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# FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 

(CBCSS - UG)
(Regular/Supplementary/Improvement)

$$
\begin{gathered}
\text { CC19U PSY1 C02 - DESCRIPTIVE STATISTICS } \\
\text { (Statistics - Complementary Course) } \\
\text { (2019 Admission onwards) }
\end{gathered}
$$

Time : 2.00 Hours

$$
\begin{array}{r}
\text { Maximum : } 60 \text { Marks } \\
\text { Credit : } 3
\end{array}
$$

Part A (Short answer questions)
Answer all questions. Each question carries 2 marks.

1. Define Statistics.
2. Compare census and sampling method.
3. Distinguish between discrete and continuous variable.
4. What is Bar diagram?
5. Define Geographical classification.
6. Find the arithmetic mean of first 10 natural numbers.
7. What is mode in statistics?
8. Write any two disadvantages of Harmonic mean.
9. What is meant by a measure of dispersion?
10. What is the range of the following data? $23,45,34,21,89,45,47,91$.
11. Define mean deviation.
12. What are the different types of kurtosis?
(Ceiling: 20 Marks)
Part B (Short essay questions - Paragraph)
Answer all questions. Each question carries 5 marks.
13. Explain the various method of collecting data.
14. Discuss the important components of frequency distribution.
15. Draw two ogives for the following data and determine median graphically.

| Class | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 12 | 8 | 15 | 10 |

16. Compute the median from the following data

| Age last birth day | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Persons | 4 | 20 | 38 | 24 | 10 | 4 |

17. Calculte GM and HM for the following data.

| Classes | $0-5$ | $5-10$ | $10-15$ | $15-20$ |
| :--- | :---: | :---: | :---: | :---: |
| Frequency | 8 | 16 | 15 | 3 |

18. From the following calculate upper and lower quartiles.

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students | 8 | 10 | 22 | 25 | 10 | 5 |

19. Calculate Pearson's measure of skewness for the following data.

| x | 36 | 28 | 43 | 44 | 37 | 39 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f | 5 | 8 | 11 | 5 | 7 | 4 |

(Ceiling: 30 Marks)

## Part C (Essay questions)

Answer any one question. The question carries 10 marks.
20. Explain different methods of measuring central tendancy with its merits and demerits.
21. Prices of a particular commodity in 5 years in 2 cities are given below.

| Price in city A | 22 | 24 | 19 | 21 |
| :--- | :---: | :---: | :---: | :---: |
| Price in city B | 18 | 20 | 18 | 15 |

Find from the above data the city which has more stable price.

