

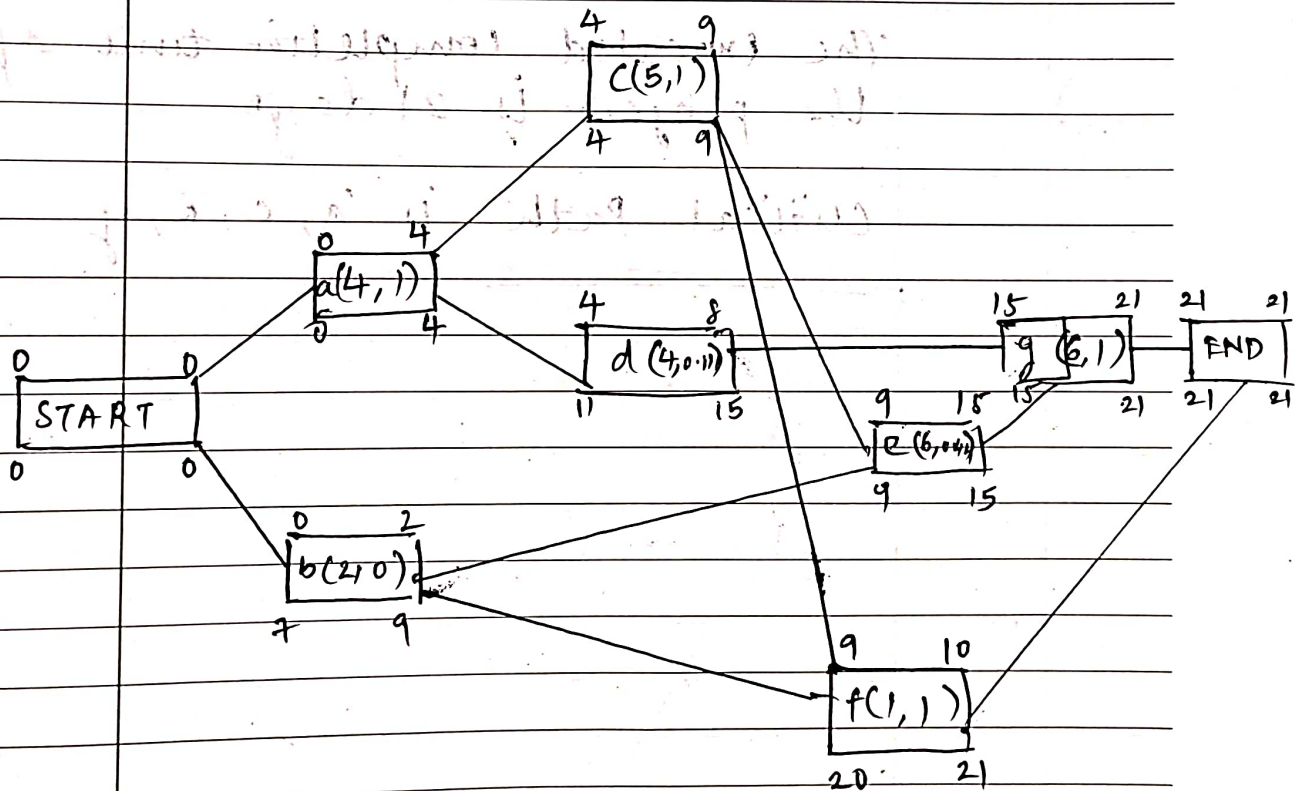
for  
Marks

No.

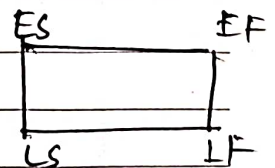
Step 2:

$$\text{Expected Time} = \frac{a + 4m + b}{6} \quad \text{Var}(\sigma^2) = \left(\frac{b-a}{6}\right)^2$$

Activity	Expected Time	Variance ( $\sigma^2$ )	SD. ( $\sqrt{\text{Variance}}$ )
a	4	1	1
b	2	0	0
c	5	1	1
d	4	0.111	0.33
e	6	0.444	0.666
f	1	1	1
g	6	1	1

Step 3: AON Diagram

Critical path = a, c, e, g

Step 4:-

Finding slack.

$$\text{Slack} = \text{LS} - \text{ES}$$

Activity	Expected time		slack
	Early start (ES)	Late start (LS)	
a	0	0	0
b	0	7	7
c	4	4	0
d	4	11	7
e	9	9	0
f	9	20	11
g	15	15	0

The expected completion time of the project is 21 days

Critical path is 'a, c, e, g'