Model questions for Ph.D in Demography

1. Who among the following defined natural fertility as the marital fertility prevailing in a population in the absence of any deliberate birth control?
   a. Easterlin
   b. Inkeles
   c. Louis Henry
   d. Lesthaeghe

2. The International Day for Older Persons is celebrated on which day?
   a. 1st July
   b. 1st October
   c. 11 th July
   d. 11 th October

3. 3. A function of variate for estimating a parameter is called:
   a. an estimate
   b. an estimator
   c. a frame
   d. a statistics

4. Which column of Life table provides mortality pattern in future
   a. D_x
   b. l_x
   c. T_x
   d. e^0_x

5. The test for the equality of two population variances is based on which of the following?
   a. The difference between two sample variances
   b. The ratio of the two sample variances
   c. The ratio of the population variances to the sample variances
   d. The difference between two population variances

Model questions for Ph.D in Biostatistics and Demography

1. What is meaning of a blind subject in clinical trial?
   a. The subjects do not know which study treatment they receive
   b. Patients injected with placebo and active doses
   c. Fake Treatment
   d. Signed document of the recruited patient for the clinical trial procedures

2. We use Factorial Analysis:

   a. To know the relationship between two variables
   b. To test the Hypothesis
   c. To know the difference between two variables
   d. To know the difference among the many variable

3. Homogeneity of several variances can be tested by:
   a. Bartlett's test
   b. Fisher's Exact test
   c. F-test
   d. t-test
4. The mean and variance of a binomial distribution are 8 and 4, respectively. Then, P(X=1) is equal to:
   a. $\frac{1}{2^{12}}$
   b. $\frac{1}{2^4}$
   c. $\frac{1}{2^6}$
   d. $\frac{1}{2^8}$

5. If X is a normal variate with mean 20 and variance 64, the probability that X lies between 12 and 32 is:
   a. 0.4332
   b. 0.1189
   c. 0.7475
   d. 0.5

6. Homogeneity of several variances can be tested by:
   a. Bartlett's test
   b. Fisher's Exact test
   c. F-test
   d. t-test