

B. N. BANDODKAR COLLEGE OF SCIENCE, THANE - 400 601.
FIRST TERM EXAMINATION OCT. - 2010

F. Y. B. Sc.

TIME : 2 Hrs.

SUBJECT : STATISTICS - I

MARKS : 60

N. B. : 1. All questions are compulsory.

2. Figures to the right indicate full marks.

3. Use of calculator is allowed.

Q.1 a) Define the terms 'variable' and 'attribute' and give one example of each. [3]

b) Attempt ANY THREE.

1) Prepare a blank table to represent the number of women in the age group 20 - 30, 30 - 40, 40 - 50 in Thane according to Marital Status and employment status. [4]

2) Describe with the help of an example stem and leaf diagram. [4]

3) Distinguish between one-dimensional and two dimensional diagrams. [4]

4) State merits and demerits of mode. [4]

5) Find whether association between A and B is negative or positive from the following data.

(i) $(A) = 240, (\beta) = 300, (A\beta) = 80, N = 800$

(ii) $N = 1000, (A) = 470, (B) = 620, (AB) = 320$ [4]

Q.2 a) Write a Short note on 'tabulation'. [7]

b) Attempt ANY ONE :

1. Define coefficient of association (Q) and coefficient of colligation (Y). Obtain the relationship between them. [8]

2. Discuss (i) Nominal (ii) Ordinal (iii) Interval (iv) Ratio scales Giving one example of each. [8]

Q.3 a) With an example explain how you draw
(i) Frequency curve
(ii) Frequency polygon [7]

P.T.O.

Q.3 b) Attempt ANY ONE :

- 1) Write a note on bar-diagrams. [8]
- 2) With the help of example explain how you draw ogives ? Also state the uses of ogives. [8]

Q.4 a) What are the requisites of good measure of central tendency ? [7]**b) Attempt ANY ONE :**

- 1) Define mode. Explain how to calculate mode for (i) ungrouped (ii) grouped frequency distribution. Also state the use of mode. [8]
- 2) Define arithmetic mean, geometric mean and harmonic mean.
For two positive numbers x_1 and x_2 prove thzt their $A.M. \geq G.M. \geq H.M.$

