1.1 Changing population

Name: _____ Class: _____ Date: _____ **Total: 26 marks**

KEY WORDS demographic transition model • dependency ratio

Changing population

Objective

Use the population measures (CBR, CDR, NIR, doubling time), read the demographic transition model and population pyramids, calculate the dependency ratio, and evaluate migration and population policy (core: population distribution–changing population).

1 Key knowledge and worked examples

Population toolkit. CBR and CDR are per 1 000 per year; NIR = CBR − CDR (18 − 9 = 0.9%); doubling time ≈ 70/NIR% (≈ 78 years); total change adds net migration. DTM stages 1–5 by CBR/CDR logic. Pyramids: expansive (youthful), stationary, constrictive (ageing). Dependency ratio = (0–14 + 65+)/15–64 × 100; 90/210 ≈ 43 per 100. Migration: push, pull, barriers (Lee); refugees (1951 Convention) vs IDPs vs economic migrants; remittances. Policy: pro-natalist (France), anti-natalist (China 1979–2015), neutral.

2 Practice

2.1 Define crude birth rate and crude death rate, stating the units of each. [2]

2.2 A country has CBR 18 per 1 000 and CDR 9 per 1 000. Calculate the natural increase rate and the approximate doubling time. [3]

2.3 State what happens to CBR and CDR in stage 2 of the demographic transition model, and name the growth result. [2]

2.4 A population has 60 children (0–14), 30 elderly (65+) and 210 of working age (15–64). Calculate the dependency ratio. [3]

2.5 Classify each as push or pull: (a) civil conflict at home; (b) higher wages abroad; (c) crop failure from drought. [3]

3 Exam-style questions

3.1 *(Data-response style.)* A district of 2 million has CBR 24 and CDR 8 per 1 000, with net out-migration of 12 per 1 000 a year. Calculate annual natural increase and total population growth, and explain what the difference implies for the district's age structure and services. [6]

3.2 *(Evaluate style.)* Using one anti-natalist policy example, examine its effects on fertility AND one unintended consequence. [4]

3.3 *(Migration style.)* Distinguish a refugee from an economic migrant, and explain one impact of remittances on a country of origin. [3]