

Date:20.11.2013

Term Examination

Time: 3 Hours

Essentials of Demography

PGDHM-1

IIHMR, Jaipur

Section A- Attempt Any Five Questions. Total Marks: 70

5 x 12 =60

1. What are the different sources of data in India? Among all the sources which one is the best according to you? Why do you think the same as best?
2. Calculate CBR, GFR, ASFR and TFR from the following Table.

Age Group	Persons	Females	Births
0-4	83750000		
5-9	93638000		
10-14	85674000		
15-19	64037000	30150000	1925077
20-24	57307000	28345000	8692941
25-29	50747000	24998000	6627205
30-34	42442000	20843000	2705659
35-39	38895000	18970000	1129306
40-44	34212000	16170000	318073
45-49	29249000	13846000	110451
50-54	25440000		
55-59	16442000		
60-64	18155000		
65-69	9479000		
70+	15519000		

3. Discuss about Demographic Transition Model. In which stage of transition we are?
4. Discuss Chandrashekar and Deming's Method for Data evaluation and Error Detection.
5. Calculate the growth rate of a population in between two censuses with the help of exponential method of growth rate assuming that the present census having the population of 1208(2011) million and the previous census 1027(2001) million population. Also calculate the population for the year 2007.

6. Calculate SMAM for the following data till age 50

Age Group	Percentage Single
15-19	98.96
20-24	74.31
25-29	34.09
30-34	16.60
35-39	11.17
40-44	9.28
45-49	8.95
50-54	8.72

7. Calculate Various columns of life table from the given data

Age Group	Proportion Dying	No. Living at beginning of Age interval	No. Dying during age interval	Person years lived during interval	Total no. of person years lived in the future	Avg remaining lifetime
x-x+n	nq_x	l_x	ndx	nL_x	T_x	e_x
0-1	0.01682	100000	1682			68.43
1-4	0.00754	98318	741		6744618	68.60
5-9	0.00395	97577	385	486920	6352902	65.11
10-14	0.00245	97191	238	485361	5865982	
15-19	0.006		582	483311	5380622	55.50
20-24	0.00825	96371	795	479869		50.82
25-29	0.009	95576		475731	4417441	46.22
30-34	0.01725	94716	1634	469496	3941709	41.62
35-39	0.02475	93082	2304	459652	3472213	37.30
40-44	0.01925	90779		449524	3012561	33.19
45-49	0.0345	89031	3072	437476		28.79
50-54	0.05175		4448		2125561	24.73
55-59	0.07275	81511	5930	392730	1706885	20.94
60-64	0.169	75581	12773	345973	1314154	17.39
65-69	0.209	62808	13127	281222	968181	15.41
70+	1	49681	49681	686959	686959	

Section B- Attempt All Questions.

2 x 5 =10

1. Discuss about Age dependency ratio, young age dependency ratio and old age dependency ratio.
2. Discuss about Age and Sex pattern of Mortality

OR

Calculate UN Age Ratio for the following Table

Age Group	Females
15-19	30150000
20-24	28345000
25-29	24998000
30-34	20843000
35-39	18970000
40-44	16170000
45-49	13846000