UNIT-IV

- 8. Explain the term 'Empowerment of a woman'. Explain various national policies developed for the empowerment of women in India. [10]
- Explain Inequality-adjusted Human Development Index.
 How is it different from Human Development Index

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Question Paper Code: 6406

M.Sc. (Semester-IV) Examination, 2018
BIOSTATISTICS

[Fourth Paper]

(Population Studies)

Time: Three Hours [Maximum Marks: 70

Note: Answer **five** questions in all, selecting **one** question from each unit. Question **No. 1** is **compulsory**. Calculators are permitted.

- 1. Attempt all questions : [3x10=30]
 - (a) What is the difference between Demography and Population Studies?
 - (b) Define Demographic transition. What are the different stages of demographic transition?
 - (c) Differentiate between General Fertility Rate and Total Fertility Rate.
 - (d) Define Gross Reproduction Rate and Net Reproduction Rate. When are they equal?

6406/100 (1) [P.T.O.]

- (e) What do you mean by Maternal Mortality Ratio?
- (f) Define Nuptiality.
- (g) What do you mean by a stable population? When does a stable population becomes a stationary population?
- (h) If the estimated mid-year population of a given area for the year 2000 and 2010 is 5321 million and 6067 million respectively then calculate the annual geometric growth rate percent of the decade.
- (i) Define international migration. What is the difference between Emmigration and Immigration?
- (j) Define Gender Adjusted Human Development Index.

UNIT-I

Explain the age sex structure of a population. What are
the various factors affecting age-sex structure of a
population. [10]

6406/100 (2)

3. Write note on different sources for collecting demographic data. [10]

UNIT-II

- What are the determinants of fertility? Explain Bongaart's
 Proximate determinants of fertility. [10]
- 5. What is the meaning of Growth of a Population? Explain various measures of population growth. If sex ratio of a population is 794 per 1000 males and the Total Fertility Rate is 3.2 then what will be the Gross Reproduction Rate?

UNIT-III

- 6. What does Population projection means? What is its importance? 'Population projections are revised due to a number of factors' Elaborate. [10]
- 7. Complete the given abridged life table : [10]

Age	_n l _x	$_{n}d_{x}$	_n q _x	$_{n}L_{x}$	$_{n}T_{x}$	_n e ⁰ _x
0-1	107,000		0.1382			
1-4			0.0362			
5-9			0.0286			
10-14			0.0222			
15-19			0.017			

6406/100 (3) [P.T.O.]