Code No: 158BF

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech IV Year II Semester Examinations, September - 2022
INDUSTRIAL MANAGEMENT
(Mechanical Engineering)

Time: 3 Hours **Max.Marks:75**

Answer any five questions
All questions carry equal marks
- - -

1.a) What are the appreciations of Fayol's functional school of Management theory?
b) Examine the scientific nature in Taylor's scientific management. [8+7]

2.a) Make a comparison between theories of Herzberg and Maslow. Which of these theories do you prefer in Indian context? Give reasons.
b) Brief on social responsibilities of management. [10+5]

3.a) What is a network organization structure? Give the areas where it is best suitable for adopting. Give its strengths and weaknesses.
b) Explain how cellular organization differs from matrix organization. [8+7]

4.a) What is delegation? Explain the process of delegation.
b) Differentiate the inverted pyramid structure, lean and flat organization structure. [7+8]

5.a) What facilities would influence (both favourable and/or unfavourable) the location decisions in the case of the following:
i) City/urban sites,
ii) Sub-urban sites, and
iii) Rural/countryside sites.
b) Examine the types of values and phases of value analysis. [8+7]

6.a) Classify different types of plant layout. Briefly explain them with a neat sketch.
b) Explain the steps involved in the construction of FAST Diagram. [8+7]

7.a) How can work study be used for arriving at manufacturing budget & production plan?
b) A manufacturer purchases small capacitors in terms of cartons. Each carton may contain thousands of capacitors. 400 capacitors are chosen at random from each carton and inspected. The percentages of defective capacitors in each carton are found to be 0, 20, 5, 8, 0, 0, 3, 0, 2, and 12. Compute the appropriate control limits and draw the relevant control chart. [7+8]

8. A project is composed of seven activities whose time estimates are as follows:

Activity		1-2	1-3	1-4	2-5	3-5	4-6	5-6
Time in weeks	T_o	2	2	4	1	3	2	5
	T_m	2	5	6	1	6	6	8
	T_p	8	8	20	1	15	10	17

a) Draw a PERT network diagram. b) Calculate slack of each event.
c) Identify the critical path. d) Find the duration of the project.
e) Find the variance and standard deviation of the project length. [15]

--ooOoo--