## **CHANDVAD -III: WINTER - 2016**

## **Subject : Management Science and Decision Technology**

Day: Saturday Time: 10.00 A.M. TO 01.00 P.M. S.D.E. Max Marks: 70 Total Pages: 2 Date: 10/12/2016 N.B.: Attempt any FOUR questions from Section –I and any TWO questions from 1) Section –II. Figures to the right indicate FULL marks. 2) Answers to both the sections should be written in **SAME** answer book. 3) 4) Use of non programmable **CALCULATOR** is allowed. **SECTION-I** Discuss the contribution of Behavioral Science school to the management (10) Q.1 thought. What are different measures of dispersion? Explain them with suitable (10) **Q.2** examples. (10)What is Operations Research? Explain its methodology. Q.3 (10)A firm manufactured headache pills in two sizes A and B. Size A contains 2 Q.4 grains of aspirin, 5 grains of bicarbonate and 1 grain of codeine. Size B contains 1 grain of aspirin, 8 grains of bicarbonate and 6 grains of codeine. It is found by users that it requires at least 12 grains of aspirin, 74 grains of bicarbonate and 24 grains of codeine for providing immediate effect. It is required to determine the least number of pills a patient should take to get immediate relief. Formulate the problem as a standard Linear Programming Problem.

**Q.5** Write short notes on Any **TWO**:

(10)

- a) Queuing Theory
- b) Regression
- c) Decision and Risk Analysis
- d) Transportation Problem

P. T. O.