## 3 SEM TDC GGRH (CBCS) C 7

## 2020

( Held in April-May, 2021 )

## GEOGRAPHY

( Core )
Paper : C-7

## ( Statistical Methods of Geography )

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\frac{\text { Full Marks : } 80}{\text { Pass Marks : } 32}
$$

Time : 3 hours
The figures in the margin indicate full marks for the questions

1. Answer the following as directed : $1 \times 8=8$
(a) The quantitative revolution in geography is not primarily concerned with providing a scientific approach along with the application of statistical methodology in geographical research.
( Write True or False )
(b) Quartile deviation divides the entire data set into $\qquad$ quadrants.
(Fill in the blank )
(c) What does it indicate if the value of coefficient of correlation stands at +1 ?
(d) In a discrete series of even numbers, median indicates $\qquad$ th value.
(Fill in the blank )
(e) Write the formula to calculate coefficient of variation (CV).
(f) What will be the probability of occurrence of head and tail if a coin is tossed one time?
(g) A part of population selected as its representative is called the sample and the process of such selection is known as $\qquad$ -.

## (Fill in the blank )

(h) What is the equation of a straight line in regression analysis?
2. Write brief notes on the following : $4 \times 4=16$
(a) Need of quantification in geography
(b) Sources of data for geographical studies
(c) Stratified random sampling
(d) Distinction between nominal and ordinal measurement
3. Explain with suitable examples the use of data matrix in geographical studies.

## Or

What is meant by descriptive statistics? Explain how tabulation is done choosing 50 variables with a class interval of $4 . \quad 4+10=14$
4. What is meant by measures of central tendency? What are its types? Calculate the mean of the following data and mention its merit and demerit :
$1+2+7+2+2=14$

| Rainfall (in cm) | No. of rainy days |
| :---: | :---: |
| $50-100$ | 20 |
| $100-150$ | 35 |
| $150-200$ | 50 |
| $200-250$ | 70 |
| $250-300$ | 15 |
| $300-350$ | 5 |

Or
What is meant by measures of dispersion? What are the different measures of dispersion? Calculate the mean deviation of the following data and mention its merits and demerits :
$1+2+7+2+2=14$

| Earnings per day (in ₹) | No. of families |
| :---: | :---: |
| $0-100$ | 30 |
| $100-200$ | 45 |
| $200-300$ | 50 |
| $300-400$ | 120 |
| $400-500$ | 100 |
| $500-600$ | 112 |
| $600-700$ | 80 |

5. What do you mean by sampling? What are different methods of sampling? Describe any two of them with examples. $2+2+10=14$

## Or

What is meant by probability? Mention the characteristics of binomial distribution and normal distribution.
$2+6+6=14$
6. What is meant by correlation? Calculate the coefficient of correlation by using Spearman's rank correlation method from the table given below and interpret your result :
$3+10+1=14$

| District Code | PC of Urban <br> Population | PC of Literacy <br> Rate |
| :---: | :---: | :---: |
| A | $2 \cdot 8$ | $38 \cdot 9$ |
| $B$ | $8 \cdot 6$ | 33.7 |
| C | $1 \cdot 8$ | 40.6 |
| $D$ | $4 \cdot 8$ | 22.0 |
| $E$ | 4.8 | 29.5 |
| $F$ | $2 \cdot 0$ | 4.9 |
| $G$ | 6.7 | 37.6 |
| $H$ | 2.2 | 2.6 |
| $I$ | 5.7 | 28.2 |
| $J$ | 7.3 | 33.2 |

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