

ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



WORKSHEET – 7 (Answer Key)

Topic – Components of Network (Coaxial and Fibre optic cable) Subject: COMPUTER SCIENCE Class - 12 F.M:15 Chapter: Computer Networking Date: 11/05/2020 Choose the correct answer for each question: $[1 \times 15 = 15]$ 1. Which of the following is not a guided/bounded medium? a. Twisted-pair b. Fibre-optic c. Coaxial d. Atmosphere 2. cable consists of an inner copper core and a second conducting outer sheath. a. Coaxial b. Fibre-optic c. STP d. Twisted-pair 3. The copper mesh of coaxial cable prevents from : a. Noise b. Dust c. <u>EMI(Electromagnetic interference)</u>. d. All of these 4. The inner core of an optical fiber is ______ in composition. a. Copper b. Plastic or glass c. Bimetallic d. Liquid 5. The name of the cable is ______ as it contains two conductors - an inner conductor and an outer conductor separated by insulation. a. Coaxial b. Fibre-optic c. STP

d. UTP

- 6. TV wire is usually _____ cable:
 - a. <u>Coaxial</u>
 - b. Fibre-optic
 - c. STP
 - d. UTP
- 7. What is the major factor that makes coaxial cable less susceptible to noise than twistedpair cable?
 - a. insulating material
 - b. outer conductor
 - c. inner conductor
 - d. diameter of cable
- 8. In an optical fiber, the inner core is ______ the cladding.
 - a. Less dense than
 - b. The same density as
 - c. Another name for
 - d. Denser than
- 9. In fiber optics, the signal is ______ waves.
 - a. Radio
 - b. <u>Light</u>
 - c. Infrared
 - d. Very low frequency
- 10. _____ cables are composed of a glass or plastic inner core surrounded by cladding,

all encased in an outside jacket.

- a. Coaxial
- b. Fibre-optic
- c. STP
- d. UTP

11. In a fiber-optic cable, the signal is propagated along the inner core by ______.

- a. <u>Reflection</u>
- **b.** Refraction
- c. Modulation
- d. multiplexing

12. _____ cables carry data signals in the form of light.

- a. Coaxial
- b. <u>Fibre-optic</u>
- c. STP
- d. UTP

13. ______ carries signals of higher frequency ranges than twisted-pair cable.

- a. <u>Coaxial</u>
- b. Fibre-optic
- c. STP
- d. Twisted-pair

14. The outer metallic sheath in coaxial cable function is:

- a. A connector
- b. A second conductor
- c. A shield against noise
- d. Both (b) and (c)
- 15. Advantages of Fibre-optic cable :
 - a. Thinner and Lighter
 - b. Faster speed
 - c. Greater bandwidth
 - d. All of these

Phalguni Pramanik