



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
MBA/DIMIst Semester Assignment

Programme Name-MBA-First Semester /Diploma in Management-First Semester

Programme Code-MBA-10/DIM-10

Course Name-Quantitative Techniques in Management

Course Code:CP1004

Maximum Marks-40

Last Date of Submission: 15 Jan, 2012

Session: 2011-12(Summer)

Section-A

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answers 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

Discuss the following (Q 1-7)-

1. Mutually exclusive, dependent and independent events giving examples.
2. Binomial Distribution.
3. Meaning and Significance of Regression Analysis.
4. Chi-Square(X^2) Test and F-Test
5. Decision Tree Approach of Problem Solving
6. North West Corner Rule and Vogel's approximation method
7. Travelling Salesman Problem
8. Sample of sales in similar shops in two towns are taken for a new product with the following results:

| | Mean Sales | Variance | Size of sample |
|--------|------------|----------|----------------|
| Town A | 57 | 5.3 | 5 |
| Town B | 61 | 4.8 | 7 |

Is there any evidence of difference in sales in the two towns?

Section-B

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answers 02 questions only.

1. What is the linear programming? What are some type of problems that linear programming can help in solving them? What characteristics must a problem have if linear programming is to be used?
2. What do you understand by a waiting line model? Explain some of the basic characteristics of a queuing system? Discuss briefly the applications of linear programming in any functional area of management.
3. Explain the procedure of testing for the significance of the difference between mean of two samples by using student's t-test.

4. State addition and multiplication rules of probability. Discuss the concepts of theoretical probability distributions and their characteristics.

