**Final Exam**

Multiple Choice

1. Epidemiologists are performing a research study about the effects on the health of a community built over a toxic waste disposal location. Which other factor is needed if the study is identified as a perspective cohort study?

a. A non-exposed population for comparison

b. A detailed history of all the exposed participants

c. A group of persons who lived in the area for over a year

d. A socioeconomic profile of the non-exposed population

<Answer: a>

<Rationale: In a cohort study, researchers will select a group of people who are exposed to an event and a group not exposed to the event and compare the incidence of disease and/or mortality from the disease between these two groups>

<Ahead: Cohort Study>

<Chapter Number: 7>

<Complexity: Moderate>

<Chapter Title: Analytic Epidemiology: Observational Studies>

2. It is decided to monitor health developments for a large group of specific persons over an extended period of time and to compare findings with the general population. Which term appropriately characterizes the type of study being performed?

a. Retrospective cohort study

b. Occupation specific study

c. Prospective cohort study

d. Random population study

<Answer: c>

<Rationale: A prospective cohort study is known as a longitudinal study or a concurrent cohort study since the population was identified at the start of the study and the researchers followed this population concurrently through time. Prospective cohort studies can take many years and even decades to complete.>

<Ahead: Cohort Study>

<Chapter Number: 7>

<Complexity: Moderate>

<Chapter Title: Analytic Epidemiology: Observational Studies>

3. Which is an example of a case-control study?

a. Identifying the incidence of type 2 diabetes mellitus in adults

b. Comparing the incidence of cancer between smokers and non-smokers

c. Searching county health records for persons with genetic linked illnesses

d. Gathering demographic information about persons who died from accidents

<Answer: b>

<Rationale: A case-control study involves “grouping people as cases (people experiencing a health-related state or event) and controls and investigating whether the cases are more or less likely than the controls to have had past experiences, lifestyle behaviors, or exposures.” Including the control group is important since a determination can be made if there is a difference in exposure between the two groups.>

<Ahead: Case-Control Study>

<Chapter Number: 7>

<Complexity: Moderate>

<Chapter Title: Analytic Epidemiology: Observational Studies>

4. The nurse is providing care for a newborn diagnosed with a rare genetic disorder. The parents suspect the disorder to be connected to medication prescribed during the first trimester of pregnancy. Which type of research study does the nurse anticipate?

a. A longitudinal study

b. A case-control study

c. A cohort study

d. A perspective study

<Answer: b>

<Rationale: The strength of the case-control study is that it can be done quickly and is a good choice for rare diseases since a cohort study would require larger numbers for a rare disease and thus may take years to complete. A case-control study is usually the first step when researchers are seeking for a cause (an exposure) of an outcome (disease or other adverse event).>

<Ahead: Case-Control Study>

<Chapter Number: 7>

<Complexity: Moderate>

<Chapter Title: Analytic Epidemiology: Observational Studies>