1. yes/or no.

2.a A specific worldwide internet.

2.b A machine is on the internet if it runs the TCP/IP protocol stack and IP address and has the protocol stack, has an IP address, and has the ability to send and receive IP packets to all the other machines on the Internet.

3. Transmitted power and Bandwidth.

4.a
- Enormous potential bandwidth.
- Low transmission losses.
- Immunity to electromagnetic interference.
- Small size and weight.
- Ruggedness and flexibility.

4.b
- High investment cost.
- Need for more expensive optical transmitters and receivers.
- More difficult and expensive than wires.
- At higher optical powers, is susceptible to “fiber fuse” wherein a bit too much light meeting with an imperfection can destroy as 1.5 Km of wire at several meters per seconds.
- Cannot carry electrical power to operate terminal devices.

5.
- Power transfer value:
  -35-40-39+30+37 = -47 dBm

- Received power:
  13-47 = -34 dBm