Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 10

M.Planning (Sem.–1)

PLANNING TECHNIQUES AND QUANTITATIVE METHODS

Subject Code : UC-MURP-104

M.Code : 77247

Date of Examination : 12-01-23

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **Attempt total of FIVE questions with minimum ONE from each unit**

UNIT-I

1. Explain the technique of mapping in details.

2. What do you understand by development regulations? How do they regulate the nature and characteristic of development in any City?

UNIT-II

3. Find the standard deviation and coefficient of variation from the following data:

Wages (Rs) :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of workers :	5	8	13	15	19	12	11	9

4. Find the quartile deviation and coefficient of quartile deviation for the marks of students of class:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of students	5	8	3	15	19	12	11	9	5	3

UNIT-III

5. Define χ^2 test of goodness of fit. State any two applications of χ^2 test. Write the conditions for the application of this test.

6. Define one-tailed and two-tailed tests. Support your answer with the help of suitable examples.

UNIT-IV

7. Find the correlation coefficient between age and playing habits of the following students using Karl Pearson's coefficient of correlation method:

Age	15	16	17	18	19	20
Number of students	250	200	150	120	100	80
Regular Players	200	150	90	48	30	12

8. Find the regression equation X on Y from the following data

X	10	12	16	11	15	14	20	22
Y	15	18	23	14	20	17	25	28

UNIT-V

9. What are the predominant methods of population projection used in master planning process? Which method would you suggest for population projection of Chandigarh city for the horizon year 2050 and why?

10. Explain index number, weighted and unweighted index numbers with examples. Also explain their application is spatial planning.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.