



**WEST BENGAL STATE UNIVERSITY**  
B.A./B.Sc. Honours 3rd Semester Examination, 2019

**GEOACOR07T-GEOGRAPHY (CC7)**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

**GROUP-A**

**Answer any *one* question from the following**

10×1=10

1. How does probability sampling differ from non-probability sampling? Explain the types of probability sampling techniques with numerical examples. 3+7 = 10
2. Define 'Arithmetic Mean (AM)', 'Geometric Mean (GM)' and 'Harmonic Mean (HM)' and compare their relative advantages and disadvantages. 6+4 = 10

**GROUP-B**

**Answer any *four* questions from the following**

5×4=20

3. Calculate 7<sup>th</sup> decline and 65<sup>th</sup> percentile from the following data: 4+1 = 5

Wages (Rs.) / day	150	200	250	300	500	1000	1800
No. of workers	20	40	50	70	30	15	2

What is difference between percentage and percentile?

4. What is standard error? Differentiate between mean deviation and standard deviation. 2+3 = 5
5. Derive the linear regression equations of  $y$  on  $x$  and  $x$  on  $y$ . 5
6. Mention different types of sampling. Explain with example Simple random sampling with replacement and without replacement. 5
7. Mention the merits and demerits of moving average methods for determining trend in the analysis of time series. 5

8. Differentiate between linear and non-linear regression. Find the standard deviation of the following table: 3+2 = 5

$x$	10	20	30	40	50
$f$	9	18	25	7	5

9. Mention the difference between discrete and continuous variable. Explain with example the uses of Rank correlation. 3+2 = 5

### GROUP-C

Answer any *five* questions from the following

2×5 = 10

10. What is normal curve?
11. Distinguish between nominal and ordinal scale of measurement.
12. Mention merits and demerits of modal values.
13. Explain different methods of collection of qualitative and quantitative data.
14. What are the differences between sample and population data?
15. What are the uses of stratified sampling?
16. Mention different types of correlation with example.
17. Define frequency density and relative frequency.
18. What is sample error?

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