Question Number : 69 Question Id : 640653469406 Question Type : MSQ Is Question

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

Correct Marks : 6 Selectable Option : 0

Question Label : Multiple Select Question

Figure: 3 shows the curves represented by polynomials f(x), g(x), and h(x) of degrees 4, 4, and 2 respectively, on the XY plane. Let f(x) - g(x) = ax(x-2)(x-5)(x-10), $a \neq 0$. If b is a negative constant, then choose the most possible expression for h(x) and other correct statements among the given options. (Note that the figure is not according to scale .)





Options:

6406531560101. ***** $h(x) = b(x^2 + 8x - 7)$

6406531560102. ***** f(x) = g(x) at x = 0, -2, -5, -10

6406531560104.
$$\checkmark f(x) = g(x)$$
 at $x = 0, 2, 5, 10$

Sem1 Statistics1

Section Id :

64065330306

Section Number :

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
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 :	64065367502
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 70 Question Id : 640653469409 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: STATISTICS FOR DATA SCIENCE I"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT? CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE <u>TOP</u> FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531560113. 🗸 YES

6406531560114. * NO

Sub-Section Number :	2
Sub-Section Id :	64065367503
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653469410 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 : (71 to 72)

Question Label : Comprehension

Figure Q.1 represents the placement report of an engineering college for the academic year 2021-22.





Based on the information, answer the given subquestions.

Sub questions

Question Number : 71 Question Id : 640653469411 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 category **does not** represent the mode?

Options :

6406531560115. * Analytics

6406531560116. ** Software

6406531560117. 🗸 Core

6406531560118. * Insufficient information

Question Number : 72 Question Id : 640653469412 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 1200 students are placed during the placement season of 2021-22, then find the number of students placed in core companies?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

300

Sub-Section Number :	3
Sub-Section Id :	64065367504
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 73 Question Id : 640653469413 Question Type : MSQ Is Question

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

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following statements is/are true?

Options:

6406531560120. ✓ A sample is the subset of a population.

6406531560121. ✓ Numerical variables can have all the properties of ordinal and nominal scales of measurement.

6406531560122. * Categorical variable can have numerical properties.

6406531560123. ✓ Correlation coefficient measures a linear association between two numerical variables.

Question Number : 74 Question Id : 640653469419 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following represent(s) cross sectional data?

Options:

6406531560137. V Census of tigers estimated in four different countries in 2021.

6406531560138. * Yearly irrigation report released by a government over the period of ten years.

6406531560139. V Revenue generated by a company in four different states in 2022.

6406531560140. * Monthly expenditure of a family in 2020.

Question Number : 75 Question Id : 640653469420 Question Type : MSQ Is Question

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

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Choose the correct statement/s?

Options :

6406531560141. ✓ A nominal scale has the property of labelling the categories and it does not involve the ranking of data.

6406531560142. ✓ An ordinal scale has all the properties of nominal scale and it involves the ranking of data.

6406531560143. * An Interval scale has all the properties of ordinal scale and it satisfies the absolute zero property.

6406531560144. * A ratio scale has all the properties of interval scale and it does not satisfy the absolute zero property.

Sub-Section Number :	4
Sub-Section Id :	64065367505
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 76 Question Id : 640653469414 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

Suppose the number of cars sold by a car dealer in five months are 12, 8, 9, 20, 40.

Which of the following is/are outliers?

Options :

6406531560124. * -8

6406531560125. 🛎 20

6406531560126. ᢞ 40

6406531560127. 🏼 8

Sub-Section Number :	5
Sub-Section Id :	64065367506
Question Shuffling Allowed :	Yes

null

Question Number : 77 Question Id : 640653469415 Question Type : MSQ Is Question

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

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

An analyst did a survey to know whether literacy rate affects voting rate among adults in villages. He collected the data from a village and the results are tabulated in Table Q.1.

literacy	Participated in voting	
	Yes	No
Yes	30	10
No	40	15

Table Q.1

Choose the correct option/s?

Options :

6406531560128. V Of all the literate adults, 25% do not participate in voting.

6406531560129. V Of all the illiterate adults, 72.73% participate in voting.

6406531560130. ✓ 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.

6406531560131. * 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.

6406531560132. There is no association between literacy and voting participation.

6406531560133. * There is an association between literacy and voting participation.

Sub-Section Number :	6
Sub-Section Id :	64065367507
Question Shuffling Allowed :	No
Is Section Default? :	null

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 : (78 to 79)

Question Label : Comprehension

An analyst want to analyse the salary of employees in different organizations in a city.

To analyse this, he has selected an organization and the data of salaries is tabulated as shown in Table Q.2.

Employee name	Post	Salary (in thousands rupees)
Sagar	Assistant manager	80
Sanjana	Analyst	60
Rohit	Junior developer	50
Jenny	Senior developer	60
Ross	Consultant	50

Table Q.2

Based on the given information, answer the subquestions.

Sub questions

Question Number : 78 Question Id : 640653469417 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

Based on the data collected from an organisation, analyst made a statement that the average salary of an employee is 50,000 rupees in different organizations in the city. The given statement of analyst is based on which kind of statistical analysis ?

Options :

6406531560134. * Descriptive statistics

6406531560135. 🗸 Inferential statistics

Question Number : 79 Question Id : 640653469418 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 What is the sample standard deviation of salary (in thousand rupees)? (Enter the answer correct to 2 decimal accuracy) **Response Type :** Numeric **Evaluation Required For SA :** Yes Show Word Count : Yes Answers Type : Range Text Areas : PlainText Possible Answers : 12.22 to 12.28

Question Id : 640653469421 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 : (80 to 81)

Question Label : Comprehension

The heights (in cm) of ten athletes are represented by a stem and leaf plot in Figure Q.2.

Stem	Le	eaf			
16	2	2	8	9	
17	5	5	5	7	
18	0	4			

Here $16 \mid 4$ represents 164 cm.

Figure Q.2

Based on the above information, answer the given subquestions

Sub questions

Question Number : 80 Question Id : 640653469422 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 What is the median height(in cm) of an athlete? Response Type : Numeric Evaluation Required For SA : Yes Show Word Count : Yes Answers Type : Equal Text Areas : PlainText Possible Answers :

175

Question Number : 81 Question Id : 640653469423 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			
What is the mode of the heights (in cm) of athletes?			
Response Type : Numeric			
Evaluation Required For SA : Yes			
Show Word Count : Yes			
Answers Type : Equal			
Text Areas : PlainText			
Possible Answers :			
175			
Sub-Section Number :	7		
Sub-Section Id :	64065367508		
Question Shuffling Allowed :	Yes		
Is Section Default? :	null		

Question Number : 82 Question Id : 640653469424 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 mean and sample variance of the marks (out of 50) scored by the students in the Statistics course are 40 and 25 respectively. If 5 is subtracted from the marks of each student and then multiplied by 2. Find the mean of the modified marks.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

70

Sub-Section Number :	8
Sub-Section Id :	64065367509
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 83 Question Id : 640653469425 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* represent the total marks of Mayur and Deepak in 5 subjects respectively. If the marks scored by Deepak is twice the marks scored by Mayur in each subject, then which of the following statement is correct?

Options :

6406531560148. * There is no correlation between X and Y.

6406531560149. * There is a weak positive correlation between *X* and *Y*.

6406531560150. V There is a strong positive correlation between X and Y.

6406531560151. * Insufficient information.

Sem2 Intro to Python

Section Id :	64065330307
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 Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065367510
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 84 Question Id : 640653469426 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: 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