INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH
IIHMR DELHI

Post Graduate Diploma in Management (Hospital & Health Management)
PGDM – 2022-24 Batch
Term – I : Term End Examination

Course & Code	:	CC-606, Essentials of Demography & Population Sciences	**Reg. No.**	:
Term & Batch	:	I, 2022-24	**Date**	: **Dec 02, 2022**
Duration	:	**3 Hrs**	**Max. Marks**	: **70**

Instructions:
- Budget your time as per the marks given for each question and write your answer accordingly.
- Don't write anything on the Question Paper except writing your Registration No.
- Mobile Phones are not allowed even for computations.

Part A [All questions are compulsory]: Q. 1 to Q.10 (10 questions*1 marks = 10 marks).

1. What is the full form of NRHM
A. National Rural Health Mission
B. National Ration Health Mission
C. National Rajya Health Mission
D. National Rural Housing Mission

2. Who introduced Demographic Transition Theory?
A. Frank Notestein
B. Gary Becker
C. Harvey Leibenstein
D. Kingsley Davis

3. Stationary population is a model that
A. Excludes migration
B. Holds fertility constant
C. Has fixed mortality rates
D. All the three above

4. In Demographic Transition Stage I is characterized by
A. Low birth rate, low death rate
B. Declining birth rate, low death rate
C. High birth rate, falling death rate
D. High birth rate, high death rate

5. What is population momentum?
A. Tendency of a population to continue to decline after replacement level of fertility has been achieved.
B. Tendency of a population to continue to grow after replacement level of fertility has been achieved.
C. Tendency of population to move up and down after reaching replacement level of fertility.
D. It is same as population stabilization.

6. Post neonatal mortality is
A. Probability of dying in the first month of life
B. Probability of dying in the first year of life.
C. Probability of dying after first month and before the first birthday.
D. Probability of dying between first and the fifth birthday.

7. In intermediate variables framework developed by Davis and Blake which among the following is not "Intercourse variable"?
A. Age of entry into sexual union.
B. Permanent Celibacy: Proportion of women never entering sexual union.
C. When unions are broken by divorce, separation or desertion.
D. Foetal mortality from involuntary causes.

8. Which one among the following term refers to number of children an average woman can bear in her reproductive span?
A. Fertility
B. Fecundity
C. Real birth rate
D. Crude death rate

9. Which of the following is not a measure of socio-economic status?
A. Physical Quality of Life Index
B. Human Development Index
C. Gender Empowerment Measure
D. Body Mass Index

10. Prevalence Rate refers to

A. Prevalence $Rate = \dfrac{Number\ of\ new\ cases\ with\ the\ disease\ at\ a\ giving\ time\ period}{Population\ at\ risk\ during\ that\ period} * 1000$

B. Prevalence $Rate = \dfrac{Number\ of\ only\ old\ cases\ with\ the\ disease\ at\ a\ giving\ time\ period}{Population\ at\ risk\ during\ that\ period} * 1000$

C. Prevalence $Rate = \dfrac{Number\ of\ people(old+new\ cases)\ with\ the\ disease\ at\ a\ giving\ time\ period}{Population\ at\ risk\ during\ that\ period} * 1000$

D. Prevalence $Rate = \dfrac{Number\ of\ people(old+new\ cases)\ with\ the\ disease\ in\ last\ 2\ years}{Population\ at\ risk\ during\ last\ 5\ years} * 1000$

Part B [Attempt any four]: Short Notes: Q.11 to Q.15 (4 questions *5 Marks =20 Marks)

11. Explain Social Capillarity Theory of fertility.

OR What is Nuptiality? What is marriage Squeeze?

12. What is replacement level fertility and how it is related to demographic transition?

13. What is Monitoring Learning and Evaluation [MLE]? How sources of data help in MLE?

14. Define TFR with appropriate formula.

OR What is period and cohort studies?

15. Explain Sample Registration System

OR What is Fecundity and Fertility?

Part C [Attempt any four]: Long Question: Q.16 to Q.20 (4 questions *10 Marks =40 Marks)

16. What is Lexis diagram? Describe different columns of life table with its formula.

<div align="center">**OR**</div>

Below is the Abridged Life Tables for Madhya Pradesh, India, Females, 2002–06. Write the formula and compute the value at missing places.

x	$_nm_x$	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	e^0_x
0	0.09529	0.08933	C	8933	F	5791150	57.9
1	0.02099	0.07977	91067	7265	346106	5697403	62.6
5	0.00215	A	83802	896	416770	5351298	63.9
10	0.00153	0.00762	82906	632	G	H	59.5
15	0.00242	0.01203	82274	990	408897	4521577	55.0
20	0.00256	0.01272	81285	1034	403839	4112679	50.6
25	0.00266	0.01321	80251	D	398604	3708840	46.2
30	0.00287	0.01425	79191	1128	393132	3310236	J
35	0.00341	0.01691	78062	1320	387012	2917104	37.4
40	0.00399	0.01975	76743	1516	379923	2530092	33.0
45	0.0056	0.02761	75227	2077	370940	2150169	28.6
50	0.00739	0.03628	73149	2654	359113	1779228	24.3
55	0.01202	0.05835	70496	4113	342195	1420116	20.1
60	0.02195	0.10404	66382	E	314646	1077921	16.2
65	0.03538	0.16252	59476	9666	273214	763275	12.8
70	0.10164	B	49810	49810	490061	I	9.8
take $_1a_0 = 0.3$; $_4a_1 = 1.5$; $_5a_x = 2.5$							

17. Why any country needs Population Policy? Explain the National Population Policy of India.

OR What is population pyramid? Define ASFR, TFR, and GRR and NRR with formula.

18. Explain Healthy Ageing. Discuss summary measures of population health (HALE and DALY) with suitable example.

OR What is period and cohort data? Define CDR, ASDR, IMR, MMR with their demerit and advantage.

19. Briefly discuss the three types of morbidity hypothesis using suitable example. How does health gap differ from health expectancy?

OR What is Maternal Mortality Ratio [MMR] in mortality study? Why Infant Mortality Rate [IMR] and Maternal Mortality Ratio [MMR] are considered as critical indicator in health system analysis.

20. Explain Birth-interval analysis. What is difference between period fertility and cohort fetility measures?

OR What is the difference between demography and population study? How the age-sex strucure and dependency ratio is important in understanding population need in specific time and region?