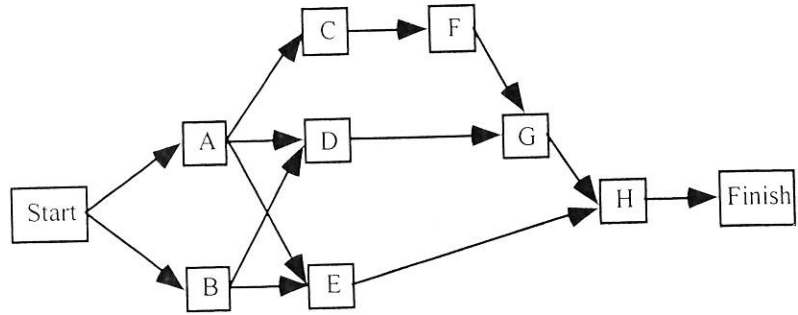
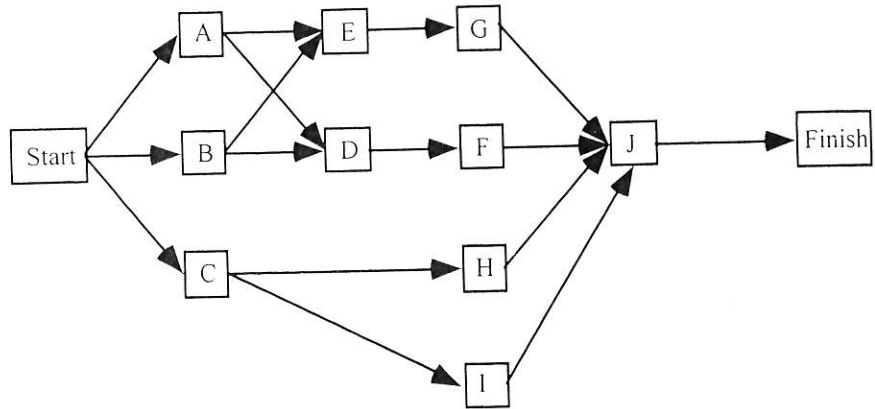


Solutions:

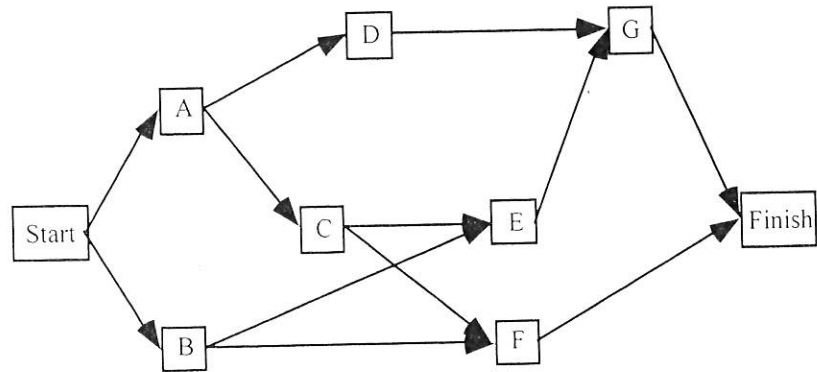
1.



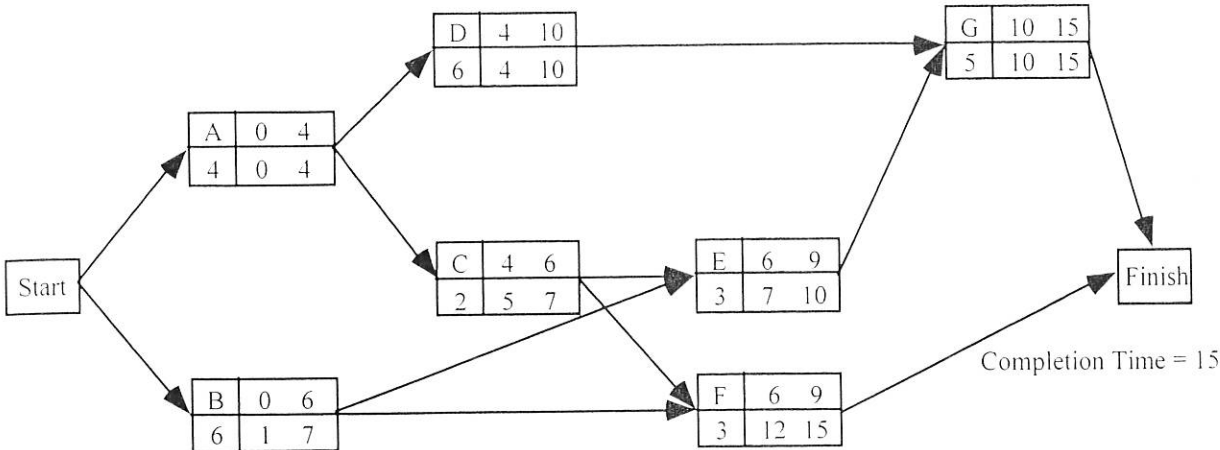
2.



3.



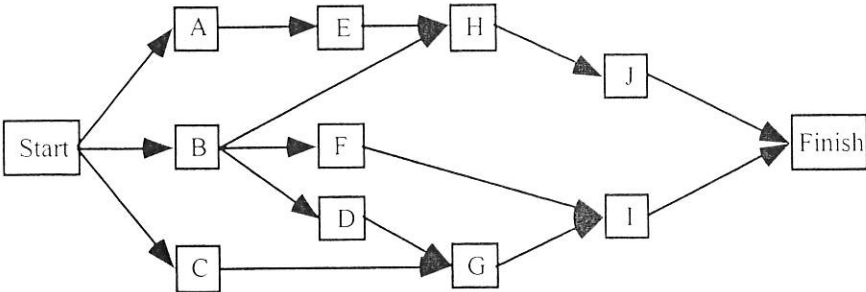
4. a.



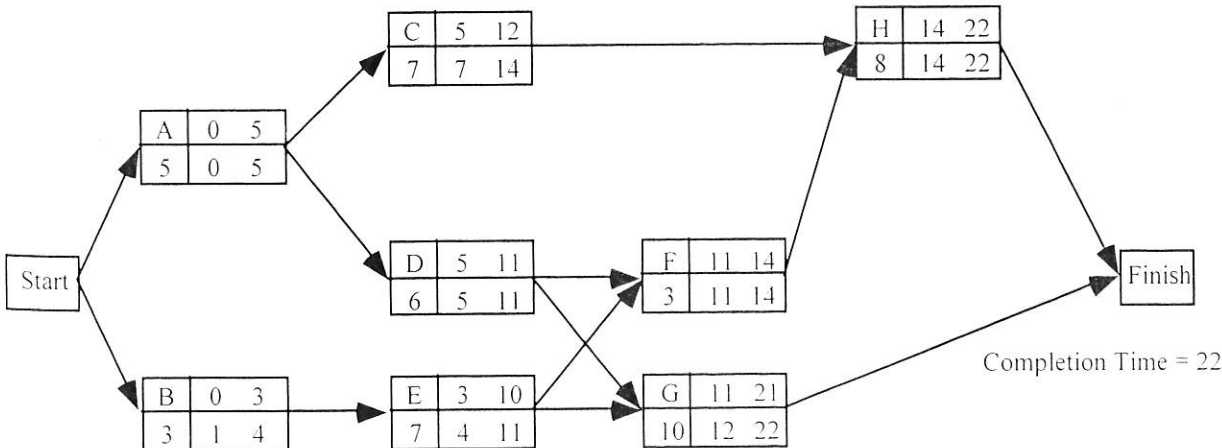
Critical Path: A-D-G

b. The critical path activities require 15 months to complete. Thus the project should be completed in 1-1/2 years.

5.



6.



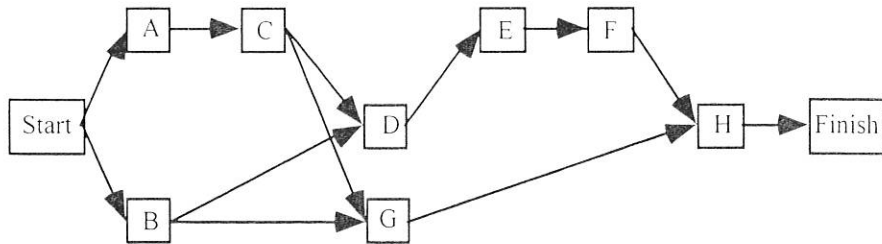
a. Critical path: A-D-F-H

b. 22 weeks

- c. No, it is a critical activity
- d. Yes, 2 weeks
- e. Schedule for activity E:

Earliest Start	3
Latest Start	4
Earliest Finish	10
Latest Finish	11

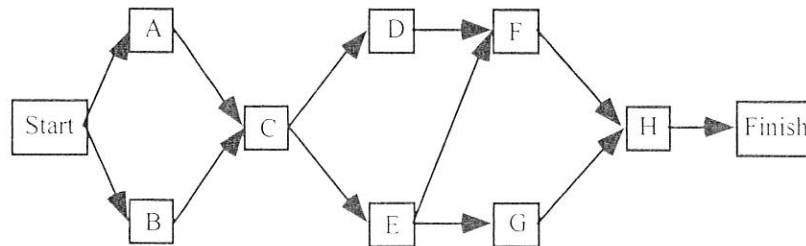
7. a.



- b. B-D-E-F-H
- c. 21 weeks

Activity	Earliest Start	Latest Start	Earliest Finish	Latest Finish	Slack	Critical Activity
A	0	1	3	4	1	
B	0	0	6	6	0	Yes
C	3	4	5	6	1	
D	6	6	11	11	0	Yes
E	11	11	15	15	0	Yes
F	15	15	18	18	0	Yes
G	6	9	15	18	3	
H	18	18	21	21	0	Yes

8. a.



- b. B-C-E-F-H

c.

Activity	Earliest Start	Latest Start	Earliest Finish	Latest Finish	Slack	Critical Activity
A	0	2	6	8	2	
B	0	0	8	8	0	Yes
C	8	8	20	20	0	Yes
D	20	22	24	26	2	
E	20	20	26	26	0	Yes
F	26	26	41	41	0	Yes
G	26	29	38	41	3	
H	41	41	49	49	0	Yes

d. Yes. Project Completion Time 49 weeks.

9. a. A-C-E-H-I

b.

Activity	Earliest Start	Latest Start	Earliest Finish	Latest Finish	Slack	Critical Activity
A	0	0	9	9	0	Yes
B	0	9	6	15	9	
C	9	9	15	15	0	Yes
D	9	12	12	15	3	
E	15	15	15	15	0	Yes
F	15	16	18	19	1	
G	18	19	20	21	1	
H	15	15	21	21	0	Yes
I	21	21	24	24	0	Yes

c. Project completion 24 weeks. The park can open within the 6 months (26 weeks) after the project is

10. a.

Activity	Optimistic	Most Probable	Pessimistic	Expected Times	Variance
A	4	5	6	5.00	0.11
B	8	9	10	9.00	0.11
C	7	7.5	11	8.00	0.44
D	6	9	10	8.83	0.25
E	6	7	9	7.17	0.25
F	5	6	7	6.00	0.11

b. Critical activities: B-D-F

Expected project completion time: $9.00 + 8.83 + 6.00 = 23.83$.

Variance of projection completion time: $0.11 + 0.25 + 0.11 = 0.47$