Name : .....

Roll No. : .....

Invigilator's Signature : .....

CS/M.Tech(CHE)/SEM-2/CHE-12/2013

2013
MANAGEMENT PRINCIPLES

Time Allotted : 3 Hours *Full Marks :* 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any *five* questions selecting at least *one* question from each module.

Module -I

1. Briefly discuss Contingency School and Quantitative School of management thought. 7 + 7

2. Explain Span Management. Explain the stages of Organization Life Cycle and criteria for measuring organizational effectiveness. 5 + 9

Module -II

3. What are the objectives of Production Control ? Define the term "Economic Order Quantity" and derive the expression for the standard model i.e.

$$EOQ = \sqrt{\frac{2SC_p}{C_u i}}$$

The annual demand of a certain item is 24000 units where Rs. 3·75 being the unit price. If cost of placing an order be Rs. 180/- and inventory carrying charges as a percentage of average inventory investment be 30% determine the economic order quantity. 5 + 6 + 3

4. Explain the characteristics of a good Incentive Scheme. Explain the strategies needed for effective Conflict Management ? 8 + 6

Module -III

5. What do you mean by Total Quality Management ? What are the seven tools of Quality Management ? Explain Quality Circle. 4 + 5 + 5

6. Explain SWOT Analysis. Explain the levels of Stress symptoms ? What do you mean by Technology Acquisition ? 5 + 5 + 4

Module -IV

7. What do you mean by the term Acceptance Sampling ? Explain Operating Characteristic Curve. Describe the features of Chain Sampling Plan. 3 + 6 + 5

8. What do you mean by Statistical Quality Control ? An automated machine produces 5 mm bolts at a high rate of speed. A quality control program has been started to control the number of defectives. The quality control inspector selects 50 bolts at a random and determines how many defectives are. The number of defectives for first 10 samples is as follows :

Sample Number	1	2	3	4	5	6	7	8	9	10
Sample size	50	50	50	50	50	50	50	50	50	50
Number of Defectives	3	5	0	4	1	2	6	5	7	7

Construct the control chart and comment whether the process is under control. 5 + 9