

**First Year MHA Degree Supplementary Examinations March 2024**  
**Paper III – Research Methodology & Biostatistics**  
**(Common for 2013 and 2016 Scheme)**

**Time: 3 Hours**

**Max Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Ordinary calculator and logarithm table may be permitted to the students.*
- *Write SECTION A and SECTION B in separate Answer books (32Pages). Do not mix up questions from Section A and Section B*

**QP Code: 123380**

**Section A – Research Methodology**

**50**

**Essay:**

**(20)**

1. What do you understand by the term “Research”. Explain the different types of research with appropriate examples from healthcare

**Short Essay:**

**(10)**

2. What is Sampling error. Explain the types of Sampling errors

**Short notes:**

**(4x5=20)**

3. Simple random sampling
4. Explorative research design
5. Formulation of research problem
6. Bar diagram and Histogram

.....

**QP Code: 124380**

**Section B – Biostatistics**

**50**

**Essay:**

**(20)**

1. Minor surgical procedures performed monthly by ENT department was:  
15, 18, 25, 40, 25, 18, 25, 21, 30, 33, 12 and 25
  - a) Find the range, median, mode, mean and SD of monthly operation
  - b) What do you understand by a normal distribution curve. What are its features

**Short Essay:**

**(10)**

2. Explain Health statistics and Vital statistics with suitable examples

**Short Notes:**

**(4x5=20)**

3. Linear regression
4. Chi square test
5. Interval estimation
6. Importance of biostatistics in healthcare

\*\*\*\*\*