

18L-1224

Q No. 1

TS Num (a)

if (a) = 0

enqueue (a)

$i = 1$

while (!empty queue)
A B C D E = dequeue

num (a) = i++

for ()
TS Num (B) = 0
enqueue B

6.5/10

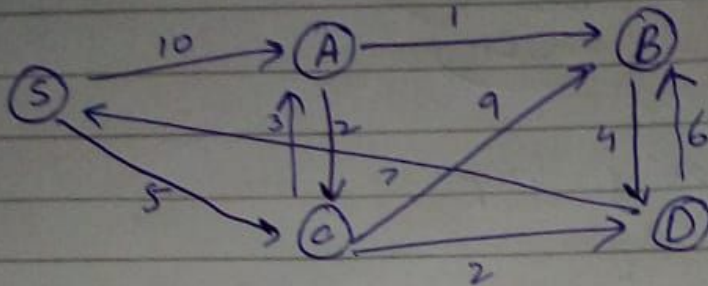
queue is

1	2	3	4	5
A	B	C	E	D

0.5 Marks

Q No. 2

a)

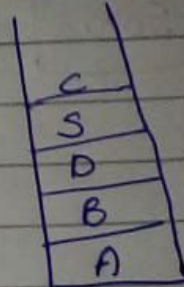


2 Marks

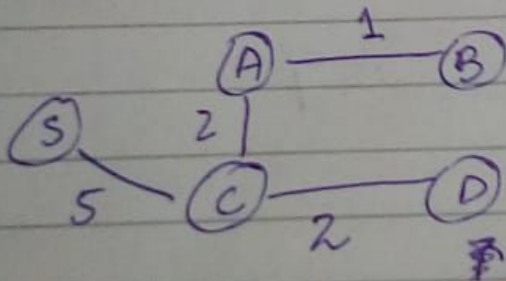
BFS : ABCDS
DFS : A B D S C

Queue: A | B | C | D | S

Stack:



b). By using Prim's



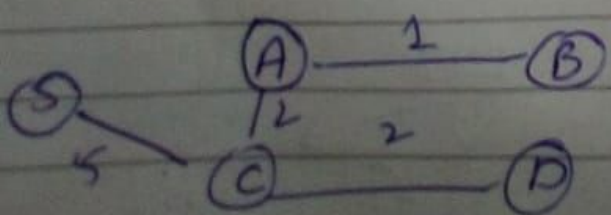
MST

Cost of MST is = 10

2 Marks

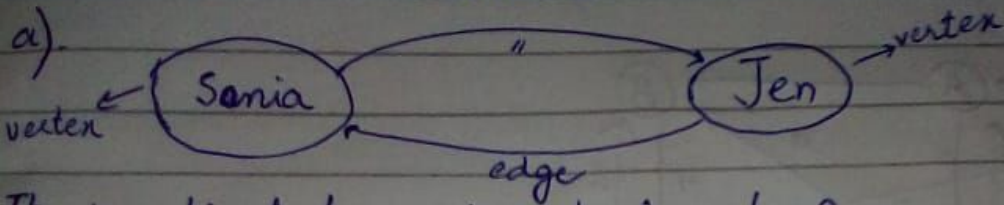
AB 1
AC 2
BC 2
SC 5
DS 7
CB 9
AS 10

By using Kruskal's algo

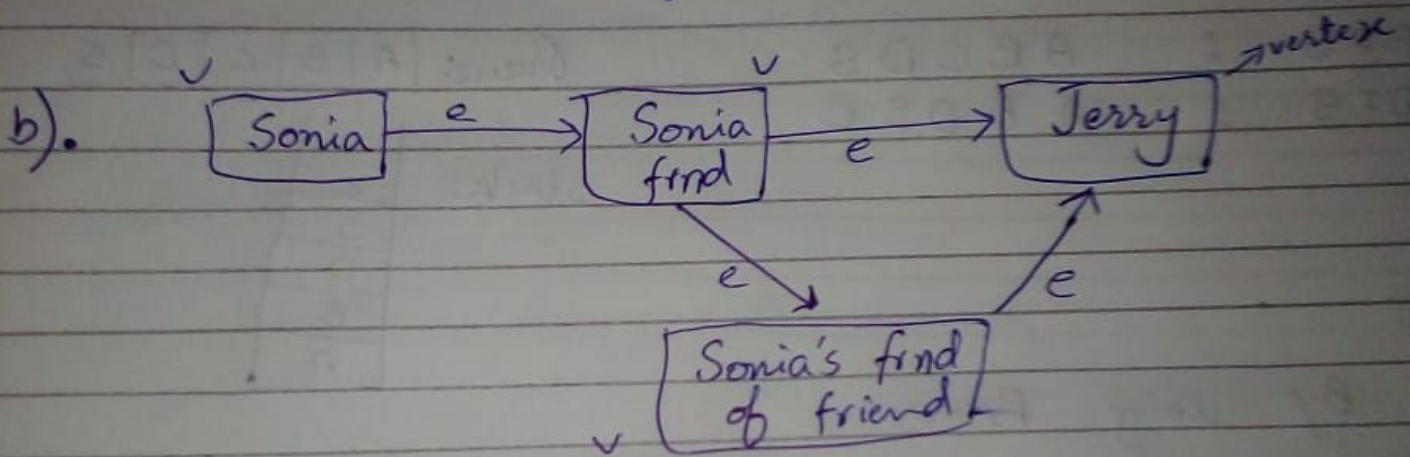


Cost = 10

QNO. 3

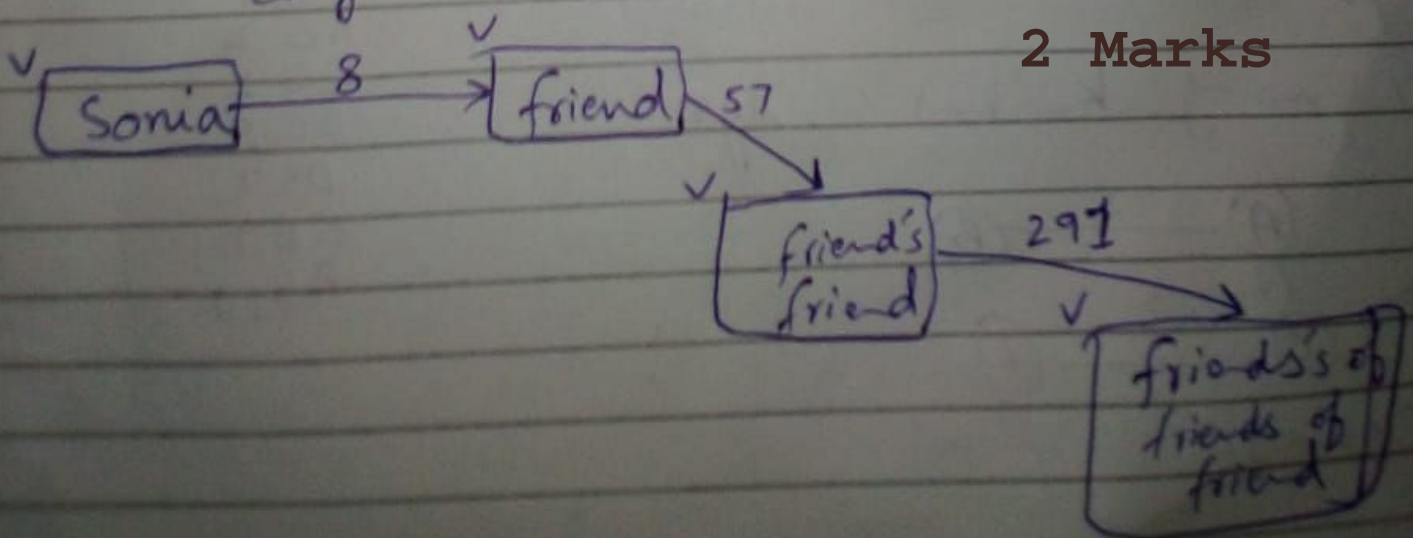


It is directed graph having loop
 vertex = 2 & edges = 2



Above is directed graph having loop

c). vertices = 355
 edges = 356



2 Marks