1. Which of the following diseases has been successfully eradicated worldwide through vaccination efforts?
   a. Poliomyelitis.
   b. Tetanus.
   c. Smallpox.
   d. Rubella.

2. Which of the following statements is true regarding the differences between live vaccines and inactivated vaccines?
   a. Live vaccines must replicate in the body to produce immunity, whereas inactivated vaccines induce immunity without replicating.
   b. Both live and inactivated vaccines should never be given simultaneously with other vaccines.
   c. Live vaccines usually require multiple booster doses to maintain immunity, whereas inactivated vaccines are protective after one or two doses.
   d. Inactivated vaccines are affected by circulating antibodies, whereas live vaccines are not affected by circulating antibodies.

3. The childhood, adolescent, and adult immunization schedules are updated and published annually during which month?
   b. February.
   c. October.
   d. December.

4. Which publication does the CDC generally use to quickly notify providers of updates to vaccine recommendations?
   a. ImmunoFacts.
   c. MMWR.
   d. Vaccine.

5. Which of the following statements is true regarding how vaccines evoke an immune response?
   a. T cells bind directly to the antigen contained in the vaccine and activate the humoral immune response.
   b. The antigen in the vaccine activates B cells, which produce antigen-specific antibodies.
   c. When exposed to the vaccine, T cells mature into plasma cells and produce antigen-specific antibodies.
   d. B cells bind directly to the antigen contained in the vaccine and activate the cell-mediated immune response.

6. Jackie is a 34-year-old woman who received an influenza vaccine from you today. She wants to know how long it will take for the vaccine to begin working to protect her from getting the flu. What would be the most appropriate response to this patient?
   a. The vaccine provides immediate protection.
   b. A couple days.
   c. A few weeks.
   d. Several months.
7. A health care provider who previously has not been vaccinated against hepatitis B is stuck by a contaminated needle after administering an immunization to a patient during a seasonal influenza clinic. In addition to hepatitis B vaccine, the health care provider also should receive HBIG as postexposure prophylaxis because the HBIG provides:
   a. Long-term protection while the vaccine provides prompt immunity.
   b. Both short- and long-term protection.
   c. A booster effect for the vaccine.
   d. Prompt immunity while the vaccine provides long-term protection.

8. Mark, a 65-year-old man, is a candidate for the following vaccines: TIV, PPSV23, ZOS, and a booster dose of Td. Which of these vaccines is a live attenuated vaccine?
   a. trivalent influenza vaccine
   b. shingles vaccine
   c. pneumococcal vaccine
   d. tetanus vaccine

9. What is the youngest age to receive an influenza vaccine?
   a. 6 months
   b. one year
   c. six years
   d. 12 years

10. Which of the following vaccines should be administered to all pregnant women?
    a. MMR.
    b. TIV.
    c. HPV.
    d. Varicella.

11. Which of the following patients would be a candidate for PPSV?
    a. 12-month-old boy with asthma.
    b. 25-year-old man who smokes cigarettes.
    c. 33-year-old woman who is pregnant.
    d. 50-year-old woman with no medical conditions.

12. After completion of a primary vaccine series and documentation of a one-time dose of Tdap, Td booster doses are required every:
    a. 1 year.
    b. 2 years.
    c. 5 years.
    d. 10 years.

13. According to ACIP, which of the following would be considered adequate evidence of immunity to varicella, indicating that vaccination with varicella is unnecessary?
    a. Patient self-reported case of chickenpox.
    b. Patient self-reported case of herpes zoster.
    d. Physician diagnosis of chickenpox.

14. Justin is a healthy 16-year-old boy who has no documentation of varicella vaccine. He should receive:
    a. No doses of varicella vaccine because he can be considered immune to varicella.
    b. One dose of varicella vaccine.
    c. Two doses of varicella vaccine separated by 4 weeks.
    d. Two doses of varicella vaccine separated by 3 months.
15. Which of the following statements is true regarding varicella-containing vaccines?
   a. The potency of the zoster vaccine is greater than that of the varicella vaccine.
   b. The potency of the varicella vaccine is greater than that of the zoster vaccine.
   c. The potency of varicella and zoster vaccines is the same.
   d. Even though the potency of the vaccines differs, the vaccines can be considered interchangeable.

16. Which of the following is a contraindication to receiving the herpes zoster vaccine?
   a. Active untreated tuberculosis.
   b. Age 60 years or older.
   c. Past history of herpes zoster.
   d. Past history of chickenpox.

17. Alex is a 32-year-old man who is scheduled to take a cruise in 9 months. He received his first dose of hepatitis A vaccine today. Alex should be counseled to return for his second dose of hepatitis A vaccine:
   a. In 4 weeks.
   b. In 6 months.
   c. In 9 months (a few days before leaving on his cruise).
   d. A second dose of vaccine is not recommended for this patient.

18. The presence of a diffuse maculopapular rash and Koplik spots are characteristic of which of the following diseases?
   a. Rubella.
   b. Varicella.
   c. Measles.
   d. Mumps.

19. The documentation system that health care providers should use to report adverse events after vaccination is:
   a. VAERS.
   b. OSHA.
   c. CMS-1500.
   d. VICP.

20. If a patient received the first dose of hepatitis B vaccine but did not return for the remaining doses in the series, under what circumstances should the hepatitis B vaccine series be restarted?
   a. If more than 2 months have passed since the second dose was due.
   b. If more than 1 year has passed since the second dose was due.
   c. If more than 5 years have passed since the second dose was due.
   d. The series should not be restarted; resume the series where it was interrupted.