MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF ARTS IN URBAN & REGIONAL PLANNING WITH INFORMATION TECHNOLOGY

(CITY CAMPUS)

PUR 222: QUANTITATIVE TECHNIQUES

Date: 24th March, 2014 Time: 9.00 – 11.00 a.m.

INSTRUCTIONS:

Answer Question ONE and any other TWO questions.

PUR 222: QUANTITATIVE TECHNIQUES

CITY CAMPUS

Instructions: Answer Question 1 and any other two questions

1. a) Calculate the median, Q, Q_3, D_6, P_{70} from the following data.**(20 marks)**

CLASS INTERVALS	FREQUENCY
0-5	17
5-10	30
10-15	35
15-20	49
20-25	43
25-30	33
30-35	26
35-40	15

b) Calculate the mean deviation and co- efficient of M.D from the following data.**10marks**

CLASS	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
FREQUENCY	5	8	12	15	20	14	12	8

2. Compute standard deviation and co efficient of variation.**20marks**

MARKS	0-10	10-20	20-30	30-40	40-50
NO. OF STUDENTS	7	6	15	12	10

3. Find the range and co efficient of range of the following distribution.**20marks**

CLASS	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
FREQUENCY	10	20	27	36	52	42	18	6

4. Draw a scatter graph for the following data and comment on the co relation.**20marks**

x	1	2	3	4	5	6
y	25	16	9	4	1	0

5. Find Karl Pearson's co efficient of co relation between traffic density and accident rate from the following information available.**20marks**

TRAFFIC DENSITY	ACCIDENT RATE
30	2
35	4
40	5
45	5
50	8
60	15
70	24
80	30
90	32

6. From the data below find the two regression equations.**20marks**

x	1	2	3	4	5
Y	2	5	3	8	7