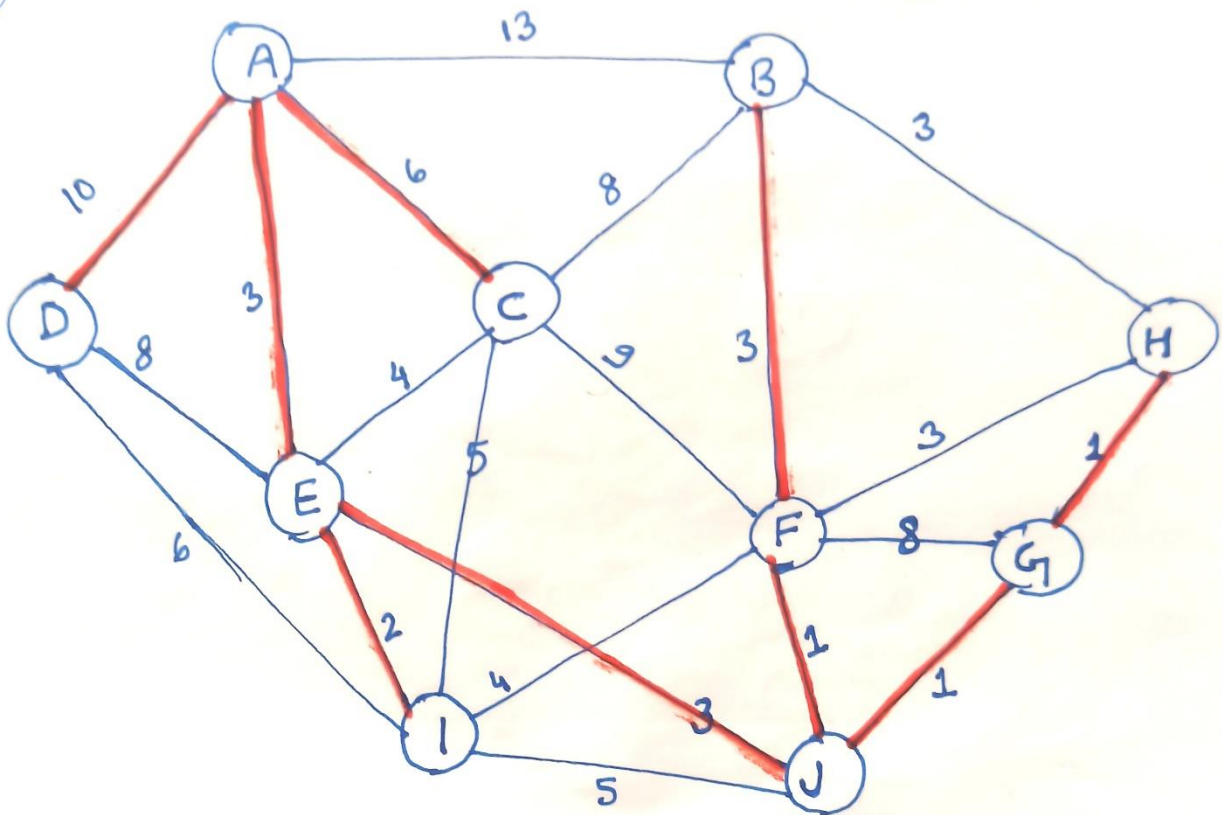




Devoir 10 (2.5% - 10 points)
CSI2110/CSI2510 (Automne 2022)

Question 1.

a



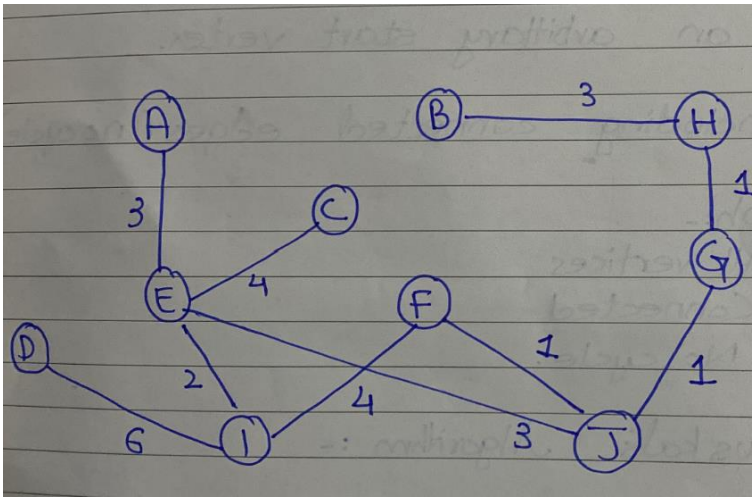
b)

Vertices (in order)	Edges (in order)
A E I C J F G H B D	(A,E) (E,I) (A,C) (E,J) (J,F) (J,G) (G,H) (F,B) (A,D)

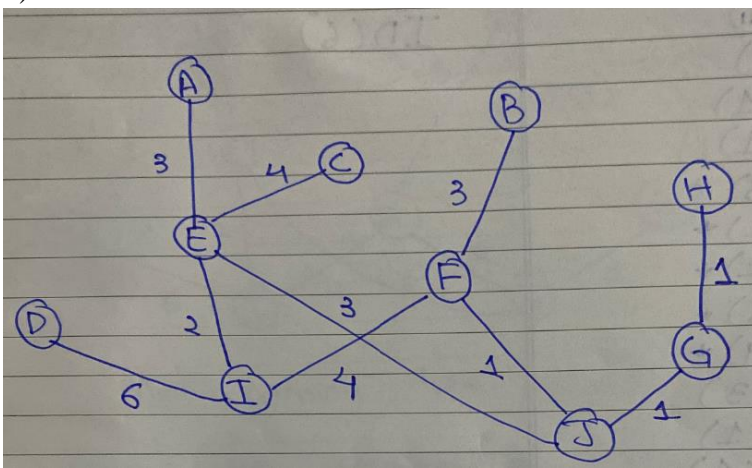
Vertex	Distance from A
A	0
B	13,10
C	6
D	10
E	3
F	9,7
G	7
H	10,8
I	5
J	6

Question 2

a)



b)



c)

Chosen edges by the Prim-Jarnik's algorithm starting at A	Chosen edges by Kruskal's algorithm starting at a
AE(3) BH(3) CE(4) DI(6) EA(3) EC(4) EI(2) EJ(3) FI(4) FJ(1) GJ(1) GH(1) HB(3) HG(1) IE(2) ID(6) IA(4) JE(3) JF(1) JG(1)	FJ(1) JG(1) GH(1) EI(2) AE(3) BF(3) EJ(3) EC(4) IF(4) ID(6)

d)

Total weight of MST in Prim's algorithm = 28

Total weight of MST in Kruskal's algorithm = 28

Total weight = 28

e)

