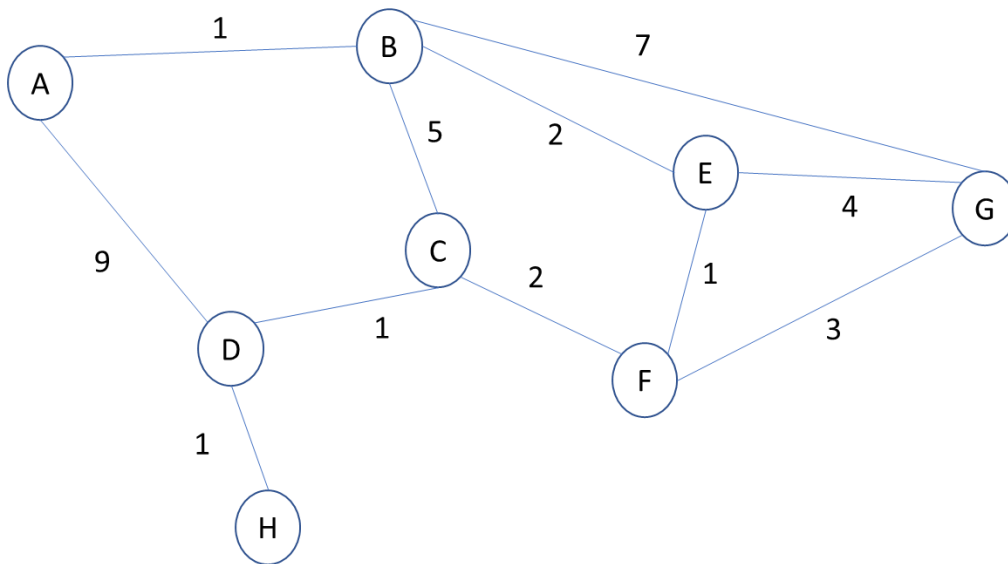In this part you must solve the questions on **a paper** and then **scan** the solution and **send it back as a file** (handwriting and drawing).
Consider the figure below.

Part3-Question1:

1- **Using the following table to simulate Dijkestra's Algorithm for node A.** Then find the minimum spanning tree for the following graph. You can add rows and columns as needed.

Note:
- D (v): current value of cost of path from source to destination.
- P (v): predecessor node along path from source to destination.
- N': set of nodes whose least cost path definitively known.

Step	N'	D(B), P(B)	D(C), P(C)	D(D), P(D)	....	...
0 (Initialization)	A					
1						
2						
.						
.						
.						

2- **Draw the minimum spanning tree (freehand drawing)**

Part3-Question2: Consider the figure below.

1- Assign IP addresses to all interfaces. Provide also the Subnet mask. Use different subnets wherever it is required. You are free to chose any IP range you want, but it should be correct.
2- Assign MAC addresses to all adapters.

Assume that the IP addresses are given statically and assume that PC3 knows the IP address of the DNS server.

3- Now suppose PC3 Sends an ARP query to get the MAC address of the DNS server, which elements (hosts or interfaces) will receive this packet?

4- Now suppose PC3 Sends a DNS query to the DNS server, which elements (hosts or interfaces) will receive this packet?