**DV162\_24\_PAS\_Optical Fiber**

**Possible Answer Sheet**

Q1. What are the benefits of using ethernet over optical fiber as opposed to twisted pair copper cabling?

Ans: Communicate Farther without regenerating up to 100KM, No RF interference and More Security.

Q2. What do you mean by transmission by light?

Ans. Transmission by light to transfer data by using fiber optic cable.

Q3. Another characteristic of fiber optic communication is because we’re sending light signals, there’s no \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ans. Radio Frequencies.

Q4.What is the advantage of using fiber optics for communication?

Ans: Long Distance Transmission, No Interference and More Secure transmission.

Q5. Radio frequencies tend to have a larger distance than fiber optics. (T/F)

Ans. False.

Q6. What if there’s any radio frequencies in your immediate area, then what is the impact on Fiber optics?

Ans. No Impact as Fiber Optics communicate using light as source.

Q7. What does the fiber optic connection look like?

Ans: A core fiber surrounded by Ferrule (A Ceramic Coating).

Q8. What is the purpose of the buffer coating in a fiber optic cable?

Ans: Buffer Coating protects everything that’s on the inside of that fiber optic cable.

Q9. What is the purpose of the cladding surrounding the core in fiber optics?

Ans: To absorb the light hit the cladding instead of reflecting back because it have low reflective index.

Q10. What is usually found at the end of a fiber optic connection?

Ans: Ferrule a ceramic protector that goes around the fiber optic.

Q11. What are two broad categories of fiber optics?

Ans. Single Mode Fiber and Multi-Mode Fiber

Q12. What type of fiber optic cable is commonly used for large range communication? Ans: Multi Mode Fiber.

Q13. Each networking standard has its own set of maximum distances that you can use, depending on what type of\_\_\_\_\_\_\_\_\_\_\_\_you’re using.

Ans. Cabling or Medium.

Q14. What type of light source is commonly used with multi-mode fiber?

Ans: LED Light Emitting Diode.

Q15. What type of fiber optic cable is commonly used for short range communication?

Ans. Multi Mode Fiber Optic.