

University of Colombo

Faculty of Arts

Bachelor of Arts Degree Examination (Special) - Fourth Year

Semester End Examination- Semester 1 - 2021/2022

DMG 4160: Computer Applications for Demographic Analysis

Answer three (03) questions only.

Time: Two (02) hours

This paper contains five (05) questions and two (2) pages

1. (a) Briefly describe the importance of using the computer software package, "Population Analysis System", for demographic data analysis in a country.
(Marks 08)
- (b) Explain the importance of using the computer software package, 'MORTPAK' for mortality analysis in a country by taking it's any method of applications.
(Marks 12)
2. Explain the input data required for following spreadsheets in the Population Analysis System which can be used to examine **population age structure** in a country and describe the results that can be obtained from each spreadsheet.
(i) PYRAMID (ii) ADJAGE (iii) AGEINT (iv) AGESEX
(Marks 20)
3. Explain the input data required for following spreadsheets in the Population Analysis System which can be used to examine **fertility** in a country and describe the results that can be obtained from each spreadsheet.
(i) ADJASFR (ii) CBR-GFR (iii) CBR-TFR (iv) TFR-GFR
(Marks 20)
4. (a) Describe the input data and assumptions which are required when using the DemProj model in the SPECTRUM software package for conducting population projections for a country
(Marks 10)

(b) When analysing future population in a country, explain what are the demographic measures/indicators that can be obtained from the results of “DemProj” model-based population projections.

(Marks 10)

5. (a) Examine the importance of using “Model lifetables” when you need to prepare an abridge Life Table for a given country.

(Marks 10)

(b) State the input data required for the LTWST spreadsheet that are used to analyze age-sex mortality patterns in a country and examine the results that can be obtained from it.

(Marks 10)