INTRO TO VIROLOGY Name _____ Date _____
QUIZ for lesson 8

1) Which one of these is NOT true about poliovirus?
a) It has a small genome. b) It leaves the cell by budding.
c) It doesn't carry any protein tools in its capsid. d) It has an IRES at the 5 prime end of its genome.

2) Which of these is NOT true about herpes simplex?
a) It has several kinds of glycoprotein spikes. b) It assembles its capsids in the nucleus.
c) Most people are infected with at least one type. d) It enters the body through intestinal cells.

3) Which of these events in the life cycle of herpes occurs outside the nucleus?
a) Manufacturing of glycoproteins b) Replication of the genome
c) Assembly of the capsids d) Transcription of mRNAs

4) Which of these cell receptors does poliovirus use?
a) sialic acid b) CD155 c) CD4 d) heparan sulfate e) MCH1 f) ACE2

5) What does the polo virus do in its replication complexes?
a) Makes capsid proteins. b) Assembles capsids.
c) Makes copies of its genome. d) Does its entire life cycle.

6) Which of these is NOT a job done by a herpes tegument protein?
a) Attaching to a receptor on the surface of a cell. b) Helping the capsid get out of the nucleus.
c) Chopping and shredding cellular mRNAs. d) Starting the production of immediate early mRNAs.

7) Why does herpes stop the ER from making MHC1 flags?
a) So the cell will lose its ability to identify itself.
b) So more ATP energy will be available for making viral proteins.
c) So the infected cell can't alert immune system cells about the viral activity going on inside.

8) How long can a herpes virus stay in its lysogenic (dormant) stage?
a) For almost a year. b) For several years c) Until the host reaches adulthood
d) Until the host catches another virus e) For the lifetime of the host.

9) From which cell part does herpes get its envelope? a) from the nucleus b) from the ER
c) from the outer surface (plasma membrane) d) from the Golgi body

10) Which virus chops and shreds cellular DNA inside the nucleus? a) polio b) herpes c) neither d) both

TRUE or FALSE?

11) ____ Chickenpox is not really a pox family virus.

12) ____ Both polio and herpes are viruses that like to migrate to nerve cells.

13) ____ Polio and herpes are equally destructive to Golgi bodies.

14) ____ There are many herpes family viruses that don't infect humans.

15) ____ Protein "scissors" (proteases) can cut any protein.

INTRO TO VIROLOGY
QUIZ for lesson 8
ANSWER KEY

1) b
2) d
3) a
4) b
5) c
6) a (Tegument proteins are inside the envelope and therefore don't touch the cell surface.)
7) c (The MHC1 flags have a clip for holding samples of proteins being made inside the cell. The immune cells will see pieces of bad viral protein and will kill the infected cell.)
8) e
9) c (The envelope comes from the outer (plasma) membrane of the cell, though it is brought inside by an endosome.)
10) c
11) T
12) T
13) F
14) T (Yes, there are many kinds that infect animals.)
15) F (Proteases are very specific and can only cut one type of protein bond.)