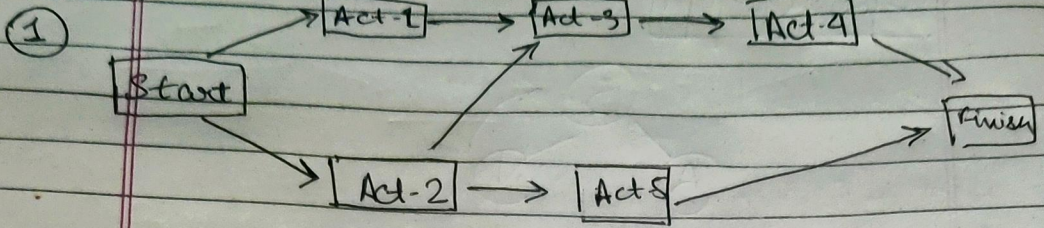


1905635 Assignment

Date _____

Page _____



Path 1 = $A2 \rightarrow A3 \rightarrow A4 = 14$

Path 2 = $A1 \rightarrow A3 \rightarrow A4 = 12$

Path 3 = $A2 \rightarrow A5 = 9$

Act 1 $\rightarrow ES=1 \quad EF=3 \quad LS=3 \quad LF=5$

Act 2 $\rightarrow ES=1 \quad EF=5 \quad LS=1 \quad LF=5$

Act 3 $\rightarrow ES=6 \quad EF=12 \quad LS=6 \quad LF=12$

Act 4 $\rightarrow ES=13 \quad EF=14 \quad LS=13 \quad LF=14$

Act 5 $\rightarrow ES=6 \quad EF=9 \quad LS=11 \quad LF=14$

Critical Path = Path 1 = 14

$EF = ES + D - 1$

$ES = EF (\text{prev}) + 1$

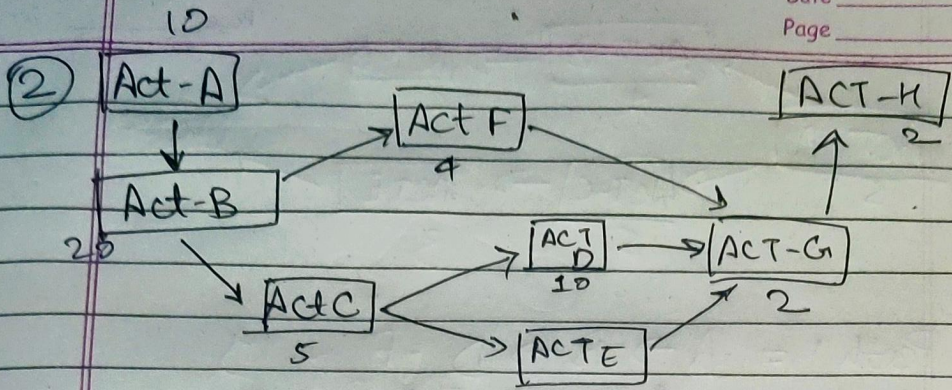
$LF = LS (\text{next}) - 1$

$LS = LF - D + 1$

Float \rightarrow Path 2 = $14 - 12 = 2$

Path 3 = $14 - 9 = 5$

Path 1 = $14 - 14 = 0$ (critical Path)



$$\text{Path 1} = A \rightarrow B \rightarrow C \rightarrow E \rightarrow G \rightarrow H = 41$$

$$\text{Path 2} = A \rightarrow B \rightarrow F \rightarrow G \rightarrow H = 38$$

$$\text{Path 3} = A \rightarrow B \rightarrow C \rightarrow D \rightarrow G \rightarrow H = 49$$

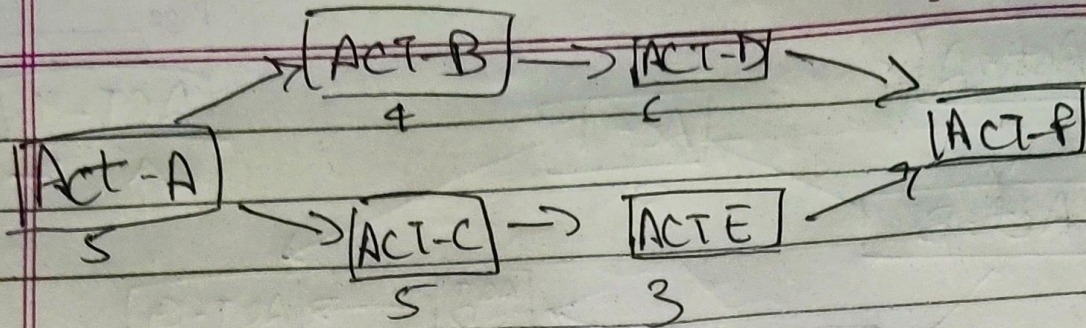
→ Critical Path = 49

A →	ES = 1	EF = 10	LS = 1	LF = 10
B →	ES = 11	EF = 30	LS = 11	LF = 30
C →	ES = 31	EF = 35	LS = 31	LF = 35
D →	ES = 36	EF = 45	LS = 36	LF = 45
E →	ES = 36	EF = 37	LS = 44	LF = 45
F →	ES = 31	EF = 34	LS = 42	LF = 45
G →	ES = 46	EF = 47	LS = 46	LF = 47
H →	ES = 48	EF = 49	LS = 48	LF = 49

Float → Path 1 = $49 - 41 = 8$

Path 2 = $49 - 38 = 11$

→ Path 3 = $49 - 49 = 0$ (critical path)



$$\text{Path 1} = A \rightarrow B \rightarrow D \rightarrow F = 19$$

$$\text{Path 2} = A \rightarrow C \rightarrow E \rightarrow F = 17$$

$$\text{Critical path (Path 1)} = 19$$

$$A \rightarrow ES=1 \quad EF=5 \quad LS=1 \quad LF=5$$

$$B \rightarrow ES=6 \quad EF=9 \quad LS=6 \quad LF=9$$

$$C \rightarrow ES=6 \quad EF=10 \quad LS=8 \quad LF=12$$

$$D \rightarrow ES=10 \quad EF=15 \quad LS=10 \quad LF=15$$

$$E \rightarrow ES=11 \quad EF=13 \quad LS=13 \quad LF=15$$

$$F \rightarrow ES=16 \quad EF=19 \quad LS=16 \quad LF=19$$

$$\text{Float} \rightarrow \text{Path 1} = 19 - 19 = 0 \quad (\text{critical path})$$

$$\text{Path 2} = 19 - 17 = 2$$