



Code: 13A03801

**R13/SS**

B.Tech IV Year II Semester (R13) Regular & Supplementary Examinations April 2018

**INDUSTRIAL ENGINEERING**

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What are the objectives of industrial engineering?
  - (b) List any five contributions of Elton Mayo to human relation management.
  - (c) What are objectives of plant layout?
  - (d) List factors affecting plant location.
  - (e) Define method study.
  - (f) Define time study.
  - (g) Write a note on inventory model.
  - (h) Explain discrete variable.
  - (i) What is TQM?
  - (j) What is control chart for variables?

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 Explain X and Y theory and Herzberg's motivation Hygiene theory referred under motivation theories in management.

OR

- 3 Discuss about:
- (a) Maslow's theory of hierarchy of human needs.
  - (b) Incentives as motivators.

**UNIT – II**

- 4 What are the different types of plant layout? What are their advantages and disadvantages?

OR

- 5 Discuss the factors influencing plant locations.

**UNIT – III**

- 6 What are objectives, discuss factors considered while selecting job for method study?

OR

- 7 Explain various steps involved in and discuss time equipments.

**UNIT – IV**

- 8 Explain single period probabilistic models.

OR

- 9 (a) What is inventory control system?  
(b) Explain: (i) Minimum stock. (ii) Ordering stock level. (iii) The hastening stock level. (iv) The maximum stock level.

**UNIT – V**

- 10 Explain process out of control and process in control.

OR

- 11 Explain elements of TQM.

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