

**M Phil in Translational Ayurveda (Part Time) Part I Supplementary  
Examinations January 2025**

**Paper I – Research Methodology and Medical statistics**

**Time: 3 hours**

**Total 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*
- *Draw table/diagrams/flow charts wherever necessary*

**Answer any five questions**

**(5x20=100)**

**All questions carry equal marks**

1. What is a research hypothesis and what are its types. Explain the types of errors. What is the relationship between Type 1 and Type 2 errors. How Type 1 and Type 2 errors can be reduced.
2. Write a brief account on epidemiological study designs and explain in detail the new drug development process along with the different phases of trial.
3. What is data and explain its classification. Explain briefly different methods of data collection. Explain about various diagrammatic representation of quantitative and qualitative data.
4. Explain the decision tree analysis and its five steps in health economics. What are its advantages and disadvantages.
5. Write an account on role, composition and functioning of Institutional Review Board.
6. Discuss the impact of Covid-19 pandemic on social determinants of health and health equity.
7. Write the definition of epidemiology. Design an epidemiological study to find out the association of lung cancer and tobacco smoking in Kerala giving an account on steps involved. Which are strength and weakness of study design.

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