Mid-West University

Examinations Management Office

Surkhet, Nepal

End Semester Examinations -2078

Bachelor level/ B.Sc/7th Semester

Time: 3 hrs

Full Marks: 100

Pass Marks: 50

Subject: Research Methodology and Biostatistics (ZOOL 471)

Candidates are required to give their answer in their own words as far as Practicable. The figures in the margin indicate full marks.

Group-A

1. Answer the following questions in very short (Attempt any ten questions) $[10 \times 1 = 10]$

- a. Why biostatistics is important in research?
- b. Why research proposal are written? Give reason.
- c. What are secondary data? Give example.
- d. Define null hypothesis with example.
- e. Define the meaning of citation and referencing? Explain briefly.
- f. How can we reduce the instrumental error?
- g. Why random sampling is recommended in data collection?
- h. What is the formula to calculate standard error?
- i. Give two examples of scientific misconduct?
- j. Why standard deviation is measured in data analysis?
- k. Why abstract is important in research paper?
- 1. Define dependent variable.

Group-B

Answer the following questions in short: (Attempt any eight questions)

 $[8 \times 5 = 40]$

- 2. Describe the importance of statistics in biological research with examples.
- 3. Write short note on 'referencing and citation' style.
- 4. Why the literature review is necessary for researcher?
- 5. The data given below shows number of hours spent by a student on different activities on a working day. Illustrate the information in a pie graph.

Activity	school	Homework	sports	sleep	others	Total
No. of hrs.	7	4	2	8	3	24

- 6. Discuss the significance of setting hypothesis in research.
- 7. Differentiate between broad and specific objectives with relevant example.
- 8. What is seminar? Mention the importance of seminar for student.
- 9. Mention the types of various research designs with examples?
- 10. Why report writing is important in research project? Mention the content of preliminary part of research report.

Group-C

Answer the following questions (Attempt any five questions)

 $[5 \times 10 = 50]$

- 11. Why the proposals are written? Share a proposal outline in brief in the topic of your choice.
- 12. Why research is necessary in Karnali Province? Explain.
- 13. Describe various ways of scientific communication commonly practiced in academic sectors.
- 14. Discuss the various techniques of wildlife population estimation.
- 15. Define research design. Explain various types of research design that a researcher require to consider during research.
- 16. A patient is measured for respiratory rate per minute. And its 9 time measurement is; 23, 20, 22, 24, 16, 17, 18 and 19. Calculate; i) Means respiratory rate, ii) Variance, iii) Standard deviation and iv) Coefficient of variance.