

Quiz#03

Question#1

After the execution of algorithm the TS Num's will be

1	2	3	4	5
A	B	C	E	D

Zero

All the vertices are pushed in TS Num's so that at least there is one edge of each vertex. It is different from the topological sort algorithm because a queue is used instead of stack.

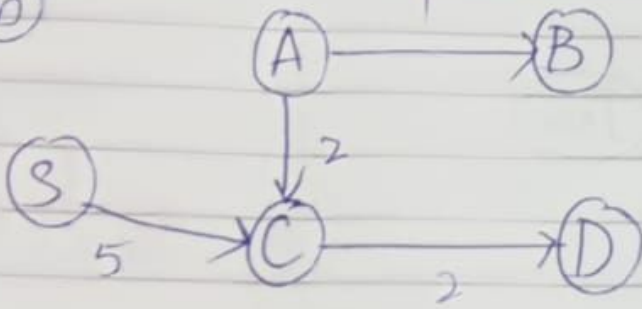
Question#2

(i) Breadth first Search: $A \rightarrow B \rightarrow C \rightarrow D \rightarrow S$

(ii) Depth first Search: $A \rightarrow B \rightarrow D \rightarrow S \rightarrow C$

2 Marks

(b)



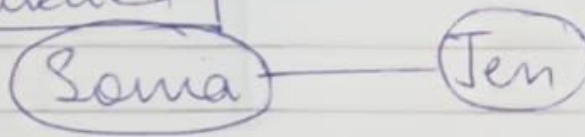
2 Marks

$$\begin{aligned} \text{MST Total weight} &= 1 + 5 + 2 + 2 \\ &= 10. \end{aligned}$$

#3

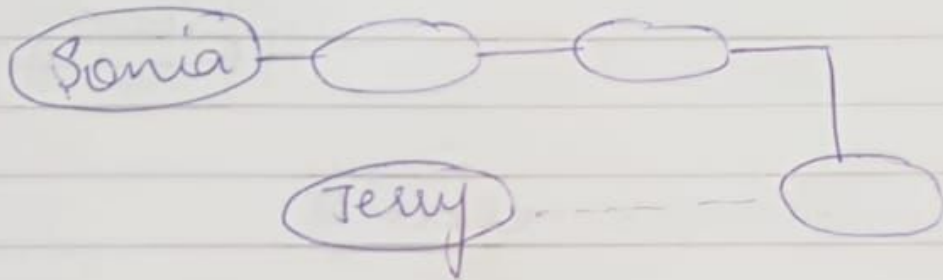
Undirected

(a)



0.5 Marks

(b)



(c)

