All India Institute of Medical Sciences, Kalyani
M.Sc Nursing First Year Examination, August 2024

Time: 3 Hrs. **Nursing Research & Statistics** Marks: 75

INSTRUCTIONS:

- Attempt Section-A & Section-B in the separate Answer sheet.
- Draw diagram wherever necessary.

SECTION A
RESEARCH (50)

Essay-type questions (Attempt All Questions) (2×15=30)

1. a. Critique the study title "Secondary traumatic stress in NICU nurses" (5)
    b. Explain the ethical principles involved in protecting the study participants involved in 1A (5)
    c. Discuss the advantages and disadvantages of the observation method of data collection (5)
2. a. Explain with example the factors affecting internal and external validity of a study (10)
    b. What are the advantages and disadvantages of undertaking a pilot study (5)

Short Notes (Answer any four questions) (4×5=20)

3. Numerical rating scales
4. Levels of hierarchy of evidence in research
5. Importance and process of control and blinding in experimental designs
6. Levels of data with examples
7. Purposes and styles for research article publication
8. Criteria for selection of literature

SECTION B
STATISTICS (25)

1. Describe Type I and Type II error (5)
2. Explain in detail the shapes of distribution (5)
3. Scatterplot versus Forest plot (5)
4. The following data represent the number of times that a sample of patients who were aged 80 or older fell during a 12-month period.

0	3	4	1	0	2	0	1	2	0
1	0	0	1	2	5	0	1	0	1
0	2	1	0	1	1	3	2	1	0
1	3	1	1	0	4	6	1	0	1

Construct a frequency distribution for this data set, showing the absolute frequencies, relative frequencies, and cumulative relative frequencies. (5)

5. Represent the data in a tabular and a graphical form (5)