

MASTER OF ARTS EXAMINATION, 2024

(2nd Year, 3rd Semester, Supplementary)

ECONOMICS**[ECONOMICS OF SOCIAL SECTOR]**

Time : Two hours

Full Marks : 30

(Answer question number 1 and any two from the rest)

1. Answer any four 2.5 x 4=10
- Distinguish between old (before 2010) and new (after 2010) methods of measuring Human Development Index.
 - Prove that Gini Index is distribution neutral.
 - What happens to Atkinson Index if inequality aversion parameter (ϵ) is unity?
 - How do you relate between demographic transition and demographic dividend?
 - Can Human Poverty Index (HPI) be considered as Head Count Ratio (HCR)? Give reasons in support of your answer.
 - Distinguish between Sen Index (SI) and Foster-Greer and Thorbecke (FGT) Index of poverty.

2. Critically examine the role of investment in human capital in economic growth. [10]

3. Distinguish between Gender Development Index (GDI) and Gender Empowerment Measure (GEM). Calculate the GEM of country A, following the modified formulae developed in the year 1995/1996. The parameter of inequality aversion (ϵ) is set at 2. The following information is given in respect of country A: [4+6]

Real GDP per capita (poverty level adjusted): PPP \$ 2120

Max. country income: PPP(\$) 40,000. Min country income: PPP(\$) 100

Percentage share of parliamentary representation:

Females: 12.1, Males: 87.9

Percentage share of administrative and managerial position:

Females: 10.1, Males: 89.9

Percentage share of professional and technical positions:

Females: 24.4, Males: 75.6

Percentage share of population:

Females: 50.38, Males: 49.62

Percentage share of economically active population:

Females: 37.4, Males: 62.6

Ratio of female non-agricultural wage to male non-agricultural wage: 0.75

4. Mention the important properties of Human Poverty Index (HPI) developed by Anand and Sen (1997). Prove that the elasticity of substitution between two poverty sub-indices is constant

($= \frac{1}{\alpha - 1}$) where α is the order of the average. [4+6]

5. Assume a child is affected by COVID at age 5 and he survives next 5 years and dies at age 10. Given that the disability weight (D) is 0.5, parameter associated with age-weighting function (viz. β) is 0.04, the value of constant of age-weighting function is C (=0.16243) and discount rate is 3%. Estimate the DALYs of the child. [10]