Roll No

PRESIDENCY UNIVERSITY BENGALURU

SET-B

Date : JUNE 06, 2024

Max Marks : 100

Weightage: 50%

5Q X 2M = 10M

Time: 9:30 AM - 12:30 PM

SCHOOL OF COMMERCE END TERM EXAMINATION – MAY/JUNE 2024

Semester : Semester - 2021 Course Code : BSE2037 Course Name : - Population Studies Program : B.Sc. Economics

Instructions:

(i) Read all questions carefully and answer accordingly.

ANSWER ANY 5 QUESTIONS

- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART - A

PART - B

ANSWER ANY 5 QUESTIONS

8. Explain the concept of the demographic window of opportunity. How does this period influence economic growth? Provide an answer to this question.

(CO3) [Comprehension]



(CO1) [Knowledge]



9. Country X has been experiencing fluctuating fertility rates over the past decade. The government wants to analyze recent fertility trends to plan for future economic and social policies. The following data has been collected for the year 2023:

Total number of live births: 800,000

Total number of women of childbearing age (15-49 years): 20,000,000 Question:

1. Calculate the Crude Birth Rate (CBR) for Country X in 2023.

2. Assume the number of women aged 20-24 is 2,000,000 and they gave birth to 150,000 childrenin 2023. Calculate the Age-Specific Fertility Rate (ASFR) for this age group.

3. If the Total Fertility Rate (TFR) in Country X for 2023 is 2.1, interpret what this TFR means for he population growth in Country X.

(CO3) [Comprehension]

10. Elaborate the concept of the demographic window of opportunity. How does this period affect economic growth?

(CO4) [Comprehension]

11. Explain and elaborate the concept of Total Fertility Rate (TFR). How is it calculated, and whatdoes it indicate about a population?

(CO4) [Comprehension]

12. Explain the phenomenon of population ageing and its social and economic implications. Analyze how population ageing affects various aspects of society and the economy, including healthcare, labour markets, social welfare systems, and economic growth. Provide examples and propose strategies that governments and policymakers can implement to address the challenges associated with population ageing.

(CO2) [Comprehension]

13. Trace the evolution of demography as a scientific discipline, examining its nature, scope, and changes over time. Discuss the multidisciplinary nature of demography and its connections with other social science disciplines. Analyze how advancements in technology, data collection methods, and interdisciplinary collaborations have shaped the field of demography and expanded its relevance in addressing contemporary social and economic challenges.

(CO1) [Comprehension]

14. Review what the demographic window of opportunity is and explain why it is important for economic progress. Provide examples of the demographic changes that lead to the emergence of this window and how they affect the economy of a country?

(CO2) [Comprehension]

ANSWER ANY 2 QUESTIONS

- **15.** Answer the following questions:
 - 1. Calculate the Total Fertility Rate (TFR) given the Age-Specific Fertility Rates (ASFR) for the following age groups:
 - 15-19: 0.05
 - 20-24: 0.10
 - 25-29: 0.08
 - 30-34: 0.06
 - 35-39: 0.04
 - 40-44: 0.02
 - 45-49: 0.01

If the Age-Specific Fertility Rates (ASFR) are given as follows, what is the General FertilityRate (GFR)? Total number of women aged 15-49 = 200,000.

- 15-19: 0.04 (8,000 women in this age group)
- 20-24: 0.08 (10,000 women in this age group)
- 25-29: 0.06 (12,000 women in this age group)
- 30-34: 0.05 (15,000 women in this age group)
- 35-39: 0.03 (25,000 women in this age group)
- 40-44: 0.02 (30,000 women in this age group)
- 45-49: 0.01 (100,000 women in this age group).

(CO4) [Application]

16. Country X is conducting a health assessment to understand its infant mortality rate (IMR). The following data was collected for the year 2023:

•Total live births: 500,000

•Total infant deaths (under 1 year): 10,000

Questions:

1. Calculate the Infant Mortality Rate (IMR) for Country X in 2023.

2. If Country X wants to reduce its IMR by 20% in the next five years, what would be the target number of infant deaths, assuming the number of live births remains constant?

3. Discuss two potential public health interventions that could help reduce the IMR in CountryX.

(CO5) [Application]

17. •Country B is conducting a demographic analysis to understand its population characteristics. The following data has been collected from the latest census:

•Total population: 50,000,000

•Population under age 15: 12,000,000

•Population aged 15-64: 32,000,000

•Population aged 65 and over: 6,000,000

•Questions:

- 1. Calculate the Dependency Ratio for Country B.
- 2. Determine the Child Dependency Ratio and Old-Age Dependency Ratio for Country B.
- 3. Discuss the implications of the dependency ratios on Country B's economic policies.

(CO3) [Application]