



JBQ-014-1053001 Seat No. _____

M. Pharm. (Sem. III) Examination

January - 2020

**MRM - 301 T : Research Methodology and
Biostatistics**

Faculty Code : 014

Subject Code : 1053001

Time : 3 Hours]

[Total Marks : 75

1 Write in brief about following : **10×2=20**

- (1) What do you mean by double effect?
- (2) Write full form of : CPCSEA, IAEC
- (3) What are roles and responsibilities of member secretary in IAEC ?
- (4) Write full form of: GCP, ICH
- (5) Enlist various members of Human Ethics Committee
- (6) Enlist members required to complete the quorum for IAEC
- (7) In clinical trial, how will you take informed consent if participant and his/her guardian are illiterate?
- (8) Define p-value with its significance.
- (9) What do you mean by Variance? Give its importance.
- (10) Mention various sources of literature review

2 Explain in detail about following questions : (Any Two) **2×10=20**

- (1) Write important points with regards to physical facilities and animal husbandry as per CPCSEA guidelines.
- (2) Enumerate various parametric tests. Write a detailed note on null hypothesis and student's t test with one example.
- (3) Informed consent process.

3 Describe at length about following questions : (Any **Seven**) $7 \times 5 = 35$

- (1) Enumerate main points of Nuremberg code.
- (2) Summarize: Tuskegee syphilis experiment.
- (3) Explain following terms: Standard deviation, Population, Sample, Bias, Out liars.
- (4) What is Euthanasia? Write a brief note on it.
- (5) Write main points of Helsinki declaration.
- (6) Enlist TEN records to be maintained by Animal Ethics Committee.
- (7) Write importance of sample size in research and various factors influencing on it.
- (8) What is regression and coefficient of correlation? Explain importance of same.
- (9) Enlist various members of IAEC with their minimum qualifications.
