

Sem1 Statistics1

Section Id :	64065353023
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	11
Number of Questions to be attempted :	11
Section Marks :	40
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653111412
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 35 Question Id : 640653765320 Question Type : MCQ Display Question
Number : Yes 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: STATISTICS
FOR DATA SCIENCE I (COMPUTER BASED EXAM)"**

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?

CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE [TOP](#) FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532561762.  YES

6406532561763.  NO

Sub-Section Number :	2
Sub-Section Id :	640653111413
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 36 Question Id : 640653765344 Question Type : MCQ Display Question Number : Yes 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

Distance covered by a runner in the first five days of training are 3 km, 5 km, 3 km, 6 km, and 7 km. If the runner covers a distance of 4 km on the sixth day, then how does it affect his overall performance?

Options :

6406532561814.  The mean of the distances will increase.

6406532561815.  The mode of the distances will decrease.

6406532561816.  The median of the distances will decrease.

6406532561817.  Range of the distances will decrease.

Sub-Section Number :	3
Sub-Section Id :	640653111414
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 37 Question Id : 640653765343 Question Type : MSQ Display Question
Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time :
N.A Minimum Instruction Time : 0

Correct Marks : 2 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the following statement(s) is(are) correct?

Options :

6406532561810. ✖ Point-bi serial method is appropriate to find the association between two categorical variables.

6406532561811. ✔ Scatter plot is more appropriate to represent the relationship between two numerical variables.

6406532561812. ✖ There is no available method for determining the association between a categorical and a numerical variable.

6406532561813. ✔ Covariance can be computed only for two numerical variables.

Sub-Section Number :	4
Sub-Section Id :	640653111415
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 38 Question Id : 640653765321 Question Type : MSQ Display Question
Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time :
N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the following option(s) is(are) correct ?

Options :

6406532561764. ✔ If A and B are independent events, then $P(A \cup B) = P(A) + P(B) - P(A)P(B)$.

6406532561765. ✖ If A and B are disjoint events, then $P(A \cup B) = P(A) + P(B) - P(A)P(B)$.

6406532561766. ✓ If A and B are disjoint events, then $P(A \cup B) = P(A) + P(B)$.

6406532561767. ✖ If A and B are independent events, then $P(A \cup B) = P(A) \times P(B)$.

Sub-Section Number : 5
Sub-Section Id : 640653111416
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 39 Question Id : 640653765339 Question Type : SA Display Question Number : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

In how many different ways can the letters of the word 'ENGLISH' be arranged such that the vowels always come together?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1440

Sub-Section Number : 6
Sub-Section Id : 640653111417
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 640653765340 Question Type : COMPREHENSION Sub Question Shuffling

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

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

Question Numbers : (40 to 41)

Question Label : Comprehension

Consider a given dataset of weights (in kg) of persons such as 50, 55, 40, 60, 99, 90, 95, 60, 80, 75.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 40 Question Id : 640653765341 Question Type : MCQ Display Question

Number : Yes 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

Five number summary (min, Q_1 , Q_2 , Q_3 , max)
of the given data is:

Options :

6406532561805. ✖ 40, 60, 75, 90, 99

6406532561806. ✔ 40, 55, 67.5, 90, 99

6406532561807. ✖ 50, 60, 94.5, 95, 99

6406532561808. ✖ 50, 60, 90, 95, 99

Question Number : 41 Question Id : 640653765342 Question Type : SA Display Question

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

Correct Marks : 1

Question Label : Short Answer Question

Find the IQR (Inter-quartile range) of the given dataset.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

35

Sub-Section Number : 7

Sub-Section Id : 640653111418

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653765322 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Question Numbers : (42 to 43)

Question Label : Comprehension

A drawer of socks contains three black socks, four blue socks, and three grey socks. Two socks are chosen at random without replacement. Based on the information, answer the given subquestion.

Sub questions

Question Number : 42 Question Id : 640653765323 Question Type : SA Display Question Number : Yes 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 probability that a black pair is chosen ? 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 :

0.04 to 0.10

Question Number : 43 Question Id : 640653765324 Question Type : SA Display Question Number : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

What is the probability that they are of same colour ? 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 :

0.24 to 0.30

Question Id : 640653765325 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Question Numbers : (44 to 45)

Question Label : Comprehension

A family has two children. Assume being a male or female of a child is equally likely.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 44 Question Id : 640653765326 Question Type : MCQ Display Question Number : Yes 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

Find the probability that at least one child is a boy.

Options :

6406532561770. ✖ $\frac{1}{2}$

6406532561771. ✖ $\frac{1}{4}$

6406532561772. ✖ $\frac{2}{3}$

6406532561773. ✔ $\frac{3}{4}$

Question Number : 45 Question Id : 640653765327 Question Type : SA Display Question Number : Yes 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 probability that both are boys given that at least one is a boy ? 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 0.36

Question Id : 640653765328 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Question Pattern Type :** NonMatrix **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0
Question Numbers : (46 to 47)

Question Label : Comprehension

The probabilities of X and Y becoming principals in a college are $\frac{4}{5}$ and $\frac{1}{5}$ respectively. The probabilities that X and Y if selected would introduce co-education in the college are $\frac{1}{6}$ and $\frac{5}{6}$ respectively.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 46 **Question Id :** 640653765329 **Question Type :** MCQ **Display Question Number :** Yes **Is Question Mandatory :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0
Correct Marks : 3

Question Label : Multiple Choice Question

What is the probability that co-education will be introduced in the college?

Options :

6406532561775. ✖ $\frac{2}{15}$

6406532561776. ✖ $\frac{1}{6}$

6406532561777. ✖ $\frac{5}{6}$

6406532561778. ✓ $\frac{3}{10}$

Question Number : 47 Question Id : 640653765330 Question Type : SA Display Question Number : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

If co-education has been introduced in the college, then what is the probability that X is principal ?
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 :

0.40 to 0.48

Question Id : 640653765331 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Question Numbers : (48 to 50)

Question Label : Comprehension

In a school function, there are 2 violinists, 3 pianists, and 1 flutist. They have to sit in a circular order for a performance. Based on the information, answer the given subquestions.

Sub questions

Question Number : 48 Question Id : 640653765332 Question Type : MSQ Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time :

N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Choose the correct options from the following:

Options :

6406532561780. ✓ Selection of performers will occur simultaneously.

6406532561781. ✗ Selection of performers will not occur simultaneously.

6406532561782. ✗ With replacement.

6406532561783. ✓ Without replacement.

Question Number : 49 Question Id : 640653765333 Question Type : MSQ Display Question

Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time :

N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Choose the correct options from the following:

Options :

6406532561784. ✓ Order matters.

6406532561785. ✗ Order does not matter.

6406532561786. ✓ Permutation is used.

6406532561787. ✗ Combination is used.

Question Number : 50 Question Id : 640653765334 Question Type : MCQ Display Question

Number : Yes 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

Find the number of ways in which performers can be arranged in a circular order such that no two

violinists will sit together.

Options :

6406532561788. ✖ 120

6406532561789. ✖ 96

6406532561790. ✔ 72

6406532561791. ✖ 672

Question Id : 640653765335 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (51 to 53)

Question Label : Comprehension

In a class, there are 5 students who like Statistics and 4 students who like Mathematics. A committee of three students is to be formed.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 51 Question Id : 640653765336 Question Type : MSQ Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Choose the correct options from the following:

Options :

6406532561792. ✔ Selection of students will occur simultaneously.

6406532561793. ✖ Selection of students will not occur simultaneously.

6406532561794. ✖ With replacement.

6406532561795. ✔ Without replacement.

Question Number : 52 Question Id : 640653765337 Question Type : MSQ Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Choose the correct options from the following:

Options :

6406532561796. ✖ Order matters.

6406532561797. ✔ Order does not matter.

6406532561798. ✖ Permutation is used.

6406532561799. ✔ Combination is used.

Question Number : 53 Question Id : 640653765338 Question Type : MCQ Display Question Number : Yes 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

Find the number of ways in which the students can be selected such that at least one student likes Statistics.

Options :

6406532561800. ✖ 70

6406532561801. ✔ 80

6406532561802. ✖ 90

6406532561803. ✖ 85

Sem2 Maths2

Section Id :	64065353024
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	9
Number of Questions to be attempted :	9
Section Marks :	25
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653111419
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 54 Question Id : 640653765345 Question Type : MCQ Display Question
Number : Yes 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 II:
MATHEMATICS FOR DATA SCIENCE II (COMPUTER BASED EXAM)"**

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?

CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.