## **Eighth Semester B. Pharm Degree Regular Examinations May 2022**

## **Biostatistics and Research Methodology**

## (2017 Scheme)

#### Time: 3 Hours

- 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
- Draw diagrams wherever necessary

## Essays

- 1. Differentiate between parametric and nonparametric tests. Briefly explain any three parametric and non-parametric tests each used in hypothesis testing.
- 2. Describe various components of a thesis. Add a note on publication ethics.

## **Short Notes**

- 3. Define and detail the primary and secondary data with examples.
- 4. Write an ideal format for research protocol preparation.
- 5. Write the difference between references and bibliography.
- 6. Explain various study designs in epidemiology.
- 7. What are measures of central tendency. Explain how it is calculated.
- 8. Compare graphical representation of data with representation in table form.
- 9. Explain inferential statistics. Write note on different models.

## Answer Briefly

- 10. Define sample and population.
- 11. Define probability.
- 12. Define statistics.
- 13. Characteristics of good hypothesis.
- 14. Define analysis of variance.
- 15. Name some software used in bio statistics.
- 16. Write difference between research methods and methodology.
- 17. Define research gap.
- 18. Different types of sampling techniques.
- 19. What is type I and type II errors in research.

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#### Max. Marks: 75

## (7x5=35)

#### (10x2=20)

# (2x10=20)