

First Semester MD/MS Ayurveda Regular Examinations May 2025
Research Methodology
(2024 Scheme)

Time: 3 hrs**Max 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.*

Application based question**(20)**

1. An Ayurveda research institute is investigating the long-term effects of a specific dietary and lifestyle intervention based on Ayurvedic principles on the progression of Type 2 Diabetes. Researchers recruit individuals with prediabetes and divide them into two groups: one group following the Ayurveda-based lifestyle intervention and the other continuing their usual diet and routine. Participants are followed for five years, with periodic assessments of fasting blood glucose, HbA1c levels, and diabetes incidence. The study ensures strict eligibility criteria and regular follow-ups to monitor adherence and health outcomes.

- a) Formulate the research question and hypothesis for the study and identify the type of the study design and justify.
- b) Explain observational study designs and identify the most suitable type for the given study.
- c) Which reporting guidelines apply to this study, and why are they important.
- d) Discuss the role of confounding factors in this study and how they can be minimized.

(4+6+4+6)**Short answer questions****(8x5=40)**

2. What is a literature review, and why is it important in research.
3. Explain the steps involved in formulating a good research question. Give one example of a well-framed research question with justifications.
4. What is the purpose of an Institutional Ethics Committee (IEC) in research.
5. What is the difference between superiority, non-inferiority, and equivalence trials.
6. What are the challenges in preserving and interpreting ancient manuscripts.
7. What is the IMRAD structure in a dissertation.
8. What is the difference between referencing and a bibliography.
9. What is data falsification in research

Long answer questions**(4x10=40)**

10. Discuss the history, need, role, and fundamental principles of research ethics for humans and animals.
11. Explain and differentiate between case reports, case series, cross-sectional, and longitudinal studies.
12. Describe protocols for drug quality testing and explain the instrumentation used in drug research.
13. Describe the structure of various types of journal articles with highlighting their key components and differences
