1. Which form of hepatitis is most commonly spread through sharing of water bottles?
   a. Hepatitis A
   b. Hepatitis B
   c. Hepatitis C
   d. Hepatitis D

2. A person with viral hepatitis may present with which of the following symptoms?
   a. Nausea and vomiting
   b. Clay colored stool
   c. Dark urine
   d. Headache and fever
   e. May be asymptomatic
   f. All of the above

3. 60-80% of patients with _______ will go on to develop some type of chronic complication.
   a. Hepatitis A
   b. Hepatitis B
   c. Hepatitis C
   d. None of the above

4. With viral Hepatitis, a person may be contagious before they are symptomatic for:
   a. 3-5 days
   b. 1 week
   c. 2 weeks
   d. 3 weeks

5. About 1/3 of viral gastroenteritis cases are caused by:
   a. Norwalk Virus
   b. Rotavirus
   c. Salmonella
   d. Giardia

6. Risk factors for Urinary Tract Infections (UTIs) include:
   a. Previous UTI
b. Diabetes  
c. Spermicidal/Diaphragm use  
d. Pregnancy  
e. All of the above  
f. Both A & C

7. What percentage of the population with have a recurrence of UTI within 6 months?  
   a. 15%  
   b. 25%  
   c. 45%  
   d. 50%

8. Which of the following are symptoms of urethritis?  
   a. Painful discharge from urethra  
   b. Watery vesicles on a red base  
   c. Sores  
   d. Rash

9. The innate branch of the immune system of a human is a:  
   a. non-specific infection part of the immune system  
   b. physical barrier consisting of the skin and mucous membranes  
   c. respiratory barrier consisting of the cilia inside the nose and a lung antibody called IgA  
   d. genital and gastrointestinal barrier to infection  
   e. all of the above

10. The most common cause of bladder infections in women is:  
    a. Uropathic E. coli  
    b. Pelvic inflammatory disease  
    c. Pyelonephritis  
    d. Renal abscess

11. Which of the following is a group of systemic infections, with common clinical manifestations, but caused by different viruses?  
    a. Cystitis  
    b. Pyelonephritis  
    c. Gastroenteritis  
    d. Hepatitis
12. The cellular component to the immune system consists of:
   a. the basophiles
   b. the phagocytes
   c. the erythrocytes
   d. plasma
   e. none of the above

13. With exercise, a number of changes occur to the immune system including:
   a. the innate system goes from nasal-breathing to mouth-breathing mode
   b. mouth-breathing allows for proper filtration of microorganisms
   c. sweat causes the skin to become macerated, which makes it more easily abraded and lacerated, allowing infections to penetrate the skin
   d. a and b
   e. a and c

14. The J-shaped relationship between infections and exercise as described by Neiman and others describes the following:
   a. people who exercise excessively (2 hours or more) have a higher risk of infection
   b. people who do not exercise have an average risk of infection
   c. people who exercise moderately have a lower risk of infection
   d. only b and c statements are true
   e. all statements are true

15. Some nutritional factors can have an affect on acquiring an infection by depressing the immune system including:
   a. even a slight weight loss of (2kg over 2 weeks)
   b. poor diet especially with protein deficiencies
   c. international travel with a shift in time zones may cause sleep-deprivation and abnormal eating habits
   d. b and c statements are true
   e. all statements are true

16. Which of the following statements is not true regarding exercising while being sick as an athlete?
a. muscle enzyme activity is diminished, which decrease power and strength
b. cardiac output is diminished, increased oxygen uptake and heart rate decreases
c. increased muscle catabolism
d. increased risk of heart irregularities including fainting spells and myocarditis

17. The term “above the neck” mentioned for allowing an athlete to work out includes the following qualifiers:
   a. symptoms above the neck, (e.g. stuffy nose, sneezing, mild scratchy throat)
   b. lack of a fever
   c. a ten-minute workout test at 50% intensity
   d. skill training instead of live workouts with the rest of team members to avoid close-contact
   e. all of the qualifiers mentioned above apply to “above the neck”

18. Dr. Porter gives a list of recommendations for participation at the end of his talk including the following. Which one is not a recommendation by Dr. Porter?
   a. minimize your exposure to pathogens and to people who have active infections
   b. monitor over training as prolonged intensive workouts may lead to diminish performance levels.
   c. maintain a well-balanced diet, get adequate sleep, minimize stress and do not get a flu vaccination
   d. for endurance athletes consider giving the athlete supplementation before, during, and after prolonged intensive exercise.

19. After the hemodynamics of inflammation, the body goes through four stages of white blood cell involvement. The proper sequence of these stages is:
   a. margination, emigration, phagocytosis, chemotaxis
   b. emigration, margination, phagocytosis, chemotaxis
   c. margination, emigration, chemotaxis, phagocytosis
   d. emigration, margination, chemotaxis, phagocytosis

20. In the stage of margination, the white blood cells:
   a. travel down the center of the artery
b. attach to the region where there is an infection by sticking against
   the artery wall

c. migrate through the tight junctions in the arterial wall to start
   fighting the infection

d. all of the above

e. a and c are correct

21. A researcher can measure a training response on a marathon runner
   by measuring and documenting the immunomodulator increases on
   all but which of the following:
   a. increased C-reactive protein
   b. increased SED rate
   c. increased cortisol and epinephrine
   d. increased free radicals
   e. increased salivary IgA

22. Otitis Externa or swimmer’s ear is in the external ear canal and
   symptoms and treatment of this type of infection may include:
   a. a green discharge consistent with pseudomonas
   b. a yellowish-brown discharge consistent with pseudomonas
   c. cipro drops are effective in fighting the infection and a solution of
      glycerin/rubbing alcohol can help prevent Otitis Externa
   d. a and c are correct
   e. b and c are correct

23. Viral myocarditis is a result of the:
   a. Epstein bar-virus
   b. Coxsackie virus
   c. Streptococcus virus
   d. Pneumococcus virus

24. With a high temperature over 102 degrees, a person should not
   exercise because:
   a. aspirating mucous by coughing
   b. the possibility of the fever being caused by a coxsackie virus
      resulting in Rhadbo or viral myocarditis
   c. it could be normal laryngitis
   d. none of the above
25. With nasal congestion, you shunt air into the trachea, which creates the following situations:
   a. the athlete is able to effectively hydrate and warm the air
   b. air reaches the lungs at less than ideal conditions causing Bronchospasm and coughing
   c. mucous to travel down the trachea causing Pneumonia
   d. all are correct