

**First Year MHA Degree Regular/Supplementary Examinations
September 2025
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*
- *Simple calculator shall only be permitted*
- *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. Write an essay on definition of research design and various types of research design with examples.

Short Essay:

(10)

2. Define and differentiate random and non-random sampling methods.

Short notes:

(4x5=20)

3. Sampling error.
4. Steps in hypothesis testing.
5. Content analysis.
6. Histogram, Frequency polygon and frequency curve.

.....

QP Code: 124380

Section B – Biostatistics

50

Essay:

(20)

1. Patient waiting time for consultations in ENT department was:

10, 7, 13, 15, 5, 10, 6, 4, 10, 20

- a) Find the range, median, mode, mean and SD of the waiting times.
- b) What do you understand by normal distribution. What are its features

Short Essay:

(10)

2. Differentiate parametric and non-parametric tests with details on assumptions, null hypothesis, and examples.

Short Notes:

(4x5=20)

3. Pearson's Correlation.
4. Sampling distribution and standard error.
5. Chi-square test.
6. Rate, ratio and proportion with examples from vital statistics.
