

There isn't any word without vowel sound. This statement is

Options :

6406531288503. ✓ TRUE

6406531288504. ✗ FALSE

Question Number : 57 Question Id : 640653387533 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 among the following words has the same sound as underlined in strain?

Options :

6406531288505. ✗ Naïve

6406531288506. ✘ Buy

6406531288507. ✓ Rail

Sem1 Maths1

Section Id :	64065323940
Section Number :	3
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
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 :	64065355563
Question Shuffling Allowed :	No

Question Number : 58 Question Id : 640653387534 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 1/DIRECT ENTRY DIPLOMA : MATHEMATICS FOR DATA SCIENCE 1"

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 :

6406531288508. ✓ Yes

6406531288509. ✗ No

Question Number : 59 Question Id : 640653387535 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

Instructions:

- There are some questions which have functions with discrete valued domains (such as day, month, year etc). For simplicity, we treat them as continuous functions.
- For NAT type question, enter only one right answer even if you get multiple answers for that particular question.
- Notations:
 - \mathbb{R} = Set of real numbers
 - \mathbb{Q} = Set of rational numbers
 - \mathbb{Z} = Set of integers
 - \mathbb{N} = Set of natural numbers
- The set of natural numbers includes 0.

Options :

6406531288510. ✓ Useful Data has been mentioned above.

6406531288511. ✗ This data attachment is just for a reference & not for an evaluation.

Sub-Section Number : 2

Sub-Section Id : 64065355564

Question Shuffling Allowed : No

Question Id : 640653387536 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (60 to 62)

Question Label : Comprehension

Consider two quadratic functions, $p(x)$ and $q(x)$, whose x -intercepts are shown in Figure 1. The leading coefficients of both $p(x)$ and $q(x)$ are 1 and the y -intercepts are -27 . The axis of symmetry of $q(x)$ is $x = 3$, which also passes through one of the zeroes of $p(x)$. The line $y = d$ passes through the vertices of $p(x)$ and $q(x)$.

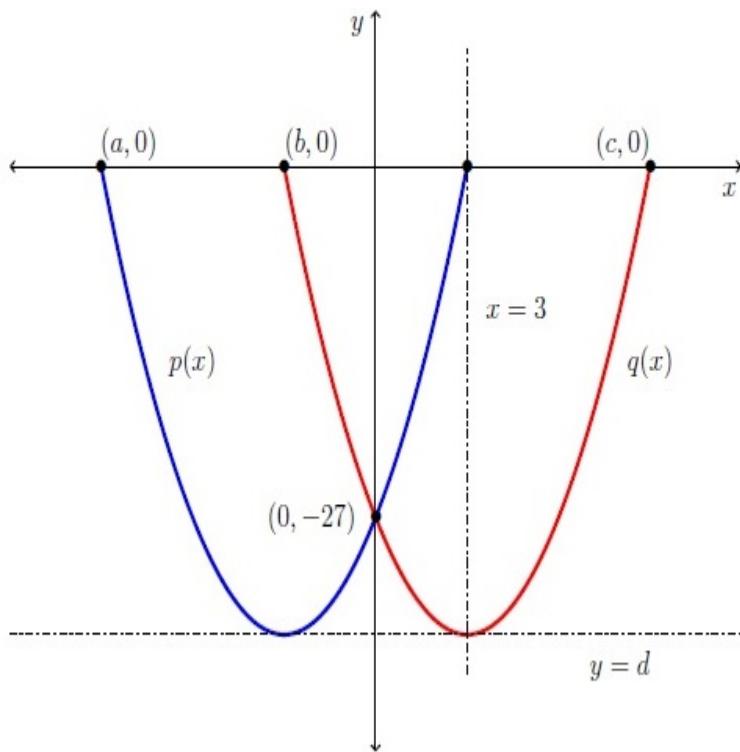


Figure 1

Based on this information, answer the given sub-questions

Sub questions

Question Number : 60 Question Id : 640653387537 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

Enter the value of $a + b + c$?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

-3

Question Number : 61 **Question Id :** 640653387538 **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

Enter the value of d ?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

-36

Question Number : 62 **Question Id :** 640653387539 **Question Type :** MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Choose the set of correct option(s)

Options :

6406531288514. ✓ The axis of symmetry of $p(x)$ is $x = -3$.

6406531288515. ✗ The slopes of both $p(x)$ and $q(x)$ are same at $(0, -27)$.

6406531288516. ✓ The slope of $p(x)$ is 6 but the slope $q(x)$ is -6 at $(0, -27)$.

6406531288517. ✓ The discriminant of both the quadratic equations $p(x) = 0$ and $q(x) = 0$ are same.

Sub-Section Number :

3

Sub-Section Id :

64065355565

Question Shuffling Allowed :

No

Question Id : 640653387540 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (63 to 64)

Question Label : Comprehension

Ritwik wrote 12 mock tests. His score in each mock test $M(n)$ is represented as $M(n) = -\left(\frac{n^2}{1000}\right)(n^3 - 15n^2 + 50n) + 40$, where n represents the mock test number i.e., $n \in \{1, 2, \dots, 11, 12\}$. He should score 40 or above to pass the assignment.

Based on this information, answer the given sub-questions

Sub questions

Question Number : 63 Question Id : 640653387541 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

How many times did Ritwik score exactly 40?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Question Number : 64 Question Id : 640653387542 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

In total, how many mock tests did Ritwik pass?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

6

Sub-Section Number : 4

Sub-Section Id : 64065355566

Question Shuffling Allowed : No

Question Id : 640653387543 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

Question Numbers : (65 to 68)

Question Label : Comprehension

Consider a relation $R \subseteq A \times A$, where $A = \{1, 2, 3\}$. Given below is Table 1, in which Column A shows the relation and Column B shows the type of relation.

Relation (R) (Column A)	Type of Relation (Column B)
$R_1 = \{(1, 1)\}$	Symmetric relation
$R_2 = \{(1, 1), (2, 2), (3, 3)\}$	Anti-symmetric relation
$R_3 = \{(1, 1), (1, 2)\}$	Identity relation
$R_4 = \{(1, 3)\}$	Transitive relation
$R_5 = \{(1, 1), (2, 2), (3, 3), (1, 2)\}$	Reflexive relation
$R_6 = \{(1, 1), (1, 2), (2, 1), (2, 3)\}$	Equivalence relation

Table 1

Based on this information, answer the given sub-questions

Sub questions

Question Number : 65 Question Id : 640653387544 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

State 'True' or 'False' : R_6 does not match with any type of relations given in Column B.

Options :

6406531288520. ✓ TRUE

6406531288521. ✗ FALSE

Question Number : 66 Question Id : 640653387545 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

State 'True' or 'False' : R_1 matches with all type of relations except anti-symmetric relation given in Column B.

Options :

6406531288522. ✗ TRUE

6406531288523. ✓ FALSE

Question Number : 67 Question Id : 640653387546 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

In total, how many relations given in Column A matches with transitive relation?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

5

Question Number : 68 **Question Id :** 640653387547 **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

In total, how many relations given in Column A matches with reflexive relation?

NOTE: Enter your answer to the nearest integer.

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 : 64065355567

Question Shuffling Allowed : Yes

Question Number : 69 **Question Id :** 640653387548 **Question Type :** MSQ Is Question

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

Correct Marks : 5

Question Label : Multiple Select Question

Consider the following relations defined on the set of integers

- $R_1 = \{(x, y) \mid x, y \in \mathbb{Z}, \text{ and } y = x^2 - 1\}$
- $R_2 = \{(x, y) \mid x, y \in \mathbb{Z}, \text{ and } |x| + |y| = 1\}$

Choose the correct option(s)?

Options :

6406531288526. ✘ $R_1 \cap R_2$ represents an injective function

6406531288527. ✓ R_2 represents a relation but not a function.

6406531288528. ✓ R_1 represents a function.

6406531288529. ✘ R_2 represents a function

Question Number : 70 Question Id : 640653387554 Question Type : MSQ Is Question

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

Correct Marks : 5

Question Label : Multiple Select Question

Figure 2 shows the graph of a polynomial $p(x)$. Choose the set of correct option(s).

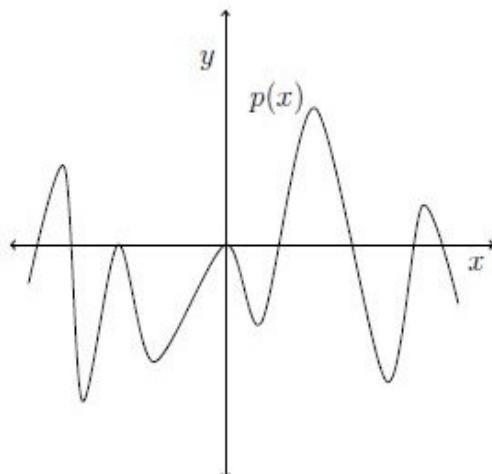


Figure 2

Options :

6406531288549. ✓ The degree of $p(x)$ is at least 10.

6406531288550. ✓ $p(x)$ represent an even degree polynomial

6406531288551. ✘ Total number of turning point of $p(x)$ are 8.

6406531288552. ✓ Multiplicities of zero and one of the negative root could be the same

Sub-Section Id : 64065355568

Question Shuffling Allowed : Yes

Question Number : 71 Question Id : 640653387549 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

Let A be the set of all points on the curve defined by the function $f_1(x) = x^2 - x - 30$ and let B be the set of all points on the curve f_2 defined by the reflection of the curve f_1 with respect to X - axis. If C is the set of all points on the axes(i.e., x and y axis), then find the cardinality of set D where $D = (A \cap B) \cup (A \cap C) \cup (B \cap C)$.

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

4

Sub-Section Number : 7

Sub-Section Id : 64065355569

Question Shuffling Allowed : Yes

Question Number : 72 Question Id : 640653387550 Question Type : MSQ Is Question

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

Correct Marks : 4

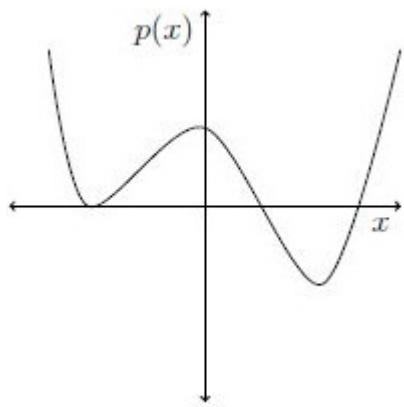
Question Label : Multiple Select Question

The polynomial $p(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_0$ has the following properties:

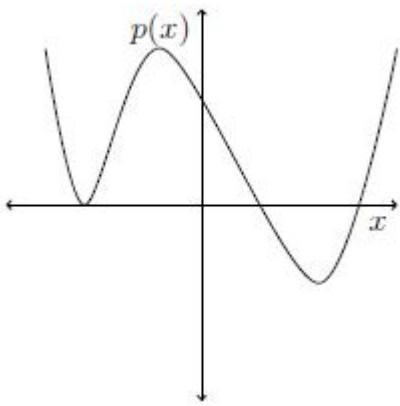
- $p(x)$ is an even degree polynomial.
- $p(x)$ has at least one positive real root and at least one negative real root.
- $(x + 4)^2$ is a factor of $p(x)$.
- $p(0) \neq 0$

From the options given, choose the possible representations of $p(x)$.

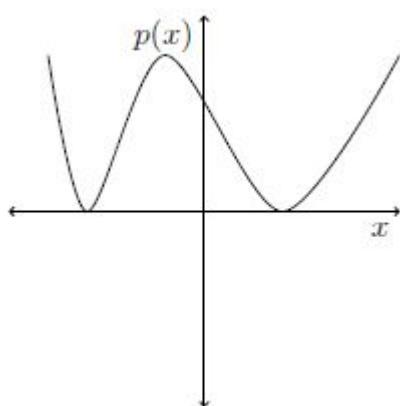
Options :



6406531288531. ✓

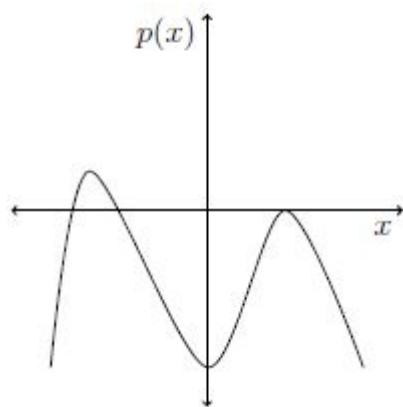
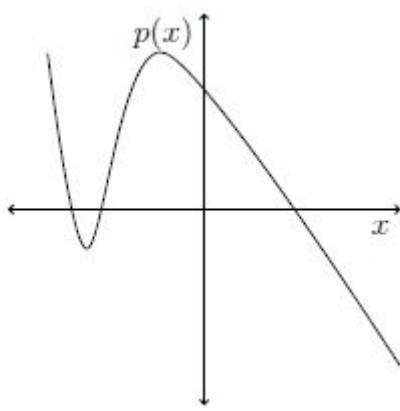


6406531288532. ✓

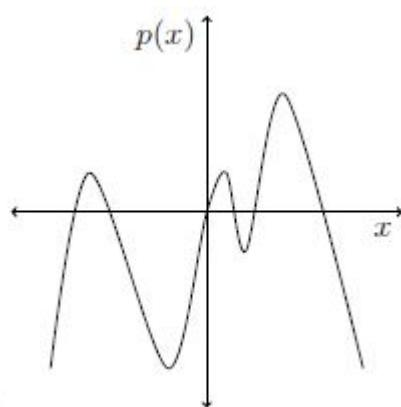


6406531288533. ✓

6406531288534. ❌



6406531288535. *



6406531288536. *

Question Number : 73 Question Id : 640653387552 Question Type : MSQ Is Question

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

Time : 0

Correct Marks : 4

Question Label : Multiple Select Question

Which of the following statements is (are) correct?

Options :

6406531288541. ✓ $y - 20 = 3(x - 10)^2$ is an equation of a parabola whose vertex is at $(10, 20)$.

6406531288542. ✓ $p(x) = ax^{10} + bx^5 + 2x + 8$ where $a = 0$ and $b \neq 0$, is a polynomial of degree 5.

6406531288543. ✘ $-5x + 4y - 1 = 0$ and $\frac{x}{4} - \frac{y}{5} = 1$ are perpendicular to each other.

6406531288544. ✓ $2x + 7y + 9 = 0$ and $6x + 21y + 9 = 0$ are parallel to each other.

Sub-Section Number : 8

Sub-Section Id : 64065355570

Question Shuffling Allowed : Yes

Question Number : 74 Question Id : 640653387551 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

You are climbing a ladder which is slanted at an angle of 45 degrees (measured in the anticlockwise direction) with respect to the ground. The ladder, leaning against a wall, is at a vertical distance of 2 metres from the ground. If you are at a location which cuts the ladder in the ratio 2 : 1 from the bottom to top, what are the coordinates of your location? Assume origin (0, 0) to be at the intersection of the ladder and the ground.

Options :

6406531288537. ✘ (3/2, 1/2)

6406531288538. ✘ (1/3, 2/3)

6406531288539. ✘ (2/3, 2/3)

6406531288540. ✓ (4/3, 4/3)

Question Number : 75 Question Id : 640653387553 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Sushmita was calculating SSE (sum squared error) and she found that SSE is a function of a as follows: $\text{SSE} = f(a) = a^2 - 8a + 30$. What will be the best fit value.

Options :

6406531288545. ✘ 9

6406531288546. ✓ 14

6406531288547. ✘ 0

6406531288548. ✘ -2

Sem1 Statistics1

Section Id :	64065323941
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	14
Number of Questions to be attempted :	14
Section Marks :	40
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 :	64065355571
Question Shuffling Allowed :	No

Question Number : 76 Question Id : 640653387555 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 1/DIRECT ENTRY DIPLOMA : STATISTICS FOR DATA SCIENCE 1"

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 :

6406531288553. ✓ Yes

6406531288554. ✗ No

Sub-Section Number : 2

Sub-Section Id : 64065355572

Question Shuffling Allowed : Yes

Question Number : 77 Question Id : 640653387556 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Which of the following statements is/are incorrect?

Options :

6406531288555. ✓ Grouping students by favourite subjects in a class is a numerical variable.

6406531288556. ✓ Amount of calories consumed by a person in a day is a categorical variable.

6406531288557. ✗ The amount of time to complete a quiz is a numerical and continuous variable.

6406531288558. ✗ The number of attempts to clear an exam is a numerical and discrete variable.

Question Number : 78 Question Id : 640653387557 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Choose the correct statement/s ?

Options :

6406531288559. ❌ A nominal scale has the property of labelling the categories and it involves the ranking of data.

6406531288560. ❌ An ordinal scale has all the properties of nominal scale and it does not involve the ranking of data.

6406531288561. ✓ An Interval scale has all the properties of ordinal scale and it does not satisfy the absolute zero property.

6406531288562. ✓ A ratio scale has all the properties of interval scale and it satisfies the absolute zero property.

Question Number : 79 Question Id : 640653387558 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

If we have a dataset 45, 42, 28, 95, 23 and 194, then choose the correct option/s?

Options :

6406531288563. ✓ Range of the dataset is 171.

6406531288564. ❌ Median of the dataset is 42.

6406531288565. ✓ 75th percentile of the dataset is 95.

6406531288566. ❌ IQR (Inter-quartile range) of the dataset is 65.

Question Number : 80 Question Id : 640653387559 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

Figure Q.1. represents the data of number of t-shirts sold of different sizes in a shop of clothes.

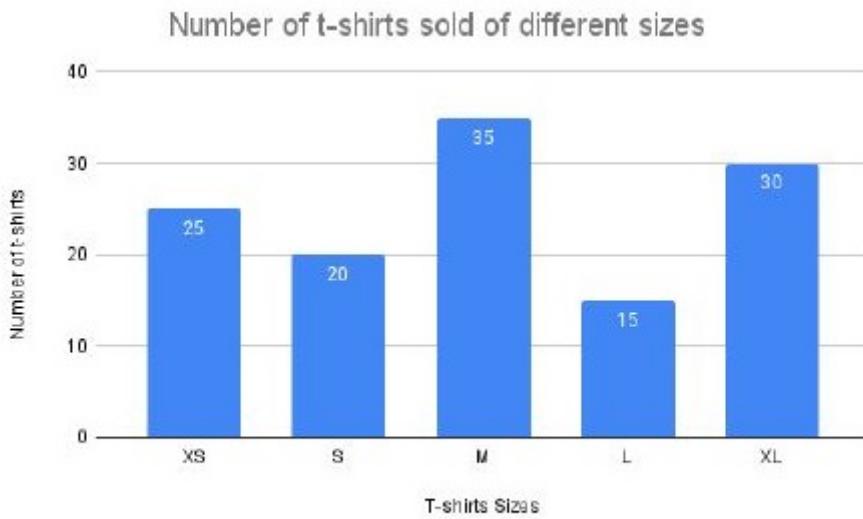


Figure Q.1: Sales distribution of t-shirts of different sizes

Choose the correct statement/s:

Options :

6406531288567. ✓ Mode of the dataset is size 'M'.

6406531288568. ✗ Mean of the dataset is 25.

6406531288569. ✗ Population variance of the dataset is 50.

6406531288570. ✗ Median of the dataset is 20.

Question Number : 81 Question Id : 640653387560 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

The five number summary of a dataset is 5, 10, 15, 20 and 25. Later it is noted that one observation 6 is wrongly noted as 5, then choose the correct option(s):

Options :

6406531288571. ✓ The five number summary may remain the same.

6406531288572. ✗ The five number summary will definitely change.

6406531288573. ✗ The minimum value of the dataset will definitely change.

6406531288574. ✗ The five number summary will always change whenever an observation is wrongly noted.

Question Number : 82 Question Id : 640653387561 Question Type : MSQ Is Question

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

Time : 0

Correct Marks : 3

Question Label : Multiple Select Question

Choose the correct option/s:

Options :

6406531288575. ❌ If the large values of variable X tend to be associated with small values of variable Y , then the correlation between X and Y will be positive.

6406531288576. ❌ If the correlation coefficient between two variables is zero, then the variables are independent.

6406531288577. ✓ Correlation coefficient is a unitless measure of association.

6406531288578. ❌ Correlation coefficient always lies between 0 and 1.

Question Number : 83 Question Id : 640653387562 Question Type : MSQ Is Question

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

Time : 0

Correct Marks : 3

Question Label : Multiple Select Question

An analyst did a survey to know the willingness of graduate and post graduate students of India to go abroad for higher studies. He collected the data from a college for the survey and the results are given in Table 1.1.Q.

Education	Willingness to go	
	Yes	No
Graduate	14	6
Post-graduate	18	12

Table 1.1.Q

Choose the correct option/s?

Options :

6406531288579. ✓ Of all the graduate students, there are 30% who does not want to go for higher studies.

6406531288580. ✗ Of all the post-graduate students, there are 56.25% who wants to go for higher studies.

6406531288581. ✓ If all row relative frequencies are similar within each column then, it implies that all column relative frequencies will also be similar within each row.

6406531288582. ✗ If all column relative frequencies are similar within each row then, it does not imply that all row relative frequencies will also be similar within each column.

6406531288583. ✗ There is no association between Education and Willingness to go for higher studies.

6406531288584. ✓ There is an association between Education and Willingness to go for higher studies.

Sub-Section Number : 3

Sub-Section Id : 64065355573

Question Shuffling Allowed : Yes

Question Number : 84 Question Id : 640653387563 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

Figure Q.2 represents the distribution of runs scored by Suresh in matches of a cricket tournament.

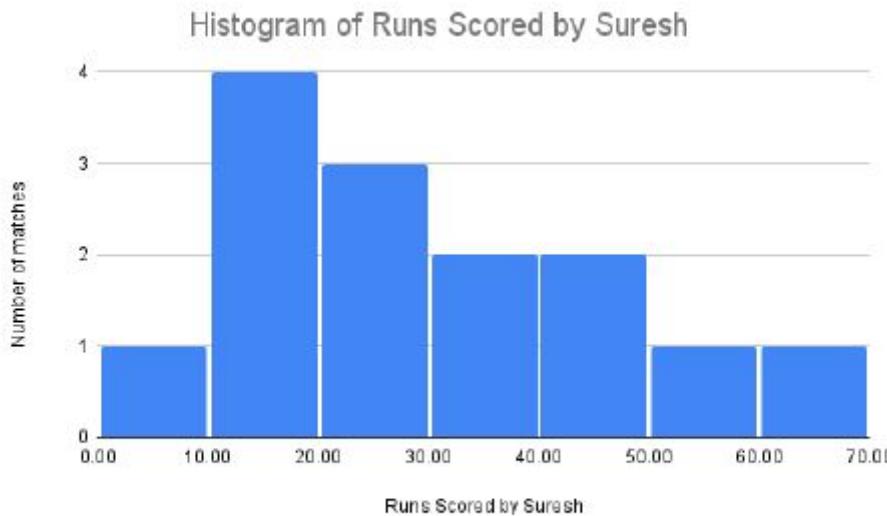


Figure Q.2: Runs scored by Suresh in a cricket tournament

What is the average runs scored by Suresh?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

29.5 to 30.5

Question Number : 85 **Question Id :** 640653387565 **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

The dataset consists of three distinct observations, say a , b and c , and the sum of their frequencies is 100 and relative frequencies corresponding to a and c are 25% and 35% respectively. Find the cumulative frequency of b and c .

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

75

Sub-Section Number : 4

Sub-Section Id : 64065355574

Question Shuffling Allowed : Yes

Question Number : 86 **Question Id :** 640653387564 **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

If the population variance of a dataset of 6 observations is 50, then what is the sample variance if each observation in the dataset is increased by 5?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

60

Sub-Section Number : 5

Sub-Section Id : 64065355575

Question Shuffling Allowed : Yes

Question Number : 87 **Question Id :** 640653387566 **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

The data of the weight (in kg) and age (in years) is recorded of 5 different persons in a hospital and tabulated in Table 1.2.Q.

Weight (in kg)	80	75	85	70	65
Age (in years)	85	70	80	95	70

Table 1.2.Q

What is the correlation coefficient between the weight and age of persons ?(Enter the answer correct to 3 decimal accuracy)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.144 to 0.154

Sub-Section Number : 6

Sub-Section Id : 64065355576

Question Shuffling Allowed : No

Question Id : 640653387567 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

Question Numbers : (88 to 89)

Question Label : Comprehension

An inspection officer wants to test the tensile strength of threaded rods produced by a factory.

Based on the information ,answer the given subquestions .

Sub questions

Question Number : 88 **Question Id :** 640653387568 **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

If he selects 70 threaded rods at random from those that produced in the month of May 2022 at the factory. Identify the sample and population.

Options :

6406531288589. ❌ The population is all threaded rods ever produced at the factory and the sample is all the threaded rods produced in the month of May 2022.

6406531288590. ✓ The population is all threaded rods ever produced at the factory and the sample is the 70 selected threaded rods.

6406531288591. ❌ The population is all threaded rods produced in the year 2022 and the sample is the threaded rods produced in the month of May 2022.

6406531288592. ❌ None of these.

Question Number : 89 Question Id : 640653387569 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

If the inspection officer is interested to test the tensile strength of threaded rods produced by the factory in different months of year 2022 and collected the data for the same, then choose the correct option:

Options :

6406531288593. ✓ It is time-series data.

6406531288594. ❌ It is cross-sectional data.

Question Id : 640653387570 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (90 to 91)

Question Label : Comprehension

Figure Q.3 represents the distribution of sales of 4 different items in a mobile shop last month. Based on this information, answer the given subquestions .

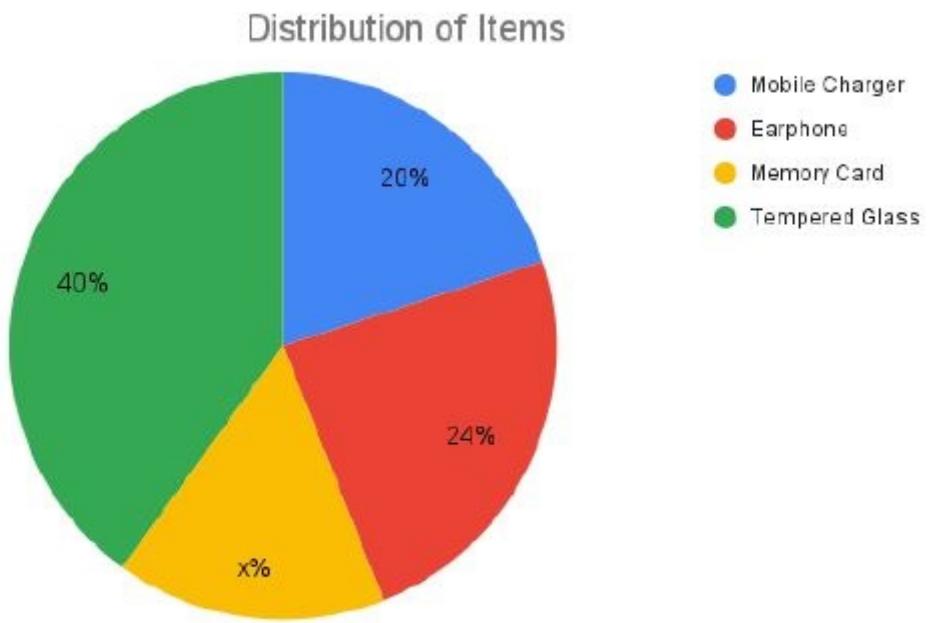


Figure Q.3: Sales distribution of 4 different items

Sub questions

Question Number : 90 Question Id : 640653387571 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

What is the value of x ?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

16

Question Number : 91 Question Id : 640653387572 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

If the total number of items sold in last month is 300, then find the number of earphones sold in the last month?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

72

Sem2 Intro to Python

Section Id : 64065323942

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

Yes

Clear Response :

Maximum Instruction Time : 0

Sub-Section Number : 1

Sub-Section Id : 64065355577

Question Shuffling Allowed : No

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/DIRECT ENTRY DIPLOMA : 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 :

6406531288597. ✓ YES

6406531288598. ✗ NO

Sub-Section Number : 2

Sub-Section Id : 64065355578

Question Shuffling Allowed : Yes

Question Number : 93 Question Id : 640653387574 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

E1 and E2 are Boolean expressions. Consider the following expression:

```
1 | not(E1 and E2) == (not E1 and not E2)
```

What can you say about the value of the expression given above?

Options :

6406531288599. ✓ It is **True** if and only if E1 and E2 have same values

6406531288600. ✗ It is **False** if and only if E1 and E2 have the same value

6406531288601. ✗ It is always **True**

6406531288602. ✘ It is always **False**

Question Number : 94 Question Id : 640653387575 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:

```
1 | a, b, c, d = input()  
2 | print((a + b + c) * int(d))
```

What will be the output of the code given above for the following input ?

Input

```
1 | 1234
```

Options :

6406531288603. ✓

```
1 | 123123123123
```

6406531288604. ✘

```
1 | 18
```

6406531288605. ✘

```
1 | 24
```

6406531288606. ✘

```
1 | 492
```

6406531288607. ✘

```
1 | 123412341234
```

Question Number : 95 Question Id : 640653387577 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

If **n** is a positive integer, then what will be the value of **count** at the end of execution of the code given below?

```
1 n = int(input())
2 count = 0
3 for x in range(1, n + 1):
4     for y in range(x + 1, n + 1):
5         count = count + 1
```

Options :

6406531288612. ✘ n^2

6406531288613. ✘ $n(n + 1)$

6406531288614. ✘ $n(n + 1)/2$

6406531288615. ✓ $n(n - 1)/2$

Sub-Section Number : 3

Sub-Section Id : 64065355579

Question Shuffling Allowed : Yes

Question Number : 96 Question Id : 640653387578 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 = [0]
2 | for i in range(1, 10):
3 |     size = len(L)
4 |     value = i + L[size-1]
5 |     L.append(value)
6 | print(L)
```

Options :

6406531288616. ✘

```
1 | [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

6406531288617. ✓

```
1 | [0, 1, 3, 6, 10, 15, 21, 28, 36, 45]
```

6406531288618. ✘

```
1 | [1, 3, 6, 10, 15, 21, 28, 36, 45]
```

6406531288619. ✘

```
1 | [0, 1, 3, 6, 10, 15, 21, 28, 36, 45, 55]
```

Question Number : 97 Question Id : 640653387580 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

If n is a positive integer, what is the output of the following code? Assume that natural numbers start from 1, that is, 0 is not a natural number.

```
1 | a = n
2 | for i in range(1, n):
3 |     a = a + i
4 | b = a
5 | for j in range(1, a):
6 |     b = b * j
7 | print(b)
```

Options :

6406531288624. ✘ Sum of the factorial of the first $n-1$ natural numbers

6406531288625. ✘ Factorial of the sum of the first $n-1$ natural numbers

6406531288626. ✘ Sum of the factorial of the first n natural numbers

6406531288627. ✓ Factorial of the sum of the first n natural numbers

Question Number : 98 Question Id : 640653387581 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

L is a non-empty list of positive integers that is already defined. Consider the following snippet of code:

```
1 flag1, flag2 = True, True
2 for i in range(1, len(L)):
3     if L[i] > L[i - 1]:
4         flag2 = False
5     elif L[i] < L[i - 1]:
6         flag1 = False
7 if flag1:
8     print('one')
9 elif flag2:
10    print('two')
11 else:
12    print('three')
```

What is the output of the code if $L = [394, 289, 120, 719, 50, 27, 15]$?

Options :

1 | one

6406531288628. ✘

6406531288629. ✘

1 | two

1 | three

6406531288630. ✓

1 | four

6406531288631. ✗

Sub-Section Number : 4

Sub-Section Id : 64065355580

Question Shuffling Allowed : Yes

Question Number : 99 Question Id : 640653387576 Question Type : MSQ Is Question

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

Correct Marks : 3

Question Label : Multiple Select Question

A is a positive integer that represents the age. Consider the following snippet of code:

```
1 if 0 < A <= 14:  
2     print('child')  
3 elif 14 < A <= 24:  
4     print('youth')  
5 elif 24 < A <= 64:  
6     print('adult')  
7 else:  
8     print('senior')
```

Two snippets of code are equivalent if they produce the same output for any given input. Select all snippets of code that are equivalent to the code given above.

Options :

6406531288608. ✓

```
1 if 0 < A <= 14:  
2     print('child')  
3 if 14 < A <= 24:  
4     print('youth')  
5 if 24 < A <= 64:  
6     print('adult')  
7 if A > 64:  
8     print('senior')
```

```
1 if 0 < A <= 14:  
2     print('child')  
3 if 14 < A <= 24:  
4     print('youth')  
5 elif 24 < A <= 64:  
6     print('adult')  
7 else:  
8     print('senior')
```

6406531288609. ✘

```
1 if 0 < A <= 14:  
2     print('child')  
3 elif 14 < A <= 24:  
4     print('youth')  
5 elif 24 < A <= 64:  
6     print('adult')  
7 elif A > 64:  
8     print('senior')
```

6406531288610. ✓

```
1 if 0 < A <= 14:  
2     print('child')  
3 if 14 < A <= 24:  
4     print('youth')  
5 if 24 < A <= 64:  
6     print('adult')  
7 else A > 64:  
8     print('senior')
```

6406531288611. ✘

Sub-Section Number :

5

Sub-Section Id :

64065355581

Question Shuffling Allowed :

Yes

Question Number : 100 Question Id : 640653387579 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

Which of the following options print the pair of "Welcome to Python Quiz!" and "All the best!!" alternatively on separate lines n times? There should be one line space between two pairs and there should not be any space after the last pair. Here, n is a positive integer that has already been defined. Your answer should be applicable for any positive integer.

Sample output for $n = 3$

```
1 Welcome to Python quiz!
2 All the best!!
3
4 Welcome to Python quiz!
5 All the best!!
6
7 Welcome to Python quiz!
8 All the best!!
```

Options :

```
1 for i in range(n):
2     print('Welcome to Python Quiz!')
3     print('All the best!!')
4     print()
```

6406531288620. ✘

```
1 print('Welcome to Python Quiz!')
2 print('All the best!!')
3 for i in range(n - 1):
4     print()
5     print('Welcome to Python Quiz!')
6     print('All the best!!')
```

6406531288621. ✓

```
1 for i in range(n):
2     print('Welcome to Python quiz!')
3     print('All the best!!')
4     if(i != n - 1):
5         print()
```

6406531288622. ✓

```
1 for i in range(n - 1):
2     print('Welcome to Python quiz!')
3     print('All the best!!')
4     if(i != n - 1):
5         print()
```

6406531288623. ✗

Question Number : 101 Question Id : 640653387583 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

Reverse a sentence based on words. The i^{th} word from the left in the input sentence is the i^{th} word from the end in the output sentence.

Consider following example:

```
1 sentence = "i know how to code in python"
2 modified_sentence = "python in code to how know i"
```

Choose all the options that accepts a sentence as input and prints the modified sentence.

Options :

```
1 sentence = input()
2 words = sentence.split(' ')
3 n = len(words)
4 for i in range(n - 1, 0, -1):
5     print(words[i] + ' ', end = '')
6 print(words[0])
```

6406531288633. ✓

6406531288634. ✗

```
1 sentence = input()
2 words = sentence.split(' ')
3 n = len(words)
4 for i in range(n - 1, -2, -1):
    print(words[i] + ' ', end = '')
```

```
1 sentence = input()
2 words = sentence.split(' ')
3 n = len(words)
4 for i in range(n - 1, -1, -1):
    print(words[i] + ' ', end = '')
6 print(words[0])
```

6406531288635. ✘

```
1 words = sentence.split(' ')
2 n = len(words)
3 for i in range(n - 1):
    print(words[n - i - 1], end = ' ')
5 print(words[0])
```

6406531288636. ✓

Question Number : 102 Question Id : 640653387584 Question Type : MSQ Is Question

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

Correct Marks : 4

Question Label : Multiple Select Question

Select all matrices M for which the following code prints **True** to the console.

```
1 n = len(M)
2 flag = True
3 for i in range(n):
4     for j in range(n):
5         if (i != j) and (M[i][j] + M[j][i] != 0):
6             flag = False
7 print(flag)
```

Options :

```
1 [[1, 2, 3], [2, 5, 4], [3, 4, 6]]
```

6406531288637. ✘

6406531288638. ❌

```
1 | [[1, 5, 3, 4], [5, 1, 4, 6], [3, 4, 2, 8], [4, 6, 8, 3]]
```

6406531288639. ✓

```
1 | [[1, 2, -3], [-2, 5, 4], [3, -4, 6]]
```

6406531288640. ❌

```
1 | [[-1, 5, -3, 4], [-5, 1, -4, 6], [-3, 4, 2, 8], [-4, -6, -8, 3]]
```

Sub-Section Number :

6

Sub-Section Id :

64065355582

Question Shuffling Allowed :

Yes

Question Number : 103 Question Id : 640653387585 Question Type : MSQ Is Question

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

Correct Marks : 5

Question Label : Multiple Select Question

For what values of **a**, **b** and **c** does the code given below print a sequence which has **0** as one of the elements?

```
1 | for i in range(a, b, c):
2 |     print(i)
```

Options :

6406531288641. ✓

```
1 | a = 10, b = -1, c = -1
```

6406531288642. ✓

```
1 | a = -10, b = 1, c = 1
```

6406531288643. ❌

```
1 | a = 10, b = -2, c = 0
```

```
1 | a = -5, b = 5, c = 5
```

6406531288644. ✓

Question Number : 104 Question Id : 640653387586 Question Type : MSQ Is Question

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

Correct Marks : 5

Question Label : Multiple Select Question

Select all snippets of code that print the following sequence of n lines, where n is a positive integer that is already defined. The i^{th} line in the output corresponds to the first i Fibonacci numbers, for $1 \leq i \leq n$. Assume that 0 and 1 are the first two Fibonacci numbers. There should be a single space after every number. Specifically, there should be a single space after the last number in any given line.

Sample output for $n = 7$

```
1 | 0
2 | 0 1
3 | 0 1 1
4 | 0 1 1 2
5 | 0 1 1 2 3
6 | 0 1 1 2 3 5
7 | 0 1 1 2 3 5 8
```

Options :

```
1 | L = [0, 1]
2 | for i in range(n - 2):
3 |     L.append(L[-1] + L[-2])
4 | for i in range(1, n + 1):
5 |     for j in range(i):
6 |         print(L[j], end = ' ')
7 |     print()
```

6406531288645. ✓

6406531288646. ✓

```
1 i = 0
2 L = []
3 while i < n:
4     if i == 0:
5         L.append(0)
6     elif i == 1:
7         L.append(1)
8     else:
9         L.append(L[-1] + L[-2])
10    i += 1
11    for j in range(i):
12        print(L[j], end = ' ')
13    print()
```

```
1 i = 0
2 L = []
3 while i <= n:
4     if i == 0:
5         L.append(0)
6     elif i == 1:
7         L.append(1)
8     else:
9         L.append(L[-1] + L[-2])
10    i += 1
11    for j in range(i):
12        print(L[j], end = ' ')
13    print()
```

6406531288647. ❌

```
1 L = [0, 1]
2 for i in range(n):
3     L.append(L[-1] + L[-2])
4 for i in range(1, n + 1):
5     for j in range(i):
6         print(L[j], end = ' ')
7     print()
```

6406531288648. ✓

Sub-Section Number :

7

Sub-Section Id :

64065355583

Question Shuffling Allowed :

Yes

Question Number : 105 Question Id : 640653387582 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

R is a zero-matrix (all entries are zeros) of size 3 x 3 and

$$P = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}, Q = \begin{bmatrix} 1 & 1 & -1 \\ 1 & 1 & -1 \\ 1 & 1 & -1 \end{bmatrix}$$

What is the output of the following snippet of code?

```
1 val = 0
2 for i in range(3):
3     for j in range(3):
4         R[i][j] = P[i][j] * Q[i][j]
5         val = val + R[i][j]
6 print(val)
```

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

9

Sem2 English2

Section Id : 64065323943

Section Number : 6

Section type : Online

Mandatory or Optional : Mandatory

Number of Questions : 33

Number of Questions to be attempted :	33
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 :	64065355584
Question Shuffling Allowed :	No

Question Number : 106 Question Id : 640653387587 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: ENGLISH 2"

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 :

6406531288649. ✓ YES

6406531288650. ✗ NO

Sub-Section Number :	2
Sub-Section Id :	64065355585
Question Shuffling Allowed :	Yes

Question Number : 107 Question Id : 640653387600 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

For the following sentence, choose whether the type of sentence is simple, compound or complex:

He did not attend the reception, nor did he send any of his family members to the occasion.

Options :

6406531288689. ✘ Simple

6406531288690. ✓ Compound

6406531288691. ✘ Complex

Question Number : 108 Question Id : 640653387601 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

For the following sentence, choose whether the type of sentence is simple, compound or complex:

The boy entered the room

Options :

6406531288692. ✓ Simple

6406531288693. ✘ Compound

6406531288694. ✘ Complex

Question Number : 109 Question Id : 640653387602 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

How many dependent clauses are there in the following sentence:

The student missed the lecture

Options :

6406531288695. ✘ 1

6406531288696. ✘ 2

6406531288697. ✓ No dependent clauses

Question Number : 110 Question Id : 640653387603 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

In the following sentence, identify the complement(s) of the verb(s) that are underlined.

Kennedy builds an enormous home that juts out into the sea.

Options :

6406531288698. ✘ Sea

6406531288699. ✘ Home

6406531288700. ✘ Kennedy

6406531288701. ✓ An enormous home

Question Number : 111 Question Id : 640653387604 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

'Hina walked the dog in the park.' Here, the adjunct is ____.

Options :

6406531288702. ✘ Hina walked

6406531288703. ✘ Hina walked the dog

6406531288704. ✓ In the park

6406531288705. ✘ The dog in the park

Question Number : 112 Question Id : 640653387605 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

Sarika, who won the filmfare award, will be our chief guest. Here the adjectival clause is

Options :

6406531288706. ✘ Sarika, who won the filmfare award

6406531288707. ✓ Who won the filmfare award

6406531288708. ✘ Will be our chief guest

6406531288709. ✘ Both Sarika, who won the filmfare award and Who won the filmfare award

Question Number : 113 Question Id : 640653387606 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

I am looking for an employee who is well versed in corporate finance. Here the relative pronoun is

—.

Options :

6406531288710. ✓ Who

6406531288711. ✘ Am

6406531288712. ✘ For

6406531288713. ✘ Is

Question Number : 114 Question Id : 640653387607 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

'Hareesh and Kabir vied for attention but neither of them received it.' is a simple sentence.

Options :

6406531288714. ✘ TRUE

6406531288715. ✓ FALSE

Question Number : 115 Question Id : 640653387608 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

Identify the independent clause in the following sentence.

This road leads to the next town, which is famous for its furniture.

Options :

6406531288716. ✓ This road leads to the next town

6406531288717. ✘ Which is famous for its furniture

6406531288718. ✘ Famous for its furniture

6406531288719. ✘ To the next town

Question Number : 116 Question Id : 640653387609 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

Mary and I __ going to the opera.

Options :

6406531288720. ✓ Are

6406531288721. ✘ Is

6406531288722. ✘ Was

Question Number : 117 Question Id : 640653387610 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

Statement 1: The verb 'go' is transitive.

Statement 2: The verb 'go' almost always requires an adverb/adjunct.

Options :

6406531288724. ✘ Only statement 1 is true

6406531288725. ✘ Both statements are false

6406531288726. ✓ Only statement 2 is true

6406531288727. ✘ Both statements are true

Question Number : 118 Question Id : 640653387611 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

Identify the adverb in the following sentence.

My cat is not sleeping.

Options :

6406531288728. ✘ Is not

6406531288729. ✘ Is not sleeping

6406531288730. ✓ Not

6406531288731. ✘ My

Question Number : 119 Question Id : 640653387612 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

Adding '-able' to 'drink' changes it from ____.

Options :

6406531288732. ✓ Verb to adjective

6406531288733. ✗ Adjective to verb

6406531288734. ✗ Noun to Verb

6406531288735. ✗ Verb to noun

Question Number : 120 Question Id : 640653387613 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

Joy/less is an adjective formed by adding a ____.

Options :

6406531288736. ✗ Prefix

6406531288737. ✓ Suffix

6406531288738. ✗ Infix

6406531288739. ✗ None of these

Question Number : 121 Question Id : 640653387614 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

Identify the number of prefixes in the following sentence.

The anticlimax was that the amoral politician, who was known for his illegal ways, got decorated in the end.

Options :

6406531288740. ✘ 1

6406531288741. ✘ 2

6406531288742. ✓ 3

6406531288743. ✘ 4

Question Number : 122 Question Id : 640653387615 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

Identify the verb tense and aspect in the following sentence.

Poonguzhali was rowing the boat.

Options :

6406531288744. ✘ Simple present

6406531288745. ✘ Present continuous

6406531288746. ✓ Past continuous

6406531288747. ✘ Simple past

Question Number : 123 Question Id : 640653387616 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

Identify the (verb) mood in the following sentence.

I have not found her.

Options :

6406531288748. ✘ Subjunctive

6406531288749. ✓ Indicative

6406531288750. ✘ Interrogative

6406531288751. ✘ Imperative

Question Number : 124 Question Id : 640653387617 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

Fill in the blanks with verbs that are in the past perfect tense.

Zain and his friends _____ to visit their teachers.

Options :

6406531288752. ✘ Went

6406531288753. ✘ Gone

6406531288754. ✓ Had gone

6406531288755. ✘ Had went

Question Number : 125 Question Id : 640653387618 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

Fill in the blank with verbs that are in the future perfect tense.

Zain and his friends _____ to visit their teachers.

Options :

6406531288756. ✘ Will be going

6406531288757. ✘ Had gone

6406531288758. ✓ Will have gone

6406531288759. ✘ Had went

Question Number : 126 Question Id : 640653387619 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

Fill in the blank with verbs that are in the present perfect continuous tense.

Raya ____ the dragon.

Options :

6406531288760. ❌ Is slaying

6406531288761. ✓ Has been slaying

6406531288762. ❌ Will slay

6406531288763. ❌ Will be slaying

Question Number : 127 Question Id : 640653387620 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

Raju watches football matches every evening after school. Here the adverb is with ____.

Options :

6406531288764. ❌ Subject

6406531288765. ✓ Predicate

6406531288766. ❌ No adverb

6406531288767. ❌ Both Subject and Predicate

Question Number : 128 Question Id : 640653387621 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

Identify the adverb in the sentence given below.

Nirmal buys new laptops every year.

Options :

6406531288768. ✘ Laptops

6406531288769. ✘ Buys

6406531288770. ✘ New

6406531288771. ✓ Every year

Question Number : 129 Question Id : 640653387622 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

Choose an option that fits well for the following situation.

Inquiring about the availability of team for scheduling a meeting

Options :

6406531288772. ✓ Please let me know if you are available at 6 PM.

6406531288773. ✘ Are you available at 6 PM?

6406531288774. ✘ Could you please come at 6 PM?

6406531288775. ✘ Will you be available at 6 PM?

Question Number : 130 Question Id : 640653387623 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

'Let us do the meeting in the conference room on the fourth floor'. A softened version of this sentence is _____

Options :

6406531288776. ✘ Can we do the meeting in the fourth floor conference room?

6406531288777. ✘ Could we conduct the meeting in the conference room on the fourth floor , please?

6406531288778. ❌ I was wondering if we could do the meeting in the fourth floor conference room.

6406531288779. ✓ All of these

Question Number : 131 Question Id : 640653387624 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

Imperatives denote _____ and _____.

Options :

6406531288780. ❌ Life and death

6406531288781. ✓ Commands and requests

6406531288782. ❌ Prepositions and conjunctions

6406531288783. ❌ Articles and particles

Question Number : 132 Question Id : 640653387625 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

Fill in the blank with an appropriate connecting word:

They decided that it would be _____ correct _____ proper to boo at the dancer who danced badly.

Options :

6406531288784. ❌ Quite ... and

6406531288785. ❌ Either ... or

6406531288786. ❌ Not only ... but also

6406531288787. ✓ Neither ... nor

Question Number : 133 Question Id : 640653387626 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

Fill in the blank with an appropriate connecting word:

He could not find the book he wanted ___ he borrowed a magazine instead.

Options :

6406531288788. ✘ So that

6406531288789. ✘ But

6406531288790. ✓ So

6406531288791. ✘ And

Question Number : 134 Question Id : 640653387627 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

Fill in the blank with an appropriate connecting word:

Lucia read a magazine ____ doing her homework.

Options :

6406531288792. ✘ Nor

6406531288793. ✓ Instead of

6406531288794. ✘ And

6406531288795. ✘ Or

Question Number : 135 Question Id : 640653387628 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

Fill in the blank with an appropriate connecting word:

We are going to wait at the restaurant _____ the rain stops.

Options :

6406531288796. ❌ Because

6406531288797. ❌ Despite

6406531288798. ❌ Unless

6406531288799. ✓ Until

Question Number : 136 Question Id : 640653387629 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

Fill in the blank with an appropriate connecting word:

It was only when I reread her poems recently _____ I began to appreciate their beauty.

Options :

6406531288800. ❌ So

6406531288801. ❌ Until

6406531288802. ✓ That

6406531288803. ❌ Then

Sub-Section Number : 3

Sub-Section Id : 64065355586

Question Shuffling Allowed : No

Question Id : 640653387588 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (137 to 141)

Question Label : Comprehension

Listen to the audio and answer the given subquestions.



885_640653_0_1984128_hs1002fdqz1e2s1q1mq.mp3

Sub questions

Question Number : 137 Question Id : 640653387589 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

The word *warmth* is stressed on the _____ syllable.

Options :

6406531288651. ✘ Fourth syllable

6406531288652. ✘ Second syllable

6406531288653. ✘ Third syllable

6406531288654. ✓ First syllable

Question Number : 138 Question Id : 640653387590 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

Identify the number of syllables in the word *speaker*.

Options :

6406531288655. ✓ 2

6406531288656. ✘ 3

6406531288657. ✘ 4

6406531288658. ✘ 5

Question Number : 139 Question Id : 640653387591 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

The vowel in the second syllable of the word *story* is _____.

Options :

6406531288659. ✓ Short

6406531288660. ✗ Long

Question Number : 140 Question Id : 640653387592 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

The word *always* is stressed on the _____ syllable.

Options :

6406531288661. ✓ First syllable

6406531288662. ✗ Second syllable

6406531288663. ✗ Third Syllable

6406531288664. ✗ Fourth Syllable

Question Number : 141 Question Id : 640653387593 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 appropriate pauses for the following sentence as you hear in the audio:

Well it is a story of a woman whose perfectly imperfect life made her who and what she is today

Options :

6406531288665. ✘ //Well it is a story of/ a woman whose/ perfectly imperfect life made/ her who and what she is today//

6406531288666. ✓ //Well it is a story of a woman/ whose perfectly imperfect life/ made her who and what she is today//

6406531288667. ✘ //Well it is a story/ of a woman whose/ perfectly/ imperfect life made her who and what she/ is today//

6406531288668. ✘ //Well it is a story of a woman whose perfectly// imperfect life made her who and what/ she is today//

Question Id : 640653387594 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (142 to 146)

Question Label : Comprehension

Complete the following conversation using appropriate options in the given subquestions.

Harry: Hello. Is this XYZ Associates?

Mary: Hello. Yes, I am Mary here (1)___

Harry: (2) ___connect me to Mr. Joseph?

Mary: Sure. (3)___

Harry: Thanks!

Mary: Mr. Joseph is not available. (4) ___ like to leave a message?

Harry: Yes. Please inform him to call me back.

Mary: Sure Sir.

Harry: (5)___

Sub questions

Question Number : 142 Question Id : 640653387595 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

Complete blank (1) with an appropriate option.

Options :

6406531288669. ❌ What you want

6406531288670. ✓ What can I do for you?

6406531288671. ❌ What's the matter?

6406531288672. ❌ Why did you call?

Question Number : 143 Question Id : 640653387596 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

Complete blank (2) with an appropriate option.

Options :

6406531288673. ❌ Will you

6406531288674. ✓ Could you please

6406531288675. ❌ Could you

6406531288676. ❌ Can you please

Question Number : 144 Question Id : 640653387597 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

Complete blank (3) with an appropriate option.

Options :

6406531288677. ❌ Call after sometime

6406531288678. ❌ I will call you back

6406531288679. ✓ Please stay on the line

6406531288680. ❌ Can you call after some time?

Question Number : 145 Question Id : 640653387598 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

Complete blank (4) with an appropriate option.

Options :

6406531288681. ❌ Will you

6406531288682. ✓ Would you

6406531288683. ❌ Could you

6406531288684. ❌ Do you

Question Number : 146 Question Id : 640653387599 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

Complete blank (5) with an appropriate option.

Options :

6406531288685. ✓ Thank you

6406531288686. ❌ Bye

6406531288687. ❌ Okay

6406531288688. ❌ See you soon

Sem2 Maths2

Section Id : 64065323944

Section Number : 7

Section type : Online

Mandatory or Optional :	Mandatory
Number of Questions :	8
Number of Questions to be attempted :	8
Section Marks :	25
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 :	64065355587
Question Shuffling Allowed :	No

Question Number : 147 Question Id : 640653387630 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/DIRECT ENTRY DIPLOMA : MATHEMATICS FOR DATA SCIENCE 2"

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 :

6406531288804. ✓ YES

6406531288805. ✗ NO

Sub-Section Number :	2
Sub-Section Id :	64065355588
Question Shuffling Allowed :	Yes

Question Number : 148 Question Id : 640653387634 Question Type : MSQ Is Question

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

Correct Marks : 2

Question Label : Multiple Select Question

Choose the set of correct options.

Options :

If there is a square matrix A such that $A^2 - A = 0$, then $\det(A)$ must be either 0 or -1.
6406531288808. ❌

If u is a solution of the system of linear equations $Ax = c$ and c is a solution of the system of linear equations $Ax = b$, then u is a solution of the system of linear equations $A^2x = b$.
6406531288809. ✓

If B is a scalar matrix of order 3, then $AB - BA = 0$ for all square matrices A of order 3.
6406531288810. ✓

If there is an invertible real 3×3 matrix A such that $A \text{ adj}(A) = 4I$, then $\det(\text{adj}(A))$ must be 4.
6406531288811. ❌

Sub-Section Number : 3

Sub-Section Id : 64065355589

Question Shuffling Allowed : Yes

Question Number : 149 Question Id : 640653387635 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

If addition and scalar multiplication on $V = \mathbb{R}^2$ is defined as follows:

Addition: $(x_1, y_1) + (x_2, y_2) = (0, 0);$
 $(x_1, y_1), (x_2, y_2) \in V$

Scalar multiplication: $c(x, y) = (0, 0); (x, y) \in V, c \in \mathbb{R}$

Consider the following statements.

1. There exists an element 0 (called the zero vector of V) in V such that $0 + v = v, \forall v \in V$.
2. For each vector of $v \in V$ and for each pair $a, b \in \mathbb{R}, (a + b)v = av + bv$.
3. For each vector of $a \in \mathbb{R}$ and for each pair $v_1, v_2 \in V, a(v_1 + v_2) = av_1 + av_2$.
4. For each vector of $v \in V$ and for each pair $a, b \in \mathbb{R}, (ab)v = a(bv)$.

Which of the above statements is not true with respect to the addition and scalar multiplication on $V = \mathbb{R}^2$ defined above? (Enter the serial number of the statement which is not true. If statement 2 is incorrect, then enter 2 as your answer.)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 150 **Question Id :** 640653387645 **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 two statements:

P: $V = \mathbb{R}^2$, with the operations:

Addition:

$$(x_1, y_1) + (x_2, y_2) = (x_1x_2, y_1y_2); (x_1, y_1), (x_2, y_2) \in V$$

and

Scalar multiplication:

$$c(x, y) = (cx, cy); (x, y) \in V, c \in \mathbb{R}$$

is a vector space.

Q: Let V be a vector space. If $u, v, w \in V$ are such that $au + bv + cw = 0$ for some scalars $a, b, c \in \mathbb{R}$ and $ac \neq 0$, then $\text{span}\{u, v\} = \text{span}\{v, w\}$.

Consider the following statements:

- Statement 1: P is true, but Q is false.
- Statement 2: Q is true, but P is false.
- Statement 3: Both P and Q are true.
- Statement 4: Both P and Q are false.

Which one of the above statements is correct? (e.g. if Statement 1 is correct, then enter 1 as your answer).

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Sub-Section Number : 4

Sub-Section Id : 64065355590

Question Shuffling Allowed : No

Question Id : 640653387631 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0
Question Numbers : (151 to 152)

Question Label : Comprehension

Consider the matrix $A = \begin{bmatrix} \frac{a}{2} & -\frac{a}{2} \\ \frac{a}{2} & \frac{a}{2} \end{bmatrix}$, for some real number a .

Answer the given Subquestions:

Sub questions

Question Number : 151 Question Id : 640653387632 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

If $A^4 = \frac{\beta}{4}a^4I$, then what is the value
of β ?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

-1

Question Number : 152 Question Id : 640653387633 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

Find the value of $a + \lambda$ for which
 $\det(A - \lambda I) = 0$, where λ is a real
number (treat a as a variable).

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

0

Question Id : 640653387636 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (153 to 156)

Question Label : Comprehension

Consider the following subsets of \mathbb{R}^3 .

Subset 1) $W = \{(x, y, z) \mid x, y, z \in \mathbb{R}, \text{ and } x^2 + y^2 = 0\}$

Subset 2) $W = \{(x, y, z) \mid x, y, z \in \mathbb{R}, \text{ and } x = -z\}$

Subset 3) $W = \{(x, y, z) \mid x, y, z \in \mathbb{R}, x = 2y + z \text{ and } x + z = 2y\}$

Subset 4) $W = \{(x, y, z) \mid x, y, z \in \mathbb{R}, (x - 1) - y + (z + 1) = 0 \text{ and } x + y = z\}$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 153 Question Id : 640653387637 Question Type : SA Calculator : None

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

Correct Marks : 1

Question Label : Short Answer Question

Subset 1 is a subspace of dimension _____. (Enter the numerical value only. Suppose the dimension is 3, then enter 3 as your answer.)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 154 **Question Id :** 640653387638 **Question Type :** SA **Calculator :** None

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

Correct Marks : 1

Question Label : Short Answer Question

Subset 2 is a subspace of dimension _____. (Enter the numerical value only. Suppose the dimension is 3, then enter 3 as your answer.)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Question Number : 155 **Question Id :** 640653387639 **Question Type :** SA **Calculator :** None

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

Correct Marks : 1

Question Label : Short Answer Question

Subset 3 is a subspace of dimension _____. (Enter the numerical value only. Suppose the dimension is 3, then enter 3 as your answer.)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 156 **Question Id :** 640653387640 **Question Type :** SA **Calculator :** None

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

Correct Marks : 1

Question Label : Short Answer Question

Subset 4 is a subspace of dimension _____. (Enter the numerical value only. Suppose the dimension is 3, then enter 3 as your answer.)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Sub-Section Number : 5

Sub-Section Id : 64065355591

Question Shuffling Allowed : No

Question Id : 640653387641 **Question Type :** COMPREHENSION **Sub Question Shuffling**

Allowed : No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A

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

Question Numbers : (157 to 159)

Question Label : Comprehension

Suppose W_1 and W_2 are subspaces of \mathbb{R}^3 defined as follows:

$$W_1 = \{(x, y, x - 2y) \mid x, y \in \mathbb{R}\}$$

and

$$W_2 = \{(x, 0, y) \mid x, y \in \mathbb{R}\}$$

with usual addition and scalar multiplication, i.e.,

Addition: $(x_1, y_1, z_1) + (x_2, y_2, z_2) = (x_1 + x_2, y_1 + y_2, z_1 + z_2);$
 $(x_1, y_1, z_1), (x_2, y_2, z_2) \in V$

Scalar multiplication: $c(x, y, z) = (cx, cy, cz); (x, y, z) \in V, c \in \mathbb{R}$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 157 Question Id : 640653387642 Question Type : MSQ Is Question

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

Correct Marks : 2

Question Label : Multiple Select Question

Which of the following option(s)
represent $W_1 \cap W_2$? (More than one
options may be correct)

Options :

6406531288817. ✘ $Span\{(1, 0, 1), (1, 0, -1)\}$

6406531288818. ✓ $Span\{(1, 0, 1), (-2, 0, -2)\}$

6406531288819. ✓ $Span\{(-1, 0, -1)\}$

6406531288820. ✘ $Span\{(1, 1, -1), (1, 0, 1)\}$

Question Number : 158 Question Id : 640653387643 Question Type : SA Calculator : None

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

Correct Marks : 1

Question Label : Short Answer Question

What is the dimension of $W_1 \cap W_2$?

NOTE: Enter your answer to the nearest integer.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 159 Question Id : 640653387644 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

Which of the following options is true?

Options :

$W_1 \cup W_2$ is a vector space of dimension 3
(with usual addition and scalar

6406531288822. multiplication).

$W_1 \cup W_2$ is a vector space of dimension 2
(with usual addition and scalar

6406531288823. multiplication).

6406531288824.

$W_1 \cup W_2$ is a vector space of dimension 1

(with usual addition and scalar multiplication).

$W_1 \cup W_2$ is not a vector space
(with usual addition and scalar multiplication).

6406531288825. ✓

Sub-Section Number : 6

Sub-Section Id : 64065355592

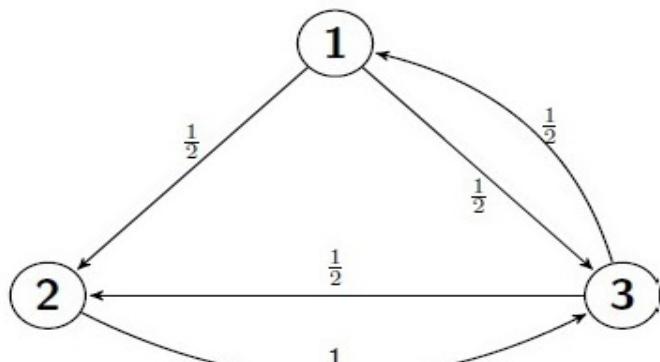
Question Shuffling Allowed : No

Question Id : 640653387646 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (160 to 162)

Question Label : Comprehension

A system can be in one of 3 possible states at a given time. At the next instant, it changes its state as represented pictorially in the diagram below. The number beside an arrow shows the transition probabilities from the beginning state of the arrow to the ending state of the arrow (e.g. in the diagram M2Q1:1, you can see that there is an arrow starting at state 1 and ending at state 2, with the number $\frac{1}{2}$ beside the arrow). It implies that the probability of transition from state 1 to state 2 is $\frac{1}{2}$). No arrow from state 2 to state 1 indicates that direct transition is not possible (equivalently the transition probability is 0). The probability of transition from a state to itself is 0.



M2Q1:1

The information in the diagram is represented by the matrix

$$P = \begin{bmatrix} 0 & \frac{1}{2} & \frac{1}{2} \\ 0 & 0 & 1 \\ \frac{1}{2} & \frac{1}{2} & 0 \end{bmatrix}, \text{ where the } ij\text{-th entry of } P \text{ denotes the probability}$$

of transition from state i to state j . Let the probabilities that the system is in State 1, State 2 or State 3 initially (i.e., at $t = 0$) be X_0^1 , X_0^2 , and X_0^3 , respectively. This is represented by the

initial distribution vector (3×1 matrix) and is denoted by $X_0 = \begin{bmatrix} X_0^1 \\ X_0^2 \\ X_0^3 \end{bmatrix}$.

For any positive integer n , the distribution vector at $t = n$ is denoted by X_n and is given by the equation $P^T X_{n-1} = X_n$.

Answer the given subquestions from the given information.

Sub questions

Question Number : 160 Question Id : 640653387647 Question Type : MSQ Is Question

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

Correct Marks : 2

Question Label : Multiple Select Question

Suppose at $t = 2$ the distribution

vector X_2 is $\begin{bmatrix} \frac{1}{3} \\ \frac{1}{2} \\ \frac{2}{3} \end{bmatrix}$. Which of the

following options are true?

Options :

6406531288827. ✓ $X_0 = X_2$.

6406531288828. ✓ $X_0 = X_1$.

6406531288829. ✗ $X_0 \neq X_n$ for some $n \in \mathbb{N}$.

There are infinitely many vectors,

6406531288830. ✗ which are possible candidates for X_0 .

There are infinitely many vectors,

6406531288831. ✗ which are possible candidates for X_1 .

Question Number : 161 Question Id : 640653387648 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

Suppose at $t = 1$ the distribution vector

X_1 is $\begin{bmatrix} \frac{1}{2} \\ \frac{1}{2} \\ 0 \end{bmatrix}$. Which of the following options

is true?

Options :

6406531288832. ✘ The system had positive initial probabilities of being in State 1 or State 2.

6406531288833. ✓ The system was initially in State 3.

6406531288834. ✘ The system was initially in State 1.

6406531288835. ✘ The system had positive initial probabilities of being in State 2 and State 3.

Question Number : 162 Question Id : 640653387649 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 set of correct option(s).

Options :

Both P and P^2 have the same
reduced row echelon form.

6406531288836. ✓

6406531288837. ✘ P is already in reduced row echelon form.

6406531288838. ✘ $P^2 = \lambda P$ for some real number λ .

6406531288839. ✘ P^2 is already in reduced row echelon form.

Sem2 Statistics2

Section Id :	64065323945
Section Number :	8
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	12
Number of Questions to be attempted :	12
Section Marks :	40
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 :	64065355593
Question Shuffling Allowed :	No

Question Number : 163 Question Id : 640653387650 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/DIRECT ENTRY DIPLOMA : STATISTICS FOR DATA SCIENCE 2"

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 TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531288840. ✓ YES

6406531288841. ✘ NO

Question Number : 164 Question Id : 640653387651 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

Discrete random variables:

Distribution	PMF ($f_X(k)$)	CDF ($F_X(x)$)	$E[X]$	$\text{Var}(X)$
Uniform(A) $A = \{a, a+1, \dots, b\}$	$\frac{1}{n}, \quad x = k$ $n = b - a + 1$ $k = a, a+1, \dots, b$	$\begin{cases} 0 & x < 0 \\ \frac{k-a+1}{n} & k \leq x < k+1 \\ 1 & k = a, a+1, \dots, b-1, b \\ 1 & x \geq n \end{cases}$	$\frac{a+b}{2}$	$\frac{n^2-1}{12}$
Bernoulli(p)	$\begin{cases} p & x = 1 \\ 1-p & x = 0 \end{cases}$	$\begin{cases} 0 & x < 0 \\ 1-p & 0 \leq x < 1 \\ 1 & x \geq 1 \end{cases}$	p	$p(1-p)$
Binomial(n, p)	$nC_k p^k (1-p)^{n-k}, \quad k = 0, 1, \dots, n$	$\begin{cases} 0 & x < 0 \\ \sum_{i=0}^k nC_i p^i (1-p)^{n-i} & k \leq x < k+1 \\ & k = 0, 1, \dots, n \\ 1 & x \geq n \end{cases}$	np	$np(1-p)$
Geometric(p)	$(1-p)^{k-1} p, \quad k = 1, \dots, \infty$	$\begin{cases} 0 & x < 0 \\ 1 - (1-p)^k & k \leq x < k+1 \\ & k = 1, \dots, \infty \end{cases}$	$\frac{1}{p}$	$\frac{1-p}{p^2}$
Poisson(λ)	$\frac{e^{-\lambda} \lambda^k}{k!}, \quad k = 0, 1, \dots, \infty$	$\begin{cases} 0 & x < 0 \\ e^{-\lambda} \sum_{i=0}^k \frac{\lambda^i}{i!} & k \leq x < k+1 \\ & k = 0, 1, \dots, \infty \end{cases}$	λ	λ

Continuous random variables:

Distribution	PDF ($f_X(k)$)	CDF ($F_X(x)$)	$E[X]$	$\text{Var}(X)$
Uniform[a, b]	$\frac{1}{b-a}, \quad a \leq x \leq b$	$\begin{cases} 0 & x \leq a \\ \frac{x-a}{b-a} & a < x < b \\ 1 & x \geq b \end{cases}$	$\frac{a+b}{2}$	$\frac{(b-a)^2}{12}$
Exp(λ)	$\lambda e^{-\lambda x}, \quad x > 0$	$\begin{cases} 0 & x \leq 0 \\ 1 - e^{-\lambda x} & x > 0 \end{cases}$	$\frac{1}{\lambda}$	$\frac{1}{\lambda^2}$
Normal(μ, σ^2)	$\frac{1}{\sigma\sqrt{2\pi}} \exp\left(\frac{-(x-\mu)^2}{2\sigma^2}\right), \quad -\infty < x < \infty$	No closed form	μ	σ^2
Gamma(α, β)	$\frac{\beta^\alpha}{\Gamma(\alpha)} x^{\alpha-1} e^{-\beta x}, \quad x > 0$		$\frac{\alpha}{\beta}$	$\frac{\alpha}{\beta^2}$
Beta(α, β)	$\frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} x^{\alpha-1} (1-x)^{\beta-1}, \quad 0 < x < 1$		$\frac{\alpha}{\alpha+\beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$

1. **Markov's inequality:** Let X be a discrete random variable taking non-negative values with a finite mean μ . Then,

$$P(X \geq c) \leq \frac{\mu}{c}$$

2. **Chebyshev's inequality:** Let X be a discrete random variable with a finite mean μ and a finite variance σ^2 . Then,

$$P(|X - \mu| \geq k\sigma) \leq \frac{1}{k^2}$$

Options :

6406531288842. ✓ Useful Data has been mentioned above.

6406531288843. ✖ This data attachment is just for a reference & not for an evaluation.

Sub-Section Number : 2

Sub-Section Id : 64065355594

Question Shuffling Allowed : Yes

Question Number : 165 Question Id : 640653387655 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

Let X and Y be two independent Bernoulli($1/3$) random variables. Define another random variable $Z = |X - Y|$. Find the PMF of Z .

Options :

z	0	1
$f(z)$	$1/2$	$1/2$

6406531288850. ✖

z	0	1
$f(z)$	$5/9$	$4/9$

6406531288851. ✓

z	0	1
$f(z)$	$4/9$	$5/9$

6406531288852. ✖

z	-1	0	1
$f(z)$	$2/9$	$5/9$	$2/9$

6406531288853. ✖

Question Number : 166 Question Id : 640653387657 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

Let X be a Poisson random variable with mean equal to 20. Which of the following bounds can be obtained using Markov's inequality?

Options :

6406531288855. ❌ $P(X > 30) \geq \frac{20}{30}$

6406531288856. ✓ $P(X > 30) \leq \frac{20}{31}$

6406531288857. ❌ $P(X > 25) \geq \frac{20}{25}$

6406531288858. ❌ $P(X < 25) \leq \frac{20}{25}$

Question Number : 167 Question Id : 640653387658 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

Which of the following statements are correct?

Options :

6406531288859. ❌ The probability density function (PDF) of a continuous random variable X must be continuous.

6406531288860. ✓ The cumulative distribution function (CDF) of a continuous random variable X must be continuous.

6406531288861. ❌ The sum of two independent binomial random variables must be a binomial random variable.

6406531288862. ❌ For a random variable X , mean and variance cannot be equal.

Sub-Section Number :

Sub-Section Id :

64065355595

Question Shuffling Allowed :

Yes

Question Number : 168 Question Id : 640653387656 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

The joint PMF of two discrete random variables X and Y is given in the following table:

\backslash	X	0	1
Y			
0		$\frac{1}{12}$	$\frac{1}{3}$
1		0	$\frac{1}{4}$
2		$\frac{1}{6}$	$\frac{1}{6}$

Joint PMF of X and Y

Calculate $\text{Cov}(X, Y)$. Enter the answer correct to two decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

-0.15 to -0.05

Sub-Section Number :

4

Sub-Section Id :

64065355596

Question Shuffling Allowed :

No

Question Id : 640653387652 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (169 to 170)

Question Label : Comprehension

The joint PMF of two discrete random variables X and Y is given in the following table:

\backslash	X	0	1	2	$f_Y(y)$
Y					
0	a	$\frac{1}{3}$	c	$\frac{2}{3}$	
1	$\frac{1}{9}$	b	d	$\frac{1}{3}$	
$f_X(x)$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{6}$	1	

Joint PMF of X and Y

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 169 Question Id : 640653387653 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

Find the values of c and d .

Options :

6406531288844. ✘ $c = 1/9, d = 1/3.$

6406531288845. ✘ $c = 2/9, d = 1/6.$

6406531288846. ✘ $c = 2/9, d = 1/3.$

6406531288847. ✓ $c = 1/9, d = 1/18.$

Question Number : 170 Question Id : 640653387654 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

Are X and Y independent?

Options :

6406531288848. ✓ Yes

6406531288849. ✗ No

Sub-Section Number : 5

Sub-Section Id : 64065355597

Question Shuffling Allowed : No

Question Id : 640653387659 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (171 to 172)

Question Label : Comprehension

A fair coin is tossed twice. Let X denote the number of heads obtained.

Let Y be defined as

$$Y = \begin{cases} 0, & \text{if no heads are obtained} \\ 1, & \text{if the first head appears on the first toss} \\ 2, & \text{if the first head appears on the second toss} \end{cases}$$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 171 Question Id : 640653387660 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

Which among the following can be the joint PMF of X and Y ?

Options :

$X \backslash Y$	0	1	2
0	0	0	0
1	0	$1/4$	$1/4$
2	0	$1/4$	$1/4$

6406531288863. ✘

$X \backslash Y$	0	1	2
0	$1/4$	0	0
1	0	$1/2$	$1/4$
2	0	0	0

6406531288864. ✘

$X \backslash Y$	0	1	2
0	$1/4$	0	0
1	0	$1/4$	$1/4$
2	0	$1/4$	0

6406531288865. ✓

$X \backslash Y$	0	1	2
0	$1/4$	0	0
1	0	$1/4$	0
2	0	$1/4$	$1/4$

6406531288866. ✘

Question Number : 172 Question Id : 640653387661 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

Find $P(Y \geq 1 | X = 1)$.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Id : 640653387662 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (173 to 174)

Question Label : Comprehension

A fair die is thrown three times. Let

X_1 represent the number obtained in the 1st throw,

X_2 represent the number obtained in the 2nd throw,

X_3 represent the number obtained in the 3rd throw.

Suppose all the throws are independent. Let

$$X = \max(X_1, X_2, X_3)$$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 173 Question Id : 640653387663 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

Compute the CDF of X , $F_X(k)$, where

$$k \in \{1, 2, \dots, 6\}.$$

Options :

6406531288868. ❌ $F_X(k) = \left(\frac{k}{6}\right)^3$

6406531288869. ❌ $F_X(k) = \left(\frac{1}{6}\right)^3$

6406531288870. ❌ $F_X(k) = \left(\frac{k+1}{6}\right)^3$

6406531288871. ✓ $F_X(k) = \left(\frac{k}{6}\right)^3$

Question Number : 174 Question Id : 640653387664 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

Find $P(X = 3)$. Enter the answer correct to three decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.085 to 0.089

Question Id : 640653387665 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (175 to 176)

Question Label : Comprehension

Aman answers a question correctly with a probability of $1/5$ independent of other questions. Suppose he is called for an interview where he can be asked either 1 or 2, or 3 questions with probability $1/3$ each. Let X denote the number of questions he is asked during the interview. Let Y denote the number of questions he answers correctly during the interview.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 175 Question Id : 640653387666 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

If Aman is asked two questions during the interview, what is the probability that he will answer only one correct? Enter the answer correct to two decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.30 to 0.34

Question Number : 176 Question Id : 640653387667 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

Find $P(X = Y)$. Enter the answer correct to three decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.081 to 0.084

Question Id : 640653387668 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (177 to 178)

Question Label : Comprehension

Consider a function $f : \mathbb{R} \rightarrow \mathbb{R}$ such that

$$f(x) = \begin{cases} \frac{1}{b} & -1 \leq x < 0 \\ ax(x+1)(x-1) & 0 \leq x \leq 1 \\ 0 & \text{Otherwise} \end{cases}$$

where a, b are any real constants.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 177 Question Id : 640653387669 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

Among the options below, for what values of a and b , is the function f a valid density function?

Options :

6406531288875. ✗ $a = 3, b = 4$

6406531288876. ✓ $a = -3, b = 4$

6406531288877. ✗ $a = -3, b = 3$

6406531288878. ✗ $a = 4, b = 3$

Question Number : 178 Question Id : 640653387670 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

With the choice of a, b given in the previous question, find P

$\left(X \leq -\frac{1}{2} \mid X < 1 \right)$. Enter the answer correct to three decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

0.125

Question Id : 640653387671 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (179 to 180)

Question Label : Comprehension

Suppose a fair die is rolled. Let X and Y be defined as

$$X = \begin{cases} 1, & \text{if the number is even} \\ 0, & \text{otherwise} \end{cases}$$

$$Y = \begin{cases} 1, & \text{if the number is prime} \\ 0, & \text{otherwise} \end{cases}$$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 179 Question Id : 640653387672 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

Find $E[XY]$. Enter the answer correct to two decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.15 to 0.18

Question Number : 180 Question Id : 640653387673 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

Find $\text{Var}(XY)$. Enter the answer correct to three decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.135 to 0.141