

IIHMR UNIVERSITY
Institute of Health Management Research
MBA Hospital and Health Management
Batch-22nd (2017-2019)
First Year
Essentials of Demography



Term Examination

Time - 3 Hour

MM-70

The question paper contains 3 printed page.

Section A- Attempt Any Five Questions. 5 x 10 =50

If anyone attempts more than five questions, only first five will be reviewed and marks will be given for the same

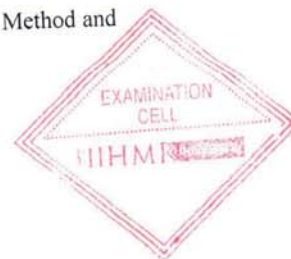
1. What are the different sources of data in India? Among all the sources which one is the best according to you? Explain why do you think the same as best?
2. Calculate CBR, GFR, ASFR and TFR from the following Table.

Age Group	Persons	Females	Births
0-4	83750000		
5-9	93638000		
10-14	85674000		
15-19	64037000	32150000	2025077
20-24	57307000	29345000	9092941
25-29	50747000	24998000	6927205
30-34	42442000	21843000	2705659
35-39	38895000	19970000	1129306
40-44	34212000	18170000	318073
45-49	29249000	14846000	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. Calculate Net Migration Rate and Net Migration Using National Growth Method and Census Survival Method from the given data

	2011	2001
Population of India (000)	1210193422	1027015247
Population of Bihar	114099452	83878796



5. Define migration and streams of migration. Explain the primary causes of migration suggested by W. Peterson with examples.
6. 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 1209(2011) million and the previous census 1026(2001) million population. Also calculate the population for the year 2007.
7. 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	15.11
35-39	10.59
40-44	9.28
45-49	8.91
50-54	8.73

8. Calculate the Missing Values 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
$x-x+n$	nqx	lx	ndx	nLx	Tx	ex
0-1	0.01682	100000	1682			68.43
1-4	0.00754	98318	741		6744618	68.60
5-9	0.00395	97577	385	486920		65.11
10-14	0.00245	97191		485361	5865982	
15-19	0.006		582	483311	5380622	55.50
20-24	0.00825	96371	795	479869		
25-29	0.009				4417441	46.22
30-34	0.01725	94716	1634	469496	3941709	

35-39	0.02475	93082	2304	459652		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	
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	

9. Discuss about basic measures of fertility.

10. Calculate UN Age Ratio Score for the following Table

Age Group	Persons
0-4	8375
5-9	93638
10-14	85674
15-19	64037
20-24	57307
25-29	50747
30-34+	42442

Section B- Attempt Any Four Questions.

4 x 5 =20

1. Describe the features of a Census
2. Discuss Age and Sex pattern of Mortality
3. Write the Assumptions of a Life Table
4. What do you mean by $NRR = 1$, $NRR > 1$ and $NRR < 1$, explain
5. Discuss about Demographic Window of Opportunity
6. Explain Age Dependency Ratio
7. Economic Consequences of Migration
8. Sources of Migration Data

