Frequently Asked Questions

1. What are the factors that influence the population growth and structure? **Answer:**

Population structure and growth is viewed as resulting from the influence of a number of parameters, including natality (birth rates), mortality (death rates), age structure, immigration, emigration.

2. What do the term natality, mortality and age structure determine?

Answer:

Natality determines the number of new individuals introduced into the population. **Mortality** determines the number of individuals lost from the population.

Age structure determines the number of reproducing individuals in the population as well as the number of reproducing individuals that will be present in the next generation.

3. What is a life table?

Answer:

The life table is a key summary tool for assessing and comparing mortality conditions prevailing in populations. This is a table that presents data on the age specific mortality and survivorship of a population and can be used to compare populations under different circumstances.

4. What are the principal measures of change in the population health status? **Answer:**

The basic summary measure of mortality from the life table, the expectation of life at birth, is widely understood by the general public and trends in life expectancy are closely monitored as the principal measure of changes in a population's health status.

5. What is the disadvantage of using General Fertility Rate?

Answer:

General Fertility rate gives a heterogeneous figure since it overlooks the age composition of the female population in the child bearing age. Hence it suffers from the drawbacks of non-comparability in respect of time and country.

6. What are the reliable sources of data for constructing the life table?

Answer:

The construction of a life table requires reliable data on a population's mortality rates, by age and sex. The most reliable source of such data is a functioning vital registration system where all deaths are registered.

7. What is a survivorship curve?

Answer:

Life tables contain a lot of information and can be difficult to interpret directly. One solution is to graph the data in the form of a survivorship curve. Survivorship curves allow for quick visual assessments of differences in age specific mortality between populations.

8. What are the uses of life table? **Answer:**

Life tables are basically lists of mortality, survivorship, and life expectancy figures categorized by age class. They are frequently used by life insurance companies as a means of setting premiums. Life tables are often used by population biologists to characterize population dynamics.

9. What are the ideal needs of constructing a life table?

Answer:

Ideally, life tables should be constructed from a long historical series of mortality data from vital registration where the deaths and population of the de jure (or defacto) population-at-risk are entirely covered by the system.

10. What are the basic criteria for selecting countries for time series analysis?

Answer:

The basic criteria used in selecting countries for the time-series analysis, are availability of historical data (1) of good quality as judged by the internal consistency of the data as well as proportion of the population covered, (2) with no more than 5 year gap in the most recent period, and (3) with at least 10 observations to allow for a more robust projection.

11. What are the two principal forms of life table? Answer:

The two principal forms of life table are the cohort life table and the period life table.

12. What is a cohort life table?

Answer:

The cohort (or generation) life table records the actual mortality experience of a particular group of individuals from the birth of its first member to the death of its last member. Such data are hard to come-by, hence the cohort or generation life table is of limited practical interest.

13. What is a period life table?

Answer:

The period (or current) life table is constructed from the conditions of mortality obtaining during a single year or a given period of years using the experience of a synthetic cohort. It thus provides a cross sectional view of the mortality and survival experience of a given population during a single year, and is therefore, a more useful tool for mortality analysis.

14. What is an abridged life table?

Answer:

In the abridged life table, as the name suggests, the values of these functions are given: either for some integral value of x which are at some distance apart, usually 5 years or 10 years. Or they are given for age groups of values of x, usually of width 5 years or 10 years.

15. What is the distinction between complete life table and abridged life table?

Answer:

Distinction is made between complete and abridged life tables. A complete life table is built up from data on deaths and population at each single year of age 0, 1, 2, 3, ..., 99, 100+. An abridged life table is based on the assumption that death rates are similar at neighbouring ages and hence uses death rates calculated from groups of ages. The most common age groupings are 0, 1-4, 5-9, ..., 95-99, 100+ but other age categories are possible (e.g. 10-year age groups).