2018

CBCS

3rd Semester

STATISTICS

PAPER—C6P

(Honours)

(Practical)

Full Marks: 20

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Demography and Vital Statistics Lab.

1. A part of a life table is given here with most of the entries missing. On the basis of the available figures, supply the missing ones.

Age x	١	d _x	q _x	L _x	T _x	e _x ⁰
10	74,600		0.0035	30		
11			0.00338	6		
12			0.00361			
13			0.00420	9		
14			0.00517			
15			0.00530			
16			0.00538			
17			0.00544			
18			0.00549		*	
19			0.0554			
					2,607,040	

Hence determine, according to the life table the probability

- (a) that a child of age 10 will live at least 5 years more,
- (b) that two children aged 10 and 11 will each live at least 5 years more,

(c) that of two children aged 10 and 11, at least one will die within 9 years.

2. The number of births occurring in Israel in 1988 is shown here classified according to age of mother, together with the female population in each age-group of the child-bearing period:

Age	Female Population (000)	Number of births to mothers in the age-group		
15–19	200.6	4,227		
20-24	173.5	26,099		
25-29	161.7	32,844		
30–34	160.9	23,449		
35–39	155.7	11,588		
40–44	125.6	2,071		
45-49	87.6	122		
Total	1,065.6	1,00,400		

3. Laboratory Note Book

4. Viva-Voce

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