Code No: 156DV **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, August/September - 2024
INDUSTRIAL MANAGEMENT
(Common to CE, EEE, ME, ECE, MIE)

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

Note: i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

1.a)	What is Management?	[2]
b)	Illustrate the Leadership Styles.	[3]
c)	What is Decentralization?	[2]
d)	Describe the types of Organization structures.	[3]
e)	What is production system?	[2]
f)	What are the objectives Operations Management?	[3]
g)	Brief on Work Sampling.	[2]
h)	Describe the purpose of Work Measurement.	[3]
i)	What is point method of Job Evaluation?	[2]
j)	Illustrate the Project Crashing.	[3]

PART – B

(50 Marks)

2.a)	Explain the Taylor's Scientific Management Theory.	
b)	What are the Fayol's Principles of Management?	[5+5]
	OR	
3.a)	Explain the Herzberg's Two-Factor Theory of Motivation.	
b)	What is the importance of Systems Approach to Management?	[5+5]
4.a)	What is Departmentalization? Explain the methods of departmentalization.	
b)	What are the merits and demerits of functional organization?	[5+5]
	OR	
5.a)	What is Line organization? Explain its merits and demerits.	
b)	What is team structure of organization? Explain its advantages.	[5+5]
6.a)	What is Product Design? Explain the Product Design Process.	
b)	What is Mass Production? Explain its advantages and suitability for Indian firms.	[5+5]
	OR	
7.a)	Discuss the various plant location factors.	
b)	What is line balancing value analysis? Explain.	[5+5]

8.a) What is work study? Explain its objectives.

b) What are the double sampling plans? Explain its importance. [5+5]

OR

9.a) A daily sample of 30 items was taken over a period of 14 days in order to establish control limits. If 21 defectives were found, what should be the upper and lower control limits of proportion of defectives?

b) Each of 20 lots of rubber belts contains 200 rubber belts. Numbers of defective rubber belts in those lots are as follows:
410,420,324,332,292,310,282,300,320,296,392,432,294,324,220,400,258,226,460,280.
Calculate control limits for fraction defective chart and give your conclusion. [5+5]

10.a) Discuss the job evaluation and explain the methods of job evaluation.

b) Brief on network analysis tools. [6+4]

OR

11.a) A small project consisting of eight activities has the following characteristics:

Time – Estimates (in weeks)

Activity	*Preceding activity*	*Most optimistic time (a)*	*Most likely time (m)*	*Most Pessimestic time (b)*
A	None	2	4	12
B	None	10	12	26
C	A	8	9	10
D	A	10	15	20
E	A	7	7.5	11
F	B,C	9	9	9
G	D	3	3.5	7
H	E, F, G	5	5	5

Draw the PERT network for the project.

b) A small project consisting of ten activities has the following characteristics:

Activity	*Preceding Activity*	*Time Estimate weeks*		
		Optimistic	*Most likely*	*Pessimestic*
A	–	4	5	12
B	–	1	1.5	5
C	A	2	3	4
D	A	3	4	11
E	A	2	3	4
F	C	1.5	2	2.5
G	D	1.5	3	4.5
H	B,E	2.5	3.5	7.5
I	H	1.5	2	2.5
J	F, G, I	1	2	3

Determine the Critical Path. [5+5]

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