Method of Calculation

Population and Housing

1. Growth rate

$$\text{Growth rate (r)} = \left[\frac{\ell n\left(P_n / P_0\right)}{t}\right] \times 100$$

P_n = Number of Population in Year n

P_o = Number of Population in Base Year

t = Interval between Base Year and Year n

ℓn = $\log_e$

2. Total Fertility Rate (TFR)

$$\text{Total Fertility Rate} = 5 \times \left[\sum_{x=15-19}^{45-49} \frac{B_x}{P_x} \times 1{,}000\right]$$

B_x = Number of live births to mother age x

P_x = Number of resident women age x

3. Infant Mortality Rate (IMR)

$$\text{Infant Mortality Rate} = \frac{D_o}{B} \times 1{,}000$$

D_o = Number of Infant Deaths Occurring within a Year

B = Number of Live Births for a Given Year

4. Population Indicators

$$\text{Dependency Ratio} = \frac{\left[\left(P_c\right) + \left(P_e\right)\right] \times 100}{P_w}$$

$$\text{Potential Support Ratio} = \frac{P_w}{P_e}$$

$$\text{Aging index} = \frac{P_e}{P_c} \times 100$$

P_c = Number of Population 0 to 14 Years

P_w = Number of Population 15 to 59 Years

P_e = Number of Population 60 Years & Over

Labor

5. Labor force participation rate

$$\frac{\text{Total Labor Force Aged 15 Years Old and Over}}{\text{Persons Aged 15 Years Old and Over}} \text{ X } 100$$

6. Unemployment rate

$$\frac{\text{Unemployed Persons Aged 15 Years Old and Over Total Labor Force}}{\text{Aged 15 Years Old and Over}} \text{ X } 100$$

Education

7. Ratio of Pupils and Student-age Population

(Calculated from Ratio of Pupils and Student-age Population)

$$\frac{\text{Number of Pupils and Students in-each level of education}}{\text{Number of population by age group of their level of education in the same year}} \text{ X } 100$$

8. Rate of Pupils and students each level of education

$$\frac{\text{Number of pupils and student each level education}}{\text{Total of pupils and student}} \text{ X } 100$$