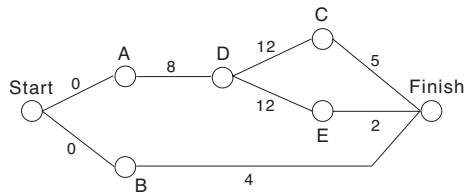


Unit 2 *Critical Path Analysis*

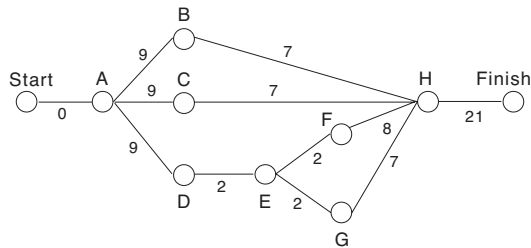
Text Answers

2.1 Activity Networks

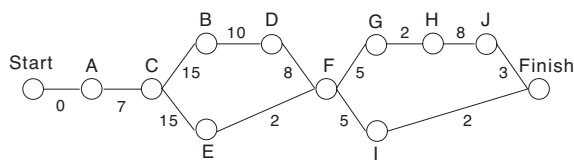
1.



2.



3.

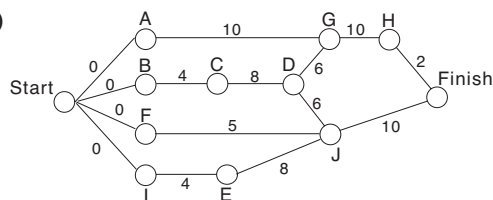


2.2 Critical Path

1. (a) Start - A - B - C - F - I - Finish
 (b) Start - A - B - D - E - G - Finish
 (c) Start - A - C - E - G - Finish

3. (a) (i) 13 (ii) start - C - F - Finish
 (b) 2

4. (a)



- (b) Start - B - C - D - G - H - Finish

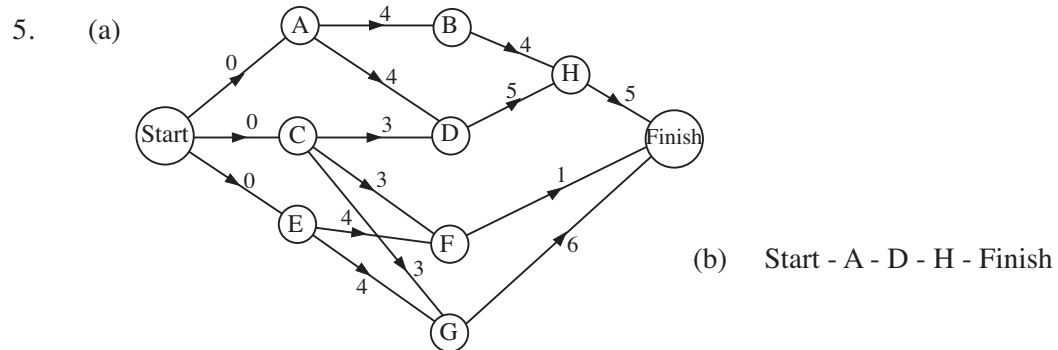
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Text Answers

2.2

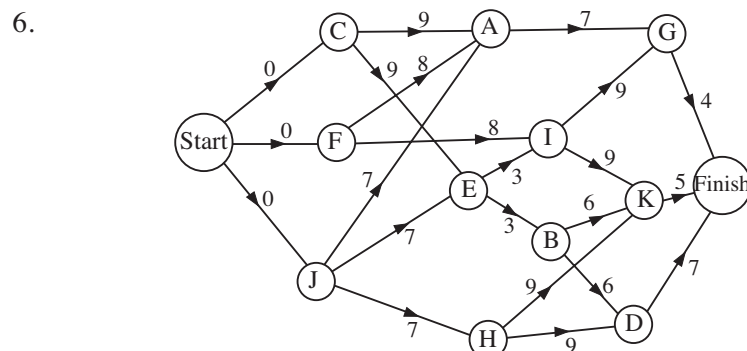
4. (c)

Activity	Latest Starting Time
A	8
B	0
C	4
D	12
E	12
F	15
G	18
H	28
I	8
J	20



(c)

Activity	Starting Times	
	Earliest	Latest
A	0	0
B	4	5
C	0	1
D	4	4
E	0	4
F	4	13
G	4	8
H	9	9



Unit 2 *Critical Path Analysis*

Text Answers

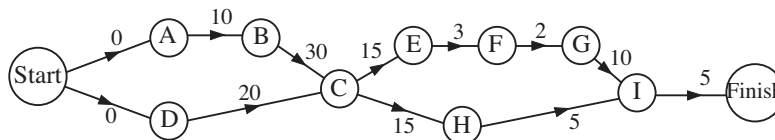
2.2

6. (b) and (c)

Starting Times			
Activity	Earliest	Latest	Float
A	9	15	6
B	12	13	1
C	0	0	0 ←
D	18	19	1
E	9	9	0 ←
F	0	4	4
G	21	22	1
H	7	10	3
I	12	12	0 ←
J	0	2	2
K	21	21	0 ←

Critical path: Start - C - E - I - K - Finish

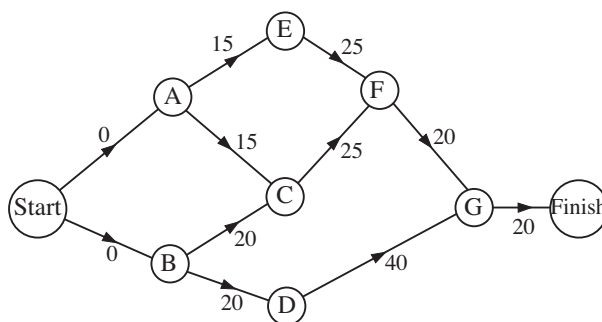
7. (a)



- (b) 75 minutes

- (c) Start - A - B - C - E - F - G - I - Finish

8. (a)



Critical path is Start - B - C - F - G - Finish

Minimum completion time is 85 mins, therefore news item can be ready before 6.00 pm that day if work commences by 4.35 pm.

- (b) Activity G (editing) requires 20 minutes, therefore activities A - F must be completed in the 70 minutes between 4.30 pm and 5.40 pm. However, activities A - F require 145 minutes of work, so cannot be completed by two reporters in the time period available.

Unit 2 *Critical Path Analysis*

Text Answers

2.3 Scheduling

1.

	0	4	9	15	16
1	A	D	G	F	
2	C	E	B	H	
	0	3	7	11	16

Optimum solution is produced.

2.

	0	9	11	13	21	28	49
1	A	D	E	F	C		
2		B	G			H	

Similar solution for second method.

These are optimal solutions for 2 workers.

3. This method gives a completion time of 25 using 4 workers.
It is not optimal.