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Ramacrisna Madeva Salgaonkar Higher Secondary School
Margao Goa

Std: XII Voc -CT

First Internal Exam Aug, 2022

Time:1hr

Date:05/08/2022

Sub:Mathematic(voc)

Marks:20

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Question number 1 to 4 carries 1 mark each.

- If two perfect cubic dice are thrown, then the total number of outcomes is ____
a) 2 b)4 c)13 d)36
- If a coin is tossed three times, then the probability of the head appearing t most twice is ____
a) $2/3$ b) $1/3$ c) $7/8$ d) $5/8$
- If "r" is the coefficient of correlation, between two variables, then ____
a) $0 < r < 1$ b) $-1 \leq r \leq 1$ c) $r \geq 0$ d) $r \leq 0$
- If a scatter plot for two variables is widely scattered then we say, ____ is very low between the two variables.
a) Regression b) Correlation c) Difference d) Value

Question number 5 to 7 carries 2 marks each.

- Two cards are drawn from a pack of 52 well shuffled cards. Find the probability that one is a Heart and other Spade.
- Construct a forward difference table for function given by

| | | | | | |
|---|---|---|----|----|----|
| x | 1 | 3 | 5 | 7 | 9 |
| y | 0 | 8 | 24 | 48 | 80 |

- Construct a backward difference table for function given by

| | | | | | | |
|---|----|----|----|----|----|----|
| x | 0 | 2 | 4 | 6 | 8 | 10 |
| y | 10 | 14 | 17 | 21 | 27 | 35 |

Question number 8 to 10 carries 3 marks each.

- Find the coefficient of Correlation for the following data

| | | | | | |
|---|---|---|---|---|---|
| x | 1 | 2 | 3 | 4 | 5 |
| y | 4 | 5 | 6 | 7 | 8 |

- Find the Regression coefficient of x on y for following data

| | | | | | | | |
|---|---|---|----|----|----|----|----|
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| y | 9 | 8 | 10 | 12 | 11 | 13 | 14 |

- Find the Regression coefficient of y on x for following data. Also find the most likely value where $x=6.5$

| | | | | | |
|---|---|---|---|----|----|
| X | 3 | 4 | 5 | 6 | 7 |
| Y | 1 | 3 | 6 | 10 | 15 |

*****All the Best*****