ESD Basics Quiz True or False

1) True	An example of Electro Static Discharge or ESD is the zap one sometimes feels after walking across carpeting and touching a metal doorknob.
2) True	Static Charges are generated all the time when two surfaces contact and separate. Electrons move from one surface to another causing an imbalance. The surface with a deficiency of electrons has a positive charge and the surface with an excess of electrons has a negative change.
3) False	ElectroStatic charges eventually will come into balance, but when this occurs suddenly an ESD or ElectroStatic Discharge event occurs. However, this event creates no heat.
4) True	A powerful example of an ESD event, creating lots of heat and light, is lightning.
5) False	Conductors are a type of material where electrical current flows easily so can be grounded. Examples of conductors include plastics and Styrofoam cups.
6) False	Insulators are a type of material where electrical current does not flow easily and cannot be grounded. Examples of insulators include metals and people.
7) False	A person walking across a carpeted floor can generate a voltage, but not greater than 100 volts of electrostatic charge on their body.
8) True	Charges on a person frequently discharge, but for the person to feel the zap, a discharge must be about 3,000 volts.
9) True	In manufacturing handling electronic components, ESD is the hidden enemy as there can easily be damaging ElectroStatic discharges that a person cannot detect.
10) False	Passing an inspection test means that the ESD sensitive item has experienced a catastrophic ESD failure.
11) False	Passing an inspection test means that the ESD sensitive item has not experienced a latent ESD defect.
12) True	Although passing all inspections in the factory, ESD sensitive items having latent defects and failing in the field can be very expensive in warranty expense, field service repairs, and loss of customer satisfaction.
13) True	Manufacturing ESD sensitive items without proper ESD control would be like a physician conducting surgery on you without following sterilization procedures.
14) True	A person can be charged, and, as a conductor should be grounded at the ESD protective workstation. So, always be grounded when handling ESD sensitive items; always wear a wrist strap when seated at an ESD protected workstation.
15) False	Make sure to always ground insulators.
16) False	Even if it adversely effects the quality of the products you are working on, allow strangers into the work area and handle products as they please.
17) False	If the air flow of the ionizer bothers you, it's OK to direct it away from the products you are working on.
18) True	Regular plastic bags are very high charging insulators and should not be permitted in an ESD protected area.
19) True	ESD Shielding Bags, if closed, will keep electrostatic charges on the exterior of the bag, and being dissipative, the charge will be removed when handled by a grounded person or placed upon a properly grounded ESD Mat.
20) True	Wrist Straps and Foot Grounders should be tested at least daily, and while wearing them. You should understand and correct any failure; if not, you should notify your supervisor.
21) False	ESD Foot Grounder grounding tabs should be cut off.
22) True	ESD Smocks protect ESD sensitive items from charges on your clothing. These charges are not reliably removed via your wrist strap. Make sure to button up ESD Smock covering all clothing.
23) False	The ESD Association understands that high charging personal items should be allowed in an ESD protected area, even if they might damage products.
24) True	Only trained or escorted people should be allowed in an ESD protected area.
25) True	Use shielded ESD packaging to store or transport ESD sensitive items outside an ESD protected area.