**DV162\_3\_PAS on video related to Cable Standards**

**Possible Answers Sheet**

Q1. \_\_\_\_\_\_\_\_\_\_\_\_ refers to the space of a building whether it is open air flow circulation and this is usually between the drop ceiling and the structure ceiling.

A1. Plenum.

Q2. These cables that through plenum spaces must meet certain requirements, what is it?

A2. Cables that pass through plenum spaces must meet certain requirements:

a. They must be more fire resistant.

b. They must not produce any toxic fumes if they are burnt.

Q3.0 The IEEE- 2013 standard is called\_\_\_\_\_\_\_\_\_\_\_\_\_over HDMI.

A3.0 Ethernet.

Q3.1 The HDMI 1.4 specification adds another channel to the HDMI cable for\_\_\_\_\_\_\_ that has a capability of network communication.

A3.1 Data.

Q4. HDMI connected device that uses features that have the ability to send and receive data at \_\_\_\_\_\_\_\_\_\_\_ethernet.

A4. 100 MB/sec.

Q5. In addition to video and audio on a single cable. the HDMI cable have another ability of \_\_\_\_\_\_\_\_\_\_networking

A5. Ethernet.

Q6. \_\_\_\_\_\_\_\_\_\_\_\_\_standard gave the ability to network using the existing electrical system building.

A6. Ethernet Over Powerline.

Q7. Ethernet over power line gives the ability of ethernet networking over power. (True/False)

A7. True.

Q8. The power line adapters plug directly into a power outlet and they have a built in ethernet port for a RJ-45 connector so one of the plugs into the \_\_\_\_\_\_\_\_\_\_\_\_next to the computer appear and then connect the ethernet cable for the network port of the computer and at the other end into the power line adapters\_\_\_\_\_\_\_\_\_\_\_\_\_.

A8. Power Outlet, Ethernet Ports.

Q9. In the powerline adapter the other adapters plug into the power outlet next to the \_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_down there, then you plug ethernet cable from the modem or router to the powerline adapter.

A9. Modem, Router.

Q10. Ethernet data will use the building's electrical wires to deliver \_\_\_\_\_\_\_\_\_\_\_into the other powerline adapter, so that the other computer can access the internet.

A10. Networking Data.

Q11. Cables are categorised and named according to their \_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_

A11. Speed, type, media.

Q12. In a cable called 10 base -T. \_\_\_\_\_\_\_\_\_\_\_\_stands for maximum speed of this cable. \_\_\_\_\_\_stands for based band transmission. And \_\_\_\_\_\_\_\_stands for twisted pair cable.

A12. 10, Base, T.

Q13. \_\_\_\_\_\_\_\_\_\_ is also referred to as a thin ethernet. It is a version of ethernet that uses a \_\_\_\_\_\_\_\_\_\_\_\_as a supposed untwisted pair cabling. It has a maximum speed of 10 MB/sec. And has a maximum length of 200 meters.

A13. 10-Base, Coaxial Cable.

Q14. 100Base-T has a speed of \_\_\_\_\_\_\_\_\_ which is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ times faster than 10 Base-T. this uses category 5 UTP cable or higher. And it also has a maximum length of 100 meters.

A14. 100 MB/s, 10

Q15. 100 Base-T is also known as \_\_\_\_\_\_\_\_\_\_\_\_

A15. Fast Ethernet.

Q16. Differentiate between 100 Base-FX and 100 Base-T.

A16. -100 Base-FX uses fiber optic cable while 100 Base-T uses copper cabling.  
 -100 Base-FX has a maximum length of 400 meters in half duplex mode and   
 2 kilometers in full duplex mode.

Q17. 100 Base-FX has a maximum length of \_\_\_\_\_\_\_ meters in half duplex mode and \_\_\_\_ kilometers in full duplex mode.

A17. 400, 2.

Q18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ has a base speed of 1000 Mbps. It uses category 5 UTP cabling or higher. And has a maximum length of 100 meters.

A18. 1000 Base-T.

Q19. 1000 Base-TX is similar to 1000 Base-T with the exception of supposed to be an easier setup because it only uses 2 un directional pairs of wires for communications. Whereas 1000 Base-T uses 4 by directional wires. But 1000 Base-TX never caught on. And is known as a failure in commercial implementation. (True/false)

A19. False.

Q20. \_\_\_\_\_\_\_\_\_ has a speed of 10,000 Mbps or 10 Gbps, it uses both shield and un-shield \_\_\_\_\_\_\_\_\_\_\_cabling. It has a maximum length of 100 meters when using category 6a cabling or it using a category 6, it has a maximum length of 55 meters.

A20. 10GBase-T, unshielded twisted pair cabling.

Q21. 10GBase-SR where the SR stands for\_\_\_\_\_\_\_\_\_\_\_\_\_. This is a commonly used \_\_\_\_\_\_\_\_\_\_\_\_\_fibre specifications and has a maximum length of 300 meters.

A21. Short Range, Multimode Fibre.

Q22. 10GBase-ER where ER stands for \_\_\_\_\_\_\_\_\_\_\_And this has a longer range of 40 kilometers using single mode fibre optics. And 10GBase -SW has the same specification as 10GBase-SR, but this is specifically used to operate over \_\_\_\_\_\_\_\_\_\_which is synchronizing optical networks.

A22. Extended Research, SONET.