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5 SEM TDC DSE STS (CBCS) 4 (H) (N/O)

2024

(November)

STATISTICS

(Discipline Specific Elective)

(For Honours)

Paper : DSE-4

(Demography and Vital Statistics)

*The figures in the margin indicate full marks
for the questions*

(New Course)

Full Marks : 55

Pass Marks : 22

Time : 3 hours

1. Choose the correct answer from the following alternatives : 1×5=5

(a) According to Malthus, which of the following is an example of preventive checks?

- (i) Infanticide
- (ii) Abortion
- (iii) Adultery
- (iv) All of the above

- (b) Which of the following is not a probability rate of vital events?
- (i) Crude death rate
 - (ii) Crude birthrate
 - (iii) General reproduction rate
 - (iv) None of the above
- (c) What does infant mortality mean?
- (i) The number of deaths per 1000 live births of children under 1 year of age
 - (ii) Death of children under the age of 5 years
 - (iii) Death of children before the age of 6 months
 - (iv) None of the above
- (d) A life table is a profile of human population which exhibits
- (i) probability of dying at each age
 - (ii) numbers living and dying
 - (iii) expectation of life at each age
 - (iv) All of the above

- (e) If NRR is less than unity, then
- (i) the population has a tendency to increase
 - (ii) the population has a tendency to decrease
 - (iii) the population has a tendency to remain constant
 - (iv) None of the above

2. Answer the following questions in brief : 2×5=10

- (a) Define the term 'demography'.
- (b) Define cohort and radix.
- (c) What is the maternal mortality rate?
- (d) Write two uses of a life table.
- (e) Distinguish between stationary population and stable population.

3. Explain Malthusian theory of population with its criticism. 4+2=6

Or

Discuss Chandrasekaran and Deming formula. 6

4. What do you mean by Myer's blended index of digit preference? What are its assumptions and limitations? 2+2+2=6

Or

Explain the theory of demographic transition. Analyze the demographic situations in India in the light of the theory of demographic transition.

3+3=6

5. Discuss the different sources with NRC and Aadhaar for obtaining demographic data in India.

5+2+2=9

Or

Why are basic measures of mortality adjusted to obtain standardized death rates? Describe the direct and indirect methods of standardized death rates.

2+3+4=9

6. Explain the various columns of a life table and relations between them.

7

Or

What is abridged life table? Describe the Greville's method of constructing abridged life table.

2+5=7

7. Define total fertility rate, gross reproduction rate and net reproduction rate. In what way they differ from one another? Discuss.

2+3+3+4=12

Or

What factors govern the growth of population? Discuss the various coefficients used for measuring population growth. 4+8=12

(5)

(Old Course)

Full Marks : 50

Pass Marks : 20

Time : 2 hours

1. Choose the correct answer from the following alternatives : 1×5=5

(a) Which of the following, disproved Malthusian theory?

(i) Malthusian Trap

(ii) Blue Revolution

(iii) Green Revolution

(iv) White Revolution

(b) Which of the following is not a probability rate of vital events?

(i) Crude death rate

(ii) Crude birthrate

(iii) General reproduction rate

(iv) None of the above

- (c) What is the maternal mortality rate?
- (i) Women's death occurred before 9th month of pregnancy
 - (ii) The annual number of female deaths per 100000 live births due to pregnancy
 - (iii) The death of women occurred within 2 years of child birth
 - (iv) None of the above
- (d) Life table has also been named as
- (i) mortality table
 - (ii) survival table
 - (iii) life expectancy table
 - (iv) All of the above
- (e) The relation between NRR and GRR is
- (i) NRR and GRR are usually equal
 - (ii) NRR can never exceed GRR
 - (iii) NRR is generally greater than GRR
 - (iv) None of the above

2. Answer the following questions in brief : 2×5=10
- (a) Define the term 'demography'.
 - (b) Define cohort and radix.
 - (c) What is gross reproduction rate?
 - (d) Distinguish between stationary population and stable population.
 - (e) Write two uses of a life table.

3. Explain Malthusian theory of population with its criticism. 4+2=6

Or

Discuss Chandrasekaran and Deming formula. 6

4. What do you mean by Myer's blended index of digit preference? What are its assumptions and limitations? 2+2+2=6

Or

Explain the theory of demographic transition. Analyze the demographic situations in India in the light of the theory of demographic transition. 3+3=6

5. Discuss the different sources for obtaining demographic data in India. 7

Or

Explain the purpose and procedure of standardized death rates. 2+5=7

6. State the meaning of various columns of a life table. Explain how a life table can be constructed from data usually available.

4+3=7

Or

What is abridged life table? Describe the Greville's method of constructing abridged life table.

2+5=7

7. Explain the different measures of fertility. Out of the age specific fertility and general fertility rates which one do you think better represents the general fertility situation of a place and why?

6+3=9

Or

What factors govern the growth of population? Discuss the various coefficients used for measuring population growth.

4+5=9
