

University of Colombo

Faculty of Arts

Bachelor of Arts Degree Examination (Special) – Fourth Year

End Semester Examination–Semester II–2016/2017

DMG 4263: Business Demography

Answer Three (03) Questions only.

Time: Two Hours(02)

This question paper contains five (05) questions and three (03) pages.

Calculators can be used.

1. a) Define “Business Demography” and explain its suitability for business analyses.

(07 Marks)

b) The following statements show an analysis of the businesses in the United Kingdom (UK) during the period 2015-2016. From a view point of a Business Analyst, state the decisions that can be taken based on the following information.

- The number of UK business births continued to increase from 383,000 to 414,000 between 2015 and 2016 with a birth rate of 14.6% compared to the birth rate of 14.3% in 2015.
- The number of UK business deaths also increased from 283,000 to 328,000 between 2015 and 2016 with a death rate of 11.6% compared to the death rate of 10.5% in 2015.
- London was the region with the highest birth rate at 17.5% and the highest death rate at 14% in the year 2016.
- In broad industry terms, business administration and support services had the highest business birth rate at 23.1% and finance and insurance had the highest death rate at 17% in the United Kingdom in the year 2016

Source: Statistical Bulletin, 2016

(06 Marks)

c) Briefly explain the factors that have contributed to the evolution of Business Demography as a subject.

(07 Marks)

2. Following table shows births and deaths of various active business establishments in the years 2016 and 2017 in USA. Calculate the suitable measures by using the following data and provide an informative analysis on different business types.

Business Type	2016			2017		
	Active Establishments	Births	Deaths	Active Establishments	Births	Deaths
Production	165	21	14	170	18	19
Construction	336	50	32	359	52	41
Motor Trades	80	8	7	84	10	8
Wholesale	118	11	11	117	11	13
Retail	217	24	23	222	28	24
Transport and Storage	102	22	11	120	28	14
Accommodation and food services	172	25	22	177	27	25
Information and communication	231	38	22	244	35	28
Finance and Insurance	44	7	7	46	7	9
Property	108	14	9	112	14	18
Professional, Scientific and technical	513	82	51	549	87	63
Business administration and support services	252	52	28	279	65	44
Education	42	6	4	49	10	5
Health	121	16	9	132	18	13
Arts, entertainment, recreation and other services	186	20	1	189	18	19

(20 Marks)

3. a) Discuss how demographic knowledge can be applied in selecting potential customers for a business.

(10 Marks)

b) Examine how factors related to business environment can be used for the success of a business organization.

(10 Marks)

4. Explain the various stages of the business life cycle presented by Jeoffery A. Moore and examine how this framework can be used in making business decisions by citing examples.

(20 Marks)

5. a) Explain the sources of data required for a business demographic analysis.

(08 Marks)

b) The following table provides information regarding the data on probability of dying (dissolution) of Industrial Private Establishments in Country "A" in 2012. Complete the life table and examine how these data can be used in decision making for Industrial Private Establishments in Country "A".

Life Table for Industrial Private Establishments in 2012

Age	nq_x	l_x	nd_x	nL_x	T_x	e_x
0-1	0.1768	100,000				
1-2	0.1862					
2-3	0.1636					
3-4	0.1325					
4-5	0.1211					
5-6	0.1080					
6-7	0.0880					
7-8	0.0815					
8-9	0.0784					
9-10	0.0671					
10 and above	1			27,525		

(12 Marks)