

Assignment - HR PROJECT MANAGEMENT

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- We have mapped all task from A to G sequentially.

Task	t_o	t_m	t_p	dependency	t_e	σ^2
A	2	3	4	-	3	0.111
B	3	5	7	A	5	0.444
C	0.5	2	3.5	A	2	0.35
D	2	3	4	B, C	3	0.111
E	4	7	10	C	7	1
F	1	4	7	D, E	4	1
G	0.5	2.5	4.5	F	2.5	0.444

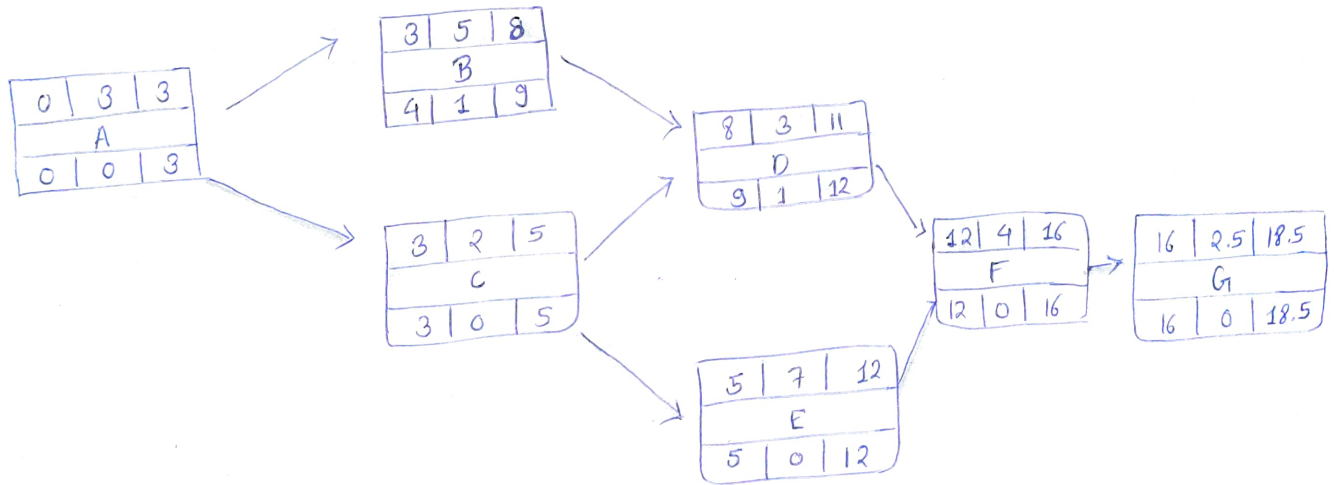
t_e is calculated using

$$t_e = \frac{t_o + 4t_m + t_p}{6} \longrightarrow \textcircled{1}$$

and σ^2 using

$$\sigma^2 = \left(\frac{t_p - t_o}{6} \right)^2 \longrightarrow \textcircled{2}$$

Network diagram



From network diagram

we get critical path is A-C-E-F-G

$$\mu = 3 + 2 + 7 + 4 + 2.5 = 18.5$$

$$\sigma^2 = 0.1111 + 0.25 + 1 + 1 + 0.4444 \\ = 2.8055$$

$$\sigma = 1.6748 \\ \approx 1.675$$

Finding Probability and p values using Z-distribution

X	μ	σ	$Z = \frac{X - \mu}{\sigma}$	Probability
18	18.5	1.675	-0.29851	0.38591
19	18.5	1.675	0.298507	0.6141
20	18.5	1.675	0.895522	0.8133
21	18.5	1.675	1.492537	0.9319

Result :-

- 38.59 % that intimation of interviews be sent to the candidates in 18 days.

61.41 for 19 days.

81.33% for 20 days.

93.19% for 21 days.