

**Time Duration: 25 mins (performing) + 15(Submission)**

**Question:** Let's assume you are working in an organization as junior Network Administrator, Network Administrator gave you an unchangeable network (Consider the topology illustrated below) assigns you a task for routing protocol. With below mentioned instructions.

- A very simple and small network, select & design such routing protocol which is suitable.
- Company wants to keep small routing table and can't afford extra load of messages.
- Company wants cost and time efficient routing protocol. E.g. configuration and maintenance should be easy.
- Use class C IP address 2<sup>nd</sup> and 3<sup>rd</sup> octet should be your roll number, and as you need multiple networks, for that you can add +1 in 3<sup>rd</sup> octet.

Let's suppose if your roll number is 17K-1234; 1<sup>st</sup> network will be 192.12.34.0, 2<sup>nd</sup> network will be 192.12.35.0, and 3<sup>rd</sup> network will be 192.12.36.0 and so on.

- Change display name and hostname (both) of routers with your ID. Such as R1-17k1234.

**What to submit?**

1. Justify your answer why you chose this protocol? Not more than 3 lines.
2. Show IP address on PCs and router interfaces.
3. Show PDU/ping status before routing protocol (From 1 PC to another).
4. Show PDU/ping status after routing protocol (From 1 PC to another).
5. Show routing table
6. Show PDU successful status

