**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**MARCH 2012 KRCHN CLASS (PRE-SERVICE)**

**END OF SECOND BLOCK EXAMINATION**

**VITAL STATISTICS EXAM**

DATE: 3 April 2014 TIME: ...........................

**INSTRUCTIONS**

1. Enter your examination number and question number on each page used.
2. ALL questions are compulsory.
3. Omission of and or wrong numbering of a question or part of the question will result in 10% deduction of the marks scored from the relevant part.
4. Do NOT use a pencil.
5. Mobile phones are NOT allowed in the examination hall.

**PART TWO: SHORT ANSWER QUESTIONS VITAL STATISTICS –40 MARKS**

Q.1. Define the following terms:

1. Demography.
2. Mode.
3. Range.
4. Nominal scale.
5. Population census. 5 marks

Q.2. Outline six (6) uses of demographic data. 6 marks

Q.3. State three (3) sources of vital statistics and their importance. 6 marks

Q.4. The number of children who received polio vaccine in a given village during a

polio campaign were 2800. The actual number of children under 5 years in the

same village was 4000 during that period of the campaign. Calculate the

immunization coverage for polio in that particular village. 4 marks

Q.5. Records from a certain T B clinic in Kenya indicated they had 600 patients who were on anti TB medications in 2009. During the same year 300 more people got infected . The area around that clinic has a population of 6000 people. Calculate:

1. Prevalence rate of TB in that area. 2 marks
2. Incidence rate of TB in that area. 2 marks

Q.6. The following data on a frequency table shows the number of neonatal deaths in

a certain district hospital in Kenya in five years.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Years | 2009 | 2010 | 2011 | 2012 | 2013 |
| No. of neonatal deaths | 10 | 30 | 15 | 20 | 35 |

Present the above data in a histograph. 5 marks

Q.7. The following data was obtained from the Bureau of statistics in 2009.

July 1 population 200,000

Live births 3,000

Deaths from maternal cause 15

Deaths from CVD 4,000

Deaths under 1 year of age 50

Fetal deaths 10

Deaths under 28 days 10

Deaths due to rabies 45

Registered cases of rabies 45

People with pneumonia 100

People exposed with pneumonia 1900

Total No. of deaths from all cases 10,000

Using the above data, calculate the following:

1. Crude birth rate. 2 marks
2. Cause of specific death rate from CVD. 3 marks
3. Maternal mortality rate. 3 marks
4. Fetal death rate. 3 marks
5. Case fatality ratio of rabies. 3 marks