University of Colombo

Faculty of Arts

Bachelor of Arts Degree Examination (General/Special) – Third Year

Semester End Examination – Semester I – 2016/2017

DMG 3152: Mortality Studies

Answer three (03) questions only.   Time: Two hours (02)
Calculators can be used.
This paper includes two (02) pages and five (05) questions.

01) a) Explain with examples the basic facts which have to be considered when comparing mortality measures between countries.

(08 marks)

b) Examine the importance of mortality measures in studying health status of a population by selecting three (03) mortality measures.

(12 marks)

02) "At present diverse socio-economic factors affect the diseases that cause mortality in countries." Examine this statement by selecting the mortality experience of any country.

(20 marks)

03) "It is important to consider biological factors as well as socio-economic factors in studying Mortality" Discuss this statement by using the analytical framework proposed by Mosley and Chen for the study of determinants of child survival.

(20 marks)

04) a) Briefly explain the importance of the use of standardization method in Mortality analysis.

(05 marks)

b) Using the data given in the following table, calculate Standardized Death Rate for country 'Y' by employing Indirect Standardization Method.

(10 marks)

Age group	Mid year population (in thousands)		No. of Deaths (X)
	X	Y	
0-4	3,008	319	8,300
5-24	14,960	1,657	6,380
25-44	13,084	1,328	14,830
45-64	11,042	1,142	101,600
65-74	4,621	461	156,000
75-84	2,390	234	190,500
85+	543	51	102,500

No. of deaths reported for country 'Y' = 63,800

c) Briefly interpret your answers.

(05 marks)

05) a) Explain the importance of decomposing infant mortality as 'endogenous deaths' and 'exogenous deaths'.

(05 marks)

b) The following table provides data collected on live births and infant deaths of a country. Answer the following questions using the given data.

Year	Birth Cohort	Number of live births	Number of Infant deaths
1989	1989	4,050,958	33,745
1990	1989	-	5,961
1990	1990	4,168,212	32,590
1991	1990	-	5,757
1991	1991	4,120,907	31,209

i. Calculate the Conventional Infant Mortality Rate for the years 1990 and 1991

ii. Calculate the Adjusted Infant Mortality Rate for the Years 1989, 1990 and 1991

(15 marks)

2