1. In a district of 15,000 persons, the following was registered: 600 births, 225 deaths. The rate of natural increase in this district equals?

$$\frac{600-225}{15000} \times 100 = 2.5\%$$

2. In a city Z, in year 2018, the Crude Birth Rate is 20/1000, Crude Death Rate is 3/1000, and the estimated midyear population is 3 million. The rate of natural increase is?

$$\frac{20-3}{10} = 1{,}7\%$$

3. In a city B, in year 2019, the Crude Birth Rate is 50, and a Crude Death Rate is 15, and the estimated midyear population is 9 million, and net migration rate is (+0.3%). So, the growth rate is?

$$RNI = \frac{50-15}{10} = 3.5\%$$

$$\text{growth rate} = 3{,}5 + 0{,}3 = 3{,}8\%$$

4. In a district of a total population = 6, 000,000 persons in 2015 the number of cancer deaths reported were 12,000 deaths in the same year. The total deaths were 12,500. So, the specific death rate from cancer equals?

$$\frac{12000}{6\,000\,000} \times 1000 = 2/1000$$

5. If a population of a town Z was 8,000,000 persons in the census of the year 2000 and it increased to reach 10,000,000 in the year 2010. The estimated inter-censual population at 2005 will be?

$$10\,000\,000 - 8\,000\,000 = 2\,000\,000 \div 2 = 1\,000\,000$$

$$(1+8)(1\,000\,000) = 9\,000\,000$$

6. The estimated midyear population of a country K in a certain year was 10,000,000. The total number of male = 6,000,000. Total number of death was 20,000 (male=12,000). So, Female Specific Death Rate is?

No of female = 4 000 000
No of death female = 8000

$$\frac{8000}{4\,000\,000} \times 1000 = 2/1000$$

7. If the estimated midyear population of a country V in a certain year was 2,000,000. The total number of young population below 15 years old = 200,000, and the total number of population aged (15-60) years old = 800,000. So, the young dependency ratio is?

$$\frac{200\,000}{800\,000} \times 100 = 25\%$$

8. The total deaths in a country X in 2002 were 300. Of these 45 were due to diabetes mellitus. If the total population is 45,000, then the proportionate mortality rate from diabetes mellitus equals to?

$$\frac{45}{300} \times 100 = 15\%$$