

**University of Colombo**  
**Faculty of Arts**  
**Bachelor of Arts Degree Examination (Special) - Third Year**  
**Semester End Examination- Semester I - 2018/2019**  
**DMG 3148: Fertility Studies**

**Answer three (03) questions only**

**Calculators can be used**

**Time: Two (02) hours**

**This paper contains five (05) questions and two (02) pages**

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1. a) Briefly explain the importance of identifying definitions of fertility and limitations of fertility data in conducting fertility analyses.  

(10 Marks)

b) Briefly explain the impact of the increase of female education on the fertility transition in Sri Lanka citing examples.  

(10 Marks)
2. "There is a strong relationship between demographic and socio-economic factors and fertility behaviour of a country". Examine this statement by using examples.  

(20 Marks)
3. a) Following table provides Age Specific Fertility Rates of Hutterite population. In addition, it provides age specific female population and married female population for Country 'A' in 2010. Using the data given calculate Coale's fertility indices.  

(16 Marks)

Age Group (years)	Female Population	Married Female Population	Age Specific Fertility Rates of Hutterite
15-19	1,593,505	179,301	0.300
20-24	1,602,390	889,296	0.550
25-29	1,390,614	1,161,841	0.502
30-34	1,127,005	1,006,903	0.447
35-39	967,062	861,211	0.406
40-44	783,424	667,007	0.222
45-49	644,214	521,300	0.61

Total number of births = 720,687 Total number of legal births = 634,290

- i. Coale's Index of overall fertility ( $I_f$ )
- ii. Coale's Index of marital fertility ( $I_g$ )
- iii. Coale's Index of non-marital fertility ( $I_h$ )
- iv. Index of marriage ( $I_m$ )

b) Interpret your results

(04 Marks)

4. "Deliberate marital fertility control factors and Natural marital fertility factors affect fertility behavior of a country". Critically examine this statement by using Proximate Determinants of fertility introduced by Bongaarts.

(20 Marks)

5. a) Explain the importance of using Parity Progression Ratios in fertility studies.

(07 Marks)

b) Calculate the Parity Progression Ratios using the data given below for country 'X' for the year 2014 and interpret your results.

(13 Marks)

Children ever born	Number of women aged 15-49
No children	34,895
Child 1	49,450
Children 2	45,883
Children 3	27,897
Children 4	17,440
Children 5	10,273
Children 6	6,268
Children 7	3,718
Children 8+	5,738