**Concepts to Study**

1. Different types of data.
2. Definition of statistics
3. Problems on relative frequency
4. Scales of measurement – definitions, examples.
5. Graph problems, chart problems – histogram, bar graph, line graph, ogives, frequency curve, frequency polygon, pi chart, multiple bar chart, subdivided. **DID NOT DO**
6. Percentage problems.
7. Central tendency – all formulaes on mean, corrected arithmetic mean
8. Properties of A.M
9. Partition values – raw, discrete, continuous
10. Mode – raw, discrete, continuous
11. Geometric & harmonic mean – proofs, formulaes.
12. Measures of dispersion – range, quartile deviation, standard deviation. - coefficients
13. Combined and corrected standard deviation.
14. Computing partition values for data.
15. Finding mode using histogram
16. Combined geometric mean.
17. Skewness, kurtosis – theory
18. Probability
19. Addition theorem of probability
20. Conditional theorem of probability
21. Bayes theorem
22. Correlation
23. Different types of correlation
24. Scattered graphs
25. Regression
26. Spearman’s Row
27. Karl Pearson’s correlation coefficient
28. Regression equation
29. Proofs in correlation –
30. Karl Pearson’s correlation coefficient lies between -1 and 1. (-1<=r<=1)
31. correlation coefficient is independent of change in origin and scale.
32. Derivation of Spearman’s rank correlation coefficient.
33. Spearman’s rank correlation coefficient lies between -1 and 1.
34. Properties of regression coefficients –
35. Correlation coefficient is the geometric mean of regression coefficient.
36. If one of the regression coefficients is greater than 1, the other should be less than 1.
37. Arithmetic mean of regression coefficients is greater than correlation coefficients provided r>0 and vice – versa.
38. Regression coefficients are independent of change in origin but not of change in scale.
39. Finding correlation coefficients when 2 regression coefficients are given and also to find mean of X and Y.
40. Some proofs in probability –
41. Pair wise and mutual independence of events
42. Given that A and B are independent, prove that A’ and B are independent-