Time : 3 Hrs.　　　　Pre- Ph.D Examination April-2018　　　[Max. Marks : 100]
Paper – I
Research Methodology & Biostatistics
QP Code – 1111

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

LONG ESSAY　　　　　　　　　　　　　　　　　10 X 10 = 100 Marks

1. What is meant by biostatistics. Explain the importance for the 'need for review of literature. Add a note on Vancouver style of referencing. (2+6+2)

2. What is meant by PICO model. Discuss how PICO model is a useful model to structure a research question. (3+7)

3. What is a clinical study design. Briefly outline the study designs in biomedical research. Add a note on declaration of Helsinki. (2+6+2)

4. What is meant by an informed consent. What are the elements of valid informed consent. Add a note on guidelines of WHO to prepare an informed consent form. (2+4+4)

5. What is sampling. Mention the different stages comprising the sampling process. Add a note on the sample size determination. (2+6+2)

6. Discuss the importance of the content of the abstract, methods, tables results and discussion in a scientific paper. (2+2+2+2+2)

7. Define ethics. Highlight a few guidelines to be followed for medical research on human subjects and guidelines for use of laboratory animals in medical colleges. (3+7)

8. Discuss correlation and regression statistics.

9. What is Null hypothesis. Explain the importance of 'students t-test' as a statistical tool. (3+7)

10. Name any five statistical graphs. Draw any four and add a note on their disadvantages and advantages. (2+2+2+2+2)

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