

Code No: 136FF

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2020

INDUSTRIAL MANAGEMENT

(Common to CE, EEE, ME, ECE, MMT, MIE)

Time: 2 hours

Max. Marks: 75

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

1. Explain Fayol's 14 principles of management. [15]
2. Write a short note on matrix, functional and virtual organization. [15]
3. Explain the objectives of operations management. [15]
4. What is work study? Explain steps in work study. [15]
5. Draw the network diagram from the following table and find the critical path. [15]

Activity	Predecessor Activity	Optimistic Time estimate (to days)	Most likely time estimate (tm days)	Pessimistic time estimate (tp days)
A	-	2	4	6
B	A	3	6	9
C	A	8	10	12
D	B	9	12	15
E	C	8	9	10
F	D,E	16	21	26
G	D,E	19	22	25
H	F	2	5	8
I	G	1	3	5

6. The following data gives the readings for 8 samples of size 6 each in the production of a certain product. Find the control limits using mean chart.

Sample	1	2	3	4	5	6
Mean	300	342	351	319	326	333
Range	25	37	20	28	30	22

Given for $n=6$, $A_2=0.483$.

7. What is plant layout? Explain the types of plant layout. [15]
8. Write short notes on:
a) Statistical Quality control
b) Line Balancing. [8+7]