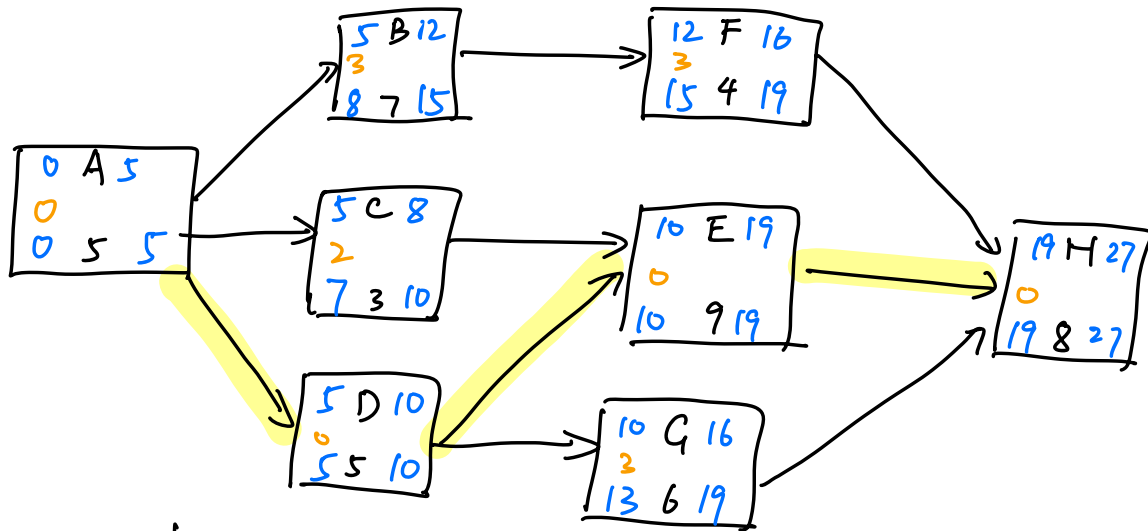10.3.3.1 Fully crashed project activity network

Q: (a) PAN

(b) forward, backward, float, critical path

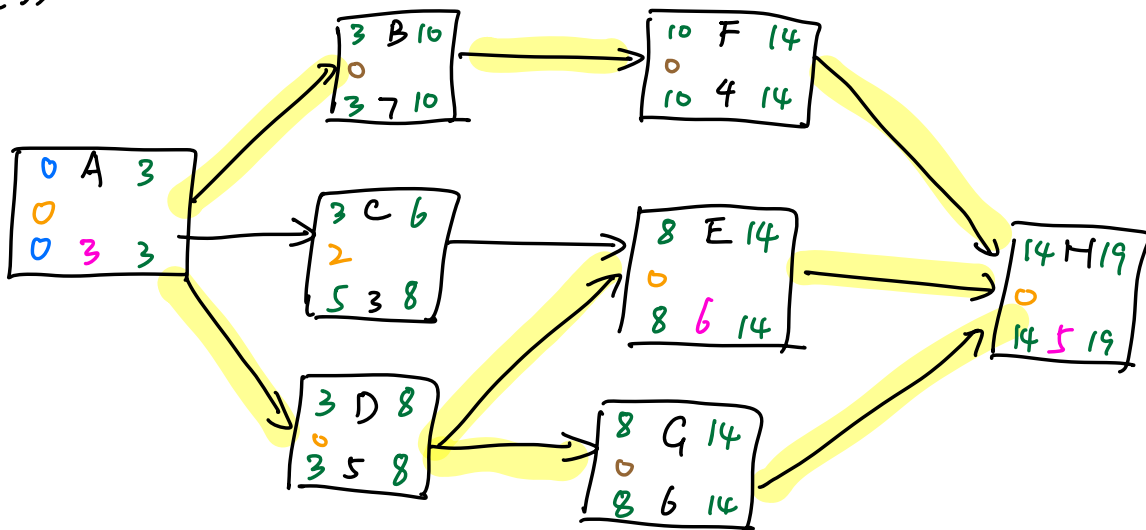(c) crash   A E H

Solution: (a)

Boxes (network diagram):

- A: 0 A 5 / 0 / 0 5 5
- B: 5 B 12 / 3 / 8 7 15
- C: 5 C 8 / 2 / 7 3 10
- D: 5 D 10 / 0 / 5 5 10
- E: 10 E 19 / 0 / 10 9 19
- F: 12 F 16 / 3 / 15 4 19
- G: 10 G 16 / 3 / 13 6 19
- H: 19 H 27 / 0 / 19 8 27

Critical Path : A – D – E – H

(b)

Boxes (network diagram):

- A: 0 A 3 / 0 / 0 3 3
- B: 3 B 10 / 0 / 3 7 10
- C: 3 C 6 / 2 / 5 3 8
- D: 3 D 8 / 0 / 3 5 8
- E: 8 E 14 / 0 / 8 6 14
- F: 10 F 14 / 0 / 10 4 14
- G: 8 G 14 / 0 / 8 6 14
- H: 14 H 19 / 0 / 14 5 19

Critical Paths.
   A – B – F – H
   A – D – E – H
   A – D – G – H