VIRUSES: BASIC CONCEPTS

1. What is the basic structure of a virus?

- [ ] DNA or RNA and a protein coat
- [ ] Only DNA
- [ ] Only RNA
- [ ] Lipids and carbohydrates

2. Which of these is *not* a component of a virus?

- [ ] Nucleic acid
- [ ] Enzymes
- [ ] Capsid
- [ ] Mitochondria

3. What is the protein coat surrounding the genetic material of a virus called?

- [ ] Capsid
- [ ] Envelope
- [ ] Membrane
- [ ] Shell

4. How do viruses typically enter a human cell?

- [ ] Osmosis
- [ ] Endocytosis
- [ ] Active transport
- [ ] Filtration

5. What specific part of the host cell do viruses hijack for replication?

- [ ] Chloroplasts
- [ ] Nucleus
- [ ] Ribosomes
- [ ] Endoplasmic reticulum

6. Which of the following is NOT a type of viral structure?

- [ ] Helical
- [ ] Icosahedral
- [ ] Pentagonal
- [ ] Complex

7. What is the function of the viral envelope?

- [ ] It provides structural support
- [ ] It helps in attachment to host cells
- [ ] It stores genetic material
- [ ] It produces ATP

8. How do viruses differ from bacteria in terms of their living characteristics?

- [ ] Viruses are larger
- [ ] Viruses require a host to replicate
- [ ] Viruses are considered fully living organisms
- [ ] Viruses can undergo metabolism independently

9. What can vaccines typically trigger in the body to fight against viruses?

- [ ] Production of antibodies
- [ ] Increased blood pressure
- [ ] Decrease in white blood cells
- [ ] Production of alcohol

10. In what way do antiviral drugs usually work to fight viruses?

- [ ] They strengthen the cell walls
- [ ] They inhibit replication of the virus
- [ ] They increase white blood cell count
- [ ] They enhance photosynthesis

11. What is the process called when a virus leaves a host cell, often destroying it?

- [ ] Endocytosis
- [ ] Mitosis
- [ ] Lysis
- [ ] Exocytosis