First Year Examination of the Three Year Degree Course, 2001 (Common for the Faculties of Arts & Science) STATISTICS Paper I (Statistical Methods) Time - Three Hours Maximum Marks - 50 Attempt Five question in all, selecting ONE question from each unit. All questions carry equal marks.

SECTION A

- 1. Define "Statistics" and discuss its scope and limitations.
- 2. Distinguish between classification and tabulation. Discuss the purpose, methods and importance of classification.
- Write a note on the use of graphic method in Statistics Indicate briefly the special merits attaching to the use of various kinds of diagrams for the presentation of statistical data.
- 4. What is meant by "Central tendency" ? Describe the various methods of measuring it and point out the usefulness of each methods.

SECTION B

- 5. Discuss the relative merits of range, standard deviation and mean deviation as a measure of dispersion.
- 6. What is skewness? What are the different tests of skewness?
- 7. Define raw and central moments of a distribution. What is the effect of change of origin and scale on the moments?

SECTION C

- 8. What do you understand by association of attributes? How will you examine the consistency of data classified according to different attributes?
- In a radio listeners preference survey, 120 persons were interviewed and their opinions were as follows :-

Type of Music	Language A	Language B
I	13	45
II	39	23

Find coefficient of association and coefficient of colligation.

 10. From the following givenclass-frequences find the values of (A), (B), (C),

 (AB) and (BC) :

 (ABC) = 149,
 $(a\alpha BC) = 204$
 $(\alpha B\gamma) = 1762$,
 $(A\beta C) = 225$,

 $(\alpha\beta\gamma) = 1196$,
 $(\alpha\beta\gamma) = 21842$.