1. Vitamin A deficiency can cause all except which of the following?
   a. Blindness
   b. **Brittle bones**
   c. Increased deaths from measles
   d. Increased deaths from diarrhea

2. Simple goiter and cretinism may be prevented by all except which of the following?
   a. **Chlorine treatment of water supply**
   b. Iodized salt
   c. Injection of iodinated oil every one-three years
   d. Iodine disinfection of the water supply

3. Which of the following is considered a contributing factor to more than half of the deaths among children under the age of five years worldwide in 2001?
   a. Diarrhea
   b. Acute respiratory infection
   c. Malaria
   d. HIV
   e. **Malnutrition**

4. The element which is most often deficient in humans is:
   a. Chromium
   b. Iodine
   c. Zinc
   d. **Iron**
   e. Sodium

5. Prevalence of bacterial infections and intestinal parasites are among the causes of malnutrition in children:
   a. **True**
   b. False

6. Rickets is characterized by all except which of the following?
   a. Often a hazard to pregnancy
   b. Causes leg deformities
   c. Prevented by vitamin D, calcium, and exposure to the sun
   d. **Not seen in persons with light skin**

7. Kwashiorkor is a term for a form of malnutrition seen in newborn infants in developing countries:
   a. True
   b. False
8. The most serious nutritional problem in the U.S. is:
   a. Vitamin A deficiency
   b. Protein deficiency
   c. Poor access to fresh foods
   d. Obesity

9. Major elements of environmental risk assessment include all except which of the following?
   a. Hazard identification
   b. Exposure assessment
   c. **Experimental exposures in small human populations**
   d. Dose-response assessment

10. Which of the following is the lifetime additional individual risk of cancer that should trigger regulatory action to reduce levels of an environmental carcinogen?
    a. 1 per 100
    b. **1 per 1000**
    c. 1 per million
    d. 1 per billion

11. The most likely cause for the change seen in the graphs above in blood lead levels between 1976 and 1980 and 1988 and 1991 is:
    a. Decrease in use of lead-containing paint on children’s furniture
    b. **Ban of tetraethyl lead in gasoline**
    c. Increased substitution of latex paint in home decoration
    d. Phasing out lead batteries in cars

12. Exposure to most of the agents evaluated by the IARC (International Agency for Cancer Research) and proven to be carcinogens occurs in industrial processes.
    a. **True**
    b. False
13. Proven carcinogens include all except which of the following?
   a. Aflatoxins  
   b. **Chile pepper**  
   c. Chromium VI  
   d. Papilloma virus

14. The particle size in internal combustion engine exhaust that affects the largest population is:
   a. Coarse  
   b. Medium  
   c. Fine  
   d. **Ultrafine**

15. Diseases caused by environmental exposures are more easily studied epidemiologically in human populations than in laboratory bioassays:
   a. True  
   b. False

16. In California, it has been impossible to demonstrate a beneficial effect of the motorcycle helmet law passed in 1992:
   a. True  
   b. False

17. Which of the following health conditions has not been linked, in some studies, to exposure to diesel exhaust?
   a. Lung cancer  
   b. Asthma  
   c. **Schizophrenia**  
   d. Decreased lung function  
   e. Low birth weights

18. The “threshold phenomenon” or point refers to:
   a. All environmental exposures  
   b. **Environmental agents that cause no measurable effect below a given level**  
   c. The number of excess cases of disease the government will allow  
   d. All of the above

19. The two leading causes of death worldwide in 2001 were:
   a. Infectious diseases and cancer  
   b. Heart disease and cancer  
   c. **Heart disease and infectious diseases**  
   d. Heart disease and injuries  
   e. Respiratory diseases and malignancies

20. Arsenic exposure is only harmful in concentrations over 50 micrograms per liter:
21. The leading cause of potential years of life lost before 75 years of age in the United States in 2000 was:
   a. Motor vehicle injuries
   b. Pneumonia and influenza
   c. Cerebrovascular disease
   d. **Malignant neoplasms**
   e. Diseases of the heart

22. The leading cause of death in the United States in 2001 was:
   a. Motor vehicle injuries
   b. Pneumonia and influenza
   c. Cerebrovascular disease
   d. Malignant neoplasms
   e. **Diseases of the heart**

23. The major preventable cause of disease worldwide is:
   a. **Tobacco use**
   b. Alcohol misuse
   c. Unhealthy diet
   d. Physical inactivity
   e. Unsafe environmental and occupational conditions

24. Public health focuses primarily on the health of the individual:
   a. True
   b. **False**

25. The first step in assessing the health of a community is:
   a. Developing the research correlates of disease occurrence
   b. Developing effective interventions
   c. Evaluating interventions
   d. **Gather data on the current health situation**

26. Political pressure (“lobbying”) is not a legitimate public health strategy.
   a. True
   b. **False**
27. The above figure which depicts the occurrence of “Black X” disease in a community during a single month suggests that Black X disease is a (for this question “Black X” disease may be a different disease than for the preceding question):
   a. Common source, non-communicable disease
   b. Infectious, communicable disease with an incubation period of 10-14 days
   c. Chronic condition such as heart disease
   d. Genetic disease
   e. Infectious, communicable disease with an incubation period of 3-8 days

28. The above figure which depicts the occurrence of “Black X” disease in a community during a single month suggests that “Black X” disease” is most likely to be a:
   a. Common source, non-communicable disease
   b. Infectious, communicable disease
   c. Chronic condition such as heart disease
   d. Genetic disease
   e. Home injuries

29. Which disease is most likely to affect men over 35 years but occurs rarely in women until after menopause?
   a. Cancer
   b. Heart attacks (myocardial infarct)
   c. Diabetes
   d. Chronic lower respiratory disease
   e. Depression

30. The “holy trinity(ies)” of epidemiology is (are):
a. Time, place and person  
b. Environment, location and policy  
c. Science, policy and common sense  
d. Agent, host and environment  
e. **a. and d. above**

31. Lifestyle-related factors accounted for what proportion of deaths in the United States in 1990?  
   a. Less than 10%  
   b. 25%  
   c. **Almost 50%**  
   d. 90%  
   e. 100%

32. Which of the following was **not** one of the seven good health practices shown to be associated with lower mortality and disability in the Alameda County Study conducted by Professor Breslow?  
   a. No tobacco use  
   b. **Brushing teeth after every meal**  
   c. Moderate or no use of alcohol  
   d. Daily exercise  
   e. 7-8 hours of sleep per night

33. Which of the following is **not** one of the three major preventive strategies used by public health?  
   a. **Treatment of existing disease**  
   b. Preventive medical measures  
   c. Environmental measures  
   d. Influence behavior

34. Considering the primary causes of disease in the United States, public health should focus primarily on strategies for:  
   a. Promoting access to medical care  
   b. Making the environment more healthy  
   c. Mitigating genetic factors  
   d. **Changing health-related behaviors**  
   e. Reducing HIV/AIDS and sexually transmitted diseases

35. Public policy includes:  
   a. Legislative activities (e.g. laws)  
   b. Funding allocations (e.g. budgets and appropriations)  
   c. Regulatory activities (e.g. standards and regulations)  
   d. Court decisions (e.g. case law)  
   e. **All of the above**
36. Public health actions against smoking have been more effective at reducing smoking among women than men:
   a. True
   b. False

37. Which of the following does not qualify as a function of public health?
   a. Assessment
   b. Policy-setting
   c. Assurance
   d. Intensive care

38. Public policies aimed at promoting health would include informing the public about risky behaviors, proscribing or prohibiting unsafe behaviors, mandating health insurance for employees of medium and large sized firms, providing free health services, and taxing unhealthy products:
   a. True
   b. False

39. Which of the following factors contributing to poor health or death in the U.S. would be the most difficult to address by public policy?
   a. Poverty, lack of jobs, housing, and adequate nutrition
   b. Easy availability of guns and norms promoting violence
   c. Social, economic and political values
   d. Personal health-related behaviors
   a. Industries that profit from tobacco, alcohol, or toxic substances

40. Legislation by the state of California to deny health care financing for illegal migrants will shift the cost of their health care to the local level:
   a. True
   b. False

41. Which of the following agencies is not part of the U.S. Department of Health and Human Services?
   b. CDC
   c. NIH
   d. WHO
   e. FDA

42. Which of the following is not an example of public health policy in the U.S.?
   a. Restriction of sale and use of tobacco products
   b. Food and drug act
   c. Clean air act
   d. Clean water act
   e. Prohibition of alcohol production
43. Death rates from tuberculosis, measles, stomach cancer, myocardial infarction, stroke, and diabetes have been falling in the past half century.
   a. True
   b. False

44. Which of the following diseases is not among the diseases that have been practically eliminated in the U.S. in the past century?
   a. Measles
   b. Poliomyelitis
   c. Tuberculosis
   d. Diphtheria

45. The best way to evaluate crowding as a health risk factors is:
   a. Population/square mile
   b. Average number of children per family
   c. Average number of people per room in dwellings
   d. Number of families sharing one building

46. Disease can be described using incidence and prevalence. When calculating these measures, the denominators are:
   a. The same
   b. Unimportant
   c. Population at risk in defined time period for incidence and total population at a given time for prevalence
   d. Population at risk in defined time period for prevalence and total population at a given time for incidence

47. Actual risk factors for widespread re-emergence of diseases that had been controllable include all of the following except:
   a. Child day care
   b. International travel
   c. Anti-microbial drug resistance
   d. Bioterrorism

48. Statistics enable scientists to determine the truth of various hypotheses:
   a. True
   b. False

49. The old public health tools of isolation and quarantine are no longer necessary in the age of vaccines and antibiotics:
   a. True
   b. False

50. Biostatistics has no methods to detect possible intentional inaccuracy in responses:
   a. True
   b. False