

Paper V — RESEARCH METHODS AND BASIC
EPIDEMIOLOGY

Time : Three hours

Maximum : 100 marks

SECTION A — (20 × 1 = 20 marks)

Answer the following in one or two sentences.

1. Define Scientific Research.
2. What do you mean by Research Hypothesis?
3. Experimental studies.
4. Features of Cohort Studies.
5. Clinical trials.
6. Primary data.
7. Epidemiology.
8. Crude death rates.
9. Types of epidemics.

10. Randomized controlled trials.
11. Sources of control.
12. Application of animal experiment.
13. Spurious association.
14. Mortality rate.
15. Prognostic study.

Choose the correct answer :

16. The commonly used design for HIV research is
 - (a) Experimental
 - (b) Non-experimental
 - (c) Post Test
 - (d) None of the above
17. Observational studies include
 - (a) Surveys
 - (b) Control studies
 - (c) Census
 - (d) All the above.

18. To study the association between different diseases the following study may be used

- (a) Cohort study
- (b) Cross sectional study
- (c) Case-control study
- (d) Prospective study

19. In fields like surgery it is impossible for a study to be

- (a) Single blind trial
- (b) Drug trial
- (c) Double blind trial
- (d) None of the above

20. _____ controls are unsuitable where genetic conditions are under study.

- (a) Hospital controls
- (b) Sibling control
- (c) Neighbour-hood control
- (d) All the above.

SECTION B — (5 × 6 = 30 marks)

Answer ALL the questions.

21. (a) What are the aspects to be considered in selecting a research question?

Or

(b) Explain the types of cohort studies.

22. (a) Explain the design of clinical trials.

Or

(b) Differentiate primary data from Secondary data.

23. (a) Write short note on epidemiology.

Or

(b) Explain the aims of Epidemiology.

24. (a) What are the basic tools of measurement in epidemiology?

Or

(b) What are the limitations of mortality rate?

25. (a) Differentiate epidemiology and clinical medicine.

Or

(b) Write a short note on disease prevalence and its types.

SECTION C — (5 × 10 = 50 marks)

Answer ALL the questions.

26. (a) Describe the major steps in the research process.

Or

(b) Discuss different types and sources of controls.

27. (a) How to write a good research paper?

Or

(b) Evaluate the measurement of morbidity.

28. (a) Analyse the strategies to explore disease actiology.

Or

(b) Explain the epidemiological approach to the problem of health and disease.

29. (a) Examine the association, causality and uses of epidemiology.

Or

(b) Explain the measures in Epidemiology.

30. (a) Discuss the design of Randomized controlled trial.

Or

(b) Write an essay on Animal studies.
