

M. Sc. EPIDEMIOLOGY
SEMESTER - II EXAMINATION, JUNE - 2026

(CMEP511) DEMOGRAPHY & POPULATION STUDIES

[Time Allotted: 3:00 Hours]

[Max. Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order, Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All) (10 x 02 = 20)

(Very short/ Short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

- a. Which age pyramid is typical of a developed country? (CO-1; PO- 1)
 - i. Expansive
 - ii. Constrictive
 - iii. Stationary
 - iv. Inverted
- b. In which stage of the demographic cycle does the population begin to stabilize? (CO-1; PO- 1)
 - i. Pre-industrial stage
 - ii. Transitional stage
 - iii. Industrial stage
 - iv. Post-industrial stage
- c. Life tables are used to measure: (CO-3; PO- 1)
 - i. Birth rates
 - ii. Death rates
 - iii. The probability of surviving to various ages
 - iv. Migration rates
- d. In the theory of demographic transition, the second stage is characterized by: (CO-1; PO- 1)
 - i. High birth rates and high death rates
 - ii. High birth rates and declining death rates
 - iii. Declining birth rates and low death rates
 - iv. Low birth rates and low death rates
- e. Population education aims to: (CO-2; PO- 1)
 - i. Teach people about economic policies.
 - ii. Raise awareness about population issues and dynamics.
 - iii. Promote cultural practices.
 - iv. Provide information on agricultural practices
- f. The National Health Policy primarily focuses on: (CO-3; PO- 1)
 - i. Economic development
 - ii. Urban Planning
 - iii. Population health and health care access
 - iv. Environmental sustainability
- g. Define fertility. (CO-1; PO- 1)
- h. The objectives of family planning in India. (CO-3; PO- 1)
- i. Define net reproduction rate. (CO-3; PO- 4)
- j. The main purpose of census is to _____. (CO-1; PO- 4)

Q. 2. Short notes / Short Answer Type (Attempt any five out of seven) (5 x 4 = 20)

- a. Concept of Family Planning in India. (CO-2; PO-1)
- b. Crude death rate (CO-1; PO-1,2,4)
- c. General Fertility rate (CO-1; PO-1,2,4)
- d. National Family Health Survey. (CO-2; PO-1,4,5)
- e. Age-sex pyramid (CO-1; PO-1)
- f. Exponential Population Growth (CO-3; PO-1,2)
- g. Migration (CO-2; PO-1,5)

Q. 3. Structured Question (Attempt any three out of four) (3 x 10 = 30)

- a. Describe the role of census and surveys in collecting demographic data (CO-1; PO-1,2,4)
- b. Explain the concept of life table and its significance in demographic studies. (CO-3; PO-1,2,5)
- c. The following table shows the number of women and the number of births in different age groups in a given year. Calculate the general fertility rate, total fertility rate, and the gross reproduction rate, assuming that for every 100 girls 106 boys are born. (CO-2; PO-1,2,4)

Age groups	Number of women	Number of births
15-19	1020	80
20-24	1150	70
25-29	1200	150
30-34	750	350
35-39	500	250
40-44	600	200
45-49	850	160

- d. Discuss the various factors affecting mortality in India. (CO-2; PO-1,3,5)

Q. 4. Long Answer/Essay type (Attempt any two out of three) (2 x 15 = 30)

- a. Discuss the concept of demography and its importance in understanding population dynamics of a country (CO-1; PO-1,2,4)
- b. How can population education contribute to better demographic outcomes? (CO-2; PO-1,2,4)
- c. Sustainable development goals. (CO-3; PO-1,2,4,5)