

**Post Graduate Diploma in Management (Hospital & Health Management)**  
**PGDM – 2023-25 Batch**

**1<sup>st</sup> Year – 1<sup>st</sup> Term Examination**

<b>Course &amp; Code</b>	<b>: Demography and Population Sciences-CC 606</b>	<b>Reg. No.</b>	<b>:</b>
<b>Term &amp; Batch</b>	<b>: I, 2023-25</b>	<b>Date</b>	<b>: 20-12-2023</b>
<b>Duration</b>	<b>: 3 Hrs.</b>	<b>Max. Marks</b>	<b>: 70</b>

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**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.
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**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. Which of the following explains the family planning 2020 strategy in India?  
(A). Population stabilization through family planning  
(B). Gender sensitive family planning programme  
(C). Human right approach in family planning programme  
(D). Expand access of family planning services to additional 48 million women
4. Which one of the following is not a spacing method of family planning?  
(A). Hormonal Method  
(B). Barrier Method  
(C). Vasectomy  
(D). Intrauterine Device (IUD)

**Contd...2..**

5. In which year, the Government of India launched the Reproductive and Child Health (RCH) Programme?

- (A). 1994
- (B). 1995
- (C). 1996
- (D). 1993

6. According to NFHS-5, the Total Fertility Rate (TFR) of India is

- (A). 2.56
- (B). 1.99
- (C). 2.76
- (D). 3.19

7. The Total Fertility Rate is

- (A). The total number of children born in a country in a given year divided by labour force.
- (B). The number of children born to the average woman during her reproductive years.
- (C). The number of births in a country divided by total population in a given year.
- (D). The number of women age 15 – 45 in a country divided by total population.

8. A stationary population is when population growth is

- (A). Increasing
- (B). Decreasing
- (C). Zero
- (D). 100 %

9. Which of the following countries has the highest out migration of nursing professionals?

- (A). The Philippines
- (B). Pakistan
- (C). Bhutan
- (D). India

10. The formula to calculate ( $T_x$ ) which defined as Person-years lived above age x is

- (A).  $T_x = \sum_{a=x}^{\infty} nLa$
- (B).  $T_x = l_x * {}_np_x$
- (C).  $T_x = 1.00$
- (D).  $T_x = \frac{T_x}{l_x}$

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

11. Explain Becker Theory of fertility.

**OR** What is CDR? Why CDR is a termed as crude measure of mortality?

12. What is dependency ratio? Define it with formula?

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

**Contd...3..**

14. What is Age-heaping?

**OR** What is Gross Reproduction Rate? Define with formula.

15. Define different columns of life table?

**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 Standardization in Demography? Describe different types of standardization with suitable examples.

**OR**

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

<b>x</b>	<b><math>n m_x</math></b>	<b><math>n q_x</math></b>	<b><math>L_x</math></b>	<b><math>n d_x</math></b>	<b><math>n L_x</math></b>	<b><math>T_x</math></b>	<b><math>e_0 x</math></b>
0	0.01247	0.01236	<b>C</b>	1236	99135	7622155	<b>I</b>
1	0.00079	0.00315	98764	311	394276	7523021	76.2
5	0.00031	0.00155	98452	152	491880	<b>G</b>	72.4
10	0.00029	<b>A</b>	98300	142	491143	6636864	67.5
15	0.00052	0.0026	98157	255	<b>F</b>	6145721	62.6
20	0.00091	0.00454	97903	444	488401	5655571	57.8
25	0.00095	0.00474	97458	462	486136	5167169	53
30	0.00105	0.00524	<b>D</b>	508	483711	4681034	48.3
35	0.00131	0.00653	96488	630	480867	4197322	43.5
40	0.00177	0.00881	95858	845	477181	3716455	38.8
45	0.00231	0.01148	95014	1091	472341	3239275	34.1
50	0.00287	0.01425	93923	1338	466268	<b>H</b>	29.5
55	0.00602	0.02965	92585	2745	456059	2300665	24.8
60	0.01072	0.0522	89839	4690	437471	1844606	20.5
65	0.01864	0.08905	85149	<b>E</b>	406790	1407136	16.5
70	0.07754	<b>B</b>	77567	77567	1000345	1000345	<b>J</b>
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 SDG? Explain any one SDG of your choice in context of health system in India.

**18.** What is Nuptiality. Explain marriage squeeze.

**OR** What is period and cohort data? How Lexis diagram is useful in understanding the period and cohort data?

**19.** Explain Davis and Blake model of fertility in Demography.

**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 Demographic Transition Theory?

**OR** What is the difference between demography and population study? How it is associated with different sciences?