Roll No……..….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B Sc. Anesthesia Technology (Semester –6TH)
RESEARCH METHODOLOGY & BIOSTATISTICS
Subject Code: BANTS1604
Paper ID: [21132331]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a) Name some basic research methods.
b) What are the ethics of research design?
c) Define observational data.
d) Define Key concepts of biostatistics.
e) Define sampling frame.
f) Define qualitative variable.
g) What is the simple definition of biostatistics?
h) How do you describe a dataset?
i) What is used to summarize data statistics in research?
j) What is statiscal analysis?

Section – B **(5 marks each)**

Q2. Difference between probability and non-probability sampling with examples.
Q3. What are the key concepts and applications of biostatistics?
Q4. Classify and explain the different types of data used in statistics?
Q5. What is the need of biostatistics? How do you find a relevant data?
Q6. Describe the types of variables in research and statistics in brief.

Section – C **(10 marks each)**

Q7. Describe the research tools and data collection methods in research methodology.
Q8. Answer the following in brief

a) Relationship between a data type and a variable.
b) Relationship between population and sample.
c) Define nominal and cluster data.

Q9. How research proposal and what are the steps involved in developing a research proposal?