Name: **Roll No:**

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1. Which technology is used to establish computer network over telephone line?
   Ans: DSL/ADSL

2. What is Access Network?
   Ans: the network that physically connects an end system to the first router / edge router.

3. What are the two mostly used architectures for FTTH based Internet access?
   Ans: Two competing optical-distribution network architectures that perform this splitting: active optical networks (AONs) and passive optical networks (PONs).

4. Which layers in network protocol stack performs the main roles in circuit switching and packet switching?
   Ans: For circuit switching: PHY, For packet switching: NET.

5. A physical object becomes smart object in IoT if it has few mandatory components. Which are they?
   Ans: sensors/actuators, computation unit , memory unit, power source, and network connectivity

6. What is the primary role of adaptation layer in Open IoT protocol stack?
   Ans: Need to perform packet/frame size optimization due to constrained node and networks.

7. What is the primary role of IoT Gateway?
   Ans: It serves as the connection point between the two different types of networks

8. What are the mandatory functions of a sketch?
   Ans: Setup and Loop

9. What is the role of pinMode() function?
   Ans: It configures the specified pin to behave either as input or as output

10. In asynchronous serial communication, what does this asynchronous mean?
    Ans: no clock signalling line to synchronize the transmitter and receiver. So, they transmitter and receiver might turn on at different time instant.