(a) Distinguish between the three stages of the demographic transition experienced by developed countries and illustrate by means of a graph. In your answer, state clearly the pattern of birth rates and death rates during each stage.

## Figure 6.5, Page 279

Stage 1 happens before economic modernisation, where the countries for centuries before had stable or very slow growing populations as a result of high birth rates and equally high death rates. The birth rates are around 35 per 1000 and the death rates around 30 per 1000.

Stage 2 begin when modernisation, associated with better health methods, healthier diets, higher income and other improvements, led to a reduction in mortality that gradually raised life expectancy from under 40 to over 60 years. The decline in death rates was not immediately accompanied by a decline in fertility. As a result, the difference between the high birth rates and falling death rates led to a sharp increase in population growth.

Stage 3 happens when the forces and influences of modernisation and development caused the beginning of a decline in fertility. Falling birth rates followed with lower death rates, leaving little or no population growth.

(b) Explain the differences between the demographic transition experienced by developed countries that is now happening in developing countries. Illustrate by means of a graph.

## Figure 6.6, Page 280

Birth rates in developing countries of stage 1 are higher than they were in stage 1 of developed countries. This is because women tend to marry at an earlier age. As a result, there are more families for a given population size and more years in which to have children.

In stage 2 the application of highly effective imported modern medical and public heath technologies caused death rates in developing countries to fall much more rapidly than in the developed countries as they were only starting to develop the technology. This meant that the developing nation's population growth increased beyond 2%.

Stage 3 can be distinguished between two broad classes of developing countries.

In case A, modern methods of death control combined with rapid rises in levels of living have resulted in death rates falling below 10 per 1000 and birth rates also falling fast to about 20 per 1000.

In case B, after an initial period of rapid decline, death rates have failed to drop further as a result of the presence of absolute poverty and low levels of living as well as the AIDS epidemic. The continuance of the high birth rate as a result of the low levels of living causes overall population growth rates to remain relatively high. These countries are still in stage 2.

(c) There are strong indications that South Africa is now in stage 2 of the demographic transition. In your view, explain how the HIV/AIDS pandemic will affect future trends in birth rates and death rates in South Africa.

The future birth rates will stay relatively high as there is not yet a medical cure for the AIDS epidemic. Most people living in absolute poverty have children for financial security in their old age. As the AIDS epidemic causes people to work less because of getting sick, and losing the little income they have, they will ensure that they have children to look after the needs of the family.

The death rates will increase as people are dying because of the AIDS epidemic but not as much as initially thought. Although medicines cannot cure the virus, there are medicines that can may you live longer and be more productive. The problems remain how the poor can afford these medicines or what policy can be implemented to improve their lifestyle.