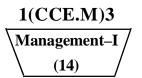
12. An important part of the customer service responsibilities of a telephone company relates to the speed with which troubles in residential service can be repaired. Suppose the past data indicate that the likelihood is 0.60 that troubles in residential service can be repaired on the same day:

For the first five troubles reported on a given day, what is the probability that:

- (a) All five will be repaired the same day.
- (b) At least two will be repaired the same day.
- (c) Fewer than two will be repaired the same day.

Roll No. .....

Total No. of Pages: 4



Time: Three Hours]

[Maximum Marks : 300

## **INSTRUCTIONS**

- (i) Answers must be written in English.
- (ii) All questions carry equal marks.
- (iii) The answer to each question or part thereof should begin on a fresh page.
- (iv) Your answer should be precise and coherent.
- (v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
- (vi) Candidates should attempt any **five** questions.
- (vii) If you encounter any typographical error, please read it as it appears in the text-book.
- (viii) Candidates are in their own interest advised to go through the General Instructions on the back side of the title page of the Answer Script for strict adherence.
- (ix) No continuation sheets shall be provided to any candidate under any circumstances.

300

- (x) Candidates shall put a cross (x) on blank pages of Answer Script.
- (xi) No blank page be left in between answer to various questions.
- (xii) No programmable Calculator is allowed.
- (xiii) No stencil (with different markings) is allowed.
- Describe the theories of motivation given by Maslow and Herzberg.
   Are these theories universally applicable? Discuss the achievement of self esteem and self actualization in Indian Industries.
- 2. What are different types of leadership? Is there any particular style that is most preferred or least prefferred? Discuss the type of leadership style that will suit the industries of developing countries the most.
- 3. Why do employees resist change? What are different types of pathological behavior shown by empoyees while resisting change? Suggest measures to minimize this resistance and achieve a cooperative environment in the industries.
- 4. What are different ego states ? How far Transaction Analysis will help managers in understanding interpersonal behavior ? Discuss.
- 5. Enumerate the features of Indian Economy and highlight some of the contemporary eonomic reforms initiated by the government.
- 6. What are different instruments of a fiscal policy? Also comment on the fiscal imbalance in India and enumerate the measures initiated for the fiscal consolidation.
- 7. Highlight the contribution of small scale sector for the Indian economy and enumerate some recent policy measures announced to make this sector more competitive and vibrant.

- 8. Describe the concept of National Income. How would you calculate National Income and how is it different from GNP and GDP? Discuss.
- 9. Solve the following Linear Programming problem using graphical technique:

$$Min Z = 3A + 5B$$

Subject to the following constraints:

$$3A + 2B \ge 36$$
  
 $3A + 5B \ge 45$   
 $A, B \ge 0.$ 

10. The following table shows the necessary information on the availability of supply to each warehouse, the requirement of each market and unit transportation cost (in Rs.) from each warehouse to each market.

	Market				
Warehouses	M1	M2	M3	M4	Supply
W1	7	4	6	5	22
W2	6	10	3	8	18
Demand	10	12	8	10	

- (a) Find Initial Basic Feasible Solution (IBFS) by North West Corner (NWC) or Least Cost Method (LC).
- (b) Find optimal transportation schedule and minimum total transportation cost.
- Explain steps involved in statistical testing of a hypothesis. Define
   Type I and II errors in Hypothesis Testing.