6406532306405. ✖ 5.3

6406532306406. ✖ 5.4

6406532306407. ✖ 5.5

6406532306408. ✔ 5.6

Statistics1

Section Id :	64065348501
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
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 :	640653100799
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 34 Question Id : 640653689430 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 : 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 :

6406532306413. ✔ YES

6406532306414. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	640653100800
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653689431 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 : (35 to 37)

Question Label : Comprehension

Manoj and his brother Nitin have five friends each. Manoj's friends circle has 2 boys and 3 girls while Nitin's friends circle has 3 boys and 2 girls. For their parents wedding anniversary, they decide to invite 4 of their friends. To ensure equal representation, it was decided that both of them will invite two of their friends and also ensure that there are a total of 2 boys and 2 girls getting invited. Based on the given information, answer the subquestions.

Sub questions

Question Number : 35 Question Id : 640653689432 Question Type : MSQ 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 :

6406532306415. ✔ Selection of boys and girls will occur simultaneously.

6406532306416. ✖ Selection of boys and girls will not occur simultaneously.

6406532306417. ✖ Selection will happen with replacement.

6406532306418. ✔ Selection will happen without replacement.

Question Number : 36 Question Id : 640653689433 Question Type : MSQ 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 :

6406532306419. ✖ Order matters.

6406532306420. ✔ Order does not matter.

6406532306421. ✖ Permutation is used.

6406532306422. ✔ Combination is used.

Question Number : 37 Question Id : 640653689434 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

Find the number of ways in which Manoj and Nitin can invite their friends.

Options :

6406532306423. ✔ 46

6406532306424. ✖ 37

6406532306425. ✖ 210

6406532306426. ✖ 40

Question Id : 640653689435 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 : (38 to 40)

Question Label : Comprehension

A group of 5 employees and 3 leaders want to do a group meeting. They have decided to sit around a circular table such that all leaders will sit together. Based on the given information, answer the subquestions.

Sub questions

Question Number : 38 Question Id : 640653689436 Question Type : MSQ 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 :

6406532306427. ✔ Selection of people will occur simultaneously.

6406532306428. ✖ Selection of people will not occur simultaneously.

6406532306429. ✖ With replacement.

6406532306430. ✔ Without replacement.

Question Number : 39 Question Id : 640653689437 Question Type : MSQ 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 :

6406532306431. ✔ Order matters.

6406532306432. ✖ Order does not matter.

6406532306433. ✔ Permutation is used.

6406532306434. ✖ Combination is used.

Question Number : 40 Question Id : 640653689438 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

Find the number of ways in which employees can sit around a circular table such that all leaders will sit together.

Options :

6406532306435. ✔ 720

6406532306436. ✖ 120

6406532306437. ✖ 5,040

6406532306438. ✖ 2,520

Sub-Section Number :	3
Sub-Section Id :	640653100801
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 41 Question Id : 640653689439 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

Kanika has to choose a t-shirt for her outfit from a collection of 6 yellow t-shirts, 2 black t-shirts and 4 blue t-shirts. If a t-shirt is chosen randomly, then what is the chance that a black or a blue t-shirt is chosen by Kanika for her outfit? Enter the answer correct to one decimal place.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.4 to 0.6

Sub-Section Number :	4
Sub-Section Id :	640653100802
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 42 Question Id : 640653689440 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

A fair die is rolled twice and a fair coin is tossed twice. Define events

A : A three appear on the die twice.
B : A head appear on the coin twice.

Find the value of $P(A \cap B)$.

Options :

6406532306440. ✖ $\frac{1}{6}$

6406532306441. ✖ $\frac{1}{72}$

6406532306442. ✖ $\frac{1}{12}$

6406532306443. ✔ $\frac{1}{144}$

Sub-Section Number :	5
Sub-Section Id :	640653100803
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653689441 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 : (43 to 44)

Question Label : Comprehension

Two bags (B_1 and B_2) containing candies are placed on a table. Bag B_1 contains 7 cinnamon candies and 4 ginger candies. Bag B_2 contains 3 cinnamon candies and 8 pepper candies. The bags are arranged such that the probability of selecting bag B_1 is 1/3 and the probability of selecting bag B_2 is 2/3. Suman is blindfolded and asked to select a candy. She will win a colour TV if she selects a cinnamon candy.

Based on the given information, answer the subquestions

Sub questions

Question Number : 43 Question Id : 640653689442 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 is the probability that Suman will win the colour TV?

Options :

6406532306444. ✖ $\frac{7}{33}$

6406532306445. ✖ $\frac{2}{11}$

6406532306446. ✖ $\frac{1}{2}$

6406532306447. ✔ $\frac{13}{33}$

Question Number : 44 Question Id : 640653689443 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 she wins a colour TV, then what is the probability that candy was from bag B_1?

(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 :

0.51 to 0.57

Sub-Section Number : 6

Sub-Section Id : 640653100804

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 45 Question Id : 640653689444 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

Administration section of a university has started to create roll numbers for the students, following the format '23Z170' using the digits 0, 1, 2, 3, 4, 5, 6, and a capital letter at the third position. Assume no digits are repeated. Find the number of ways in which the administration section can create a unique roll number.

Options :

6406532306449. ✔ 65,520

6406532306450. ✖ 52,920

6406532306451. ✖ 56,160

6406532306452. ✖ 46,800

Sub-Section Number : 7

Sub-Section Id : 640653100805

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 46 Question Id : 640653689445 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider an experiment of rolling a fair four sided die twice where all the possible outcomes are equally likely. Define the events

$$A = \text{1st roll results in a 1}$$

$$B = \text{Sum of the two rolls is a 7}$$

$$C = \text{2nd roll results in a 2}$$

Which among the following statements are true?

Options :

6406532306453. ✔ Events A and C are independent.

6406532306454. ✖ Events A, B and C are mutually exclusive.

6406532306455. ✖ Events A, B and C are exhaustive.

6406532306456. ✔ $P(A \mid (B \cup C)) = \frac{1}{6}$

Sub-Section Number :	8
Sub-Section Id :	640653100806
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653689446 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 : (47 to 48)

Question Label : Comprehension

The manufacturer of a new fitness gadget showcased the product at a high-traffic fitness expo. The following table summarizes the results for the customers who stopped to look at the innovative fitness gadget:

Reaction	Gender	
	Female	Male
Favourable	20	40
Ambivalent	5	35
Unfavourable	10	30

Table Q.1

Based on the given information, answer the subquestions

Sub questions

Question Number : 47 Question Id : 640653689447 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

What can be said about the association between the two variables “Reaction” and “Gender”?

Options :

6406532306457. ✔ The reaction to the new fitness gadget is associated with the gender of the customer.

6406532306458. ✖ The reaction to the new fitness gadget is not associated with the gender of the customer.

6406532306459. ✖ Scatter plot is the most appropriate graphical representation for the given data .

6406532306460. ✖ The correlation coefficient is close to 1.

Question Number : 48 Question Id : 640653689448 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

A person is randomly picked from this group, then what is the probability that the person is a female, given that the person's reaction is favourable to the new gadget? 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

Sub-Section Number :	9
Sub-Section Id :	640653100807
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 49 Question Id : 640653689449 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which among the following statements is/are true for a variable X?

Options :

6406532306462. ✔ Mean and median will be same if the SD(X) = 0.

6406532306463. ✖ Var(X) will always increase by multiplying each observations of X by a constant c.

6406532306464. ✖ Range(X) will always remain the same with the increase in the number of observations of X.

6406532306465. ✖ Range(X) will always increase with the increase in the number of observations of X.

Maths2

Section Id :	64065348502
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
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 :	640653100808
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 50 Question Id : 640653689450 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 : MATHEMATICS FOR DATA SCIENCE II (COMPUTER BASED EXAM)"