

First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics

Date : 06-04-2013, Saturday]
Time : 3 Hours]

[Max. Marks : 75

- Instructions : (1) Figure to the right indicate marks.
(2) Write legibly.
(3) Draw diagrams wherever necessary.
(4) Use separate answer book for each section.

SECTION - I

Que. 1. Define following (Any Five)

[10]

1. Research 2. Reliability 3. Hypothesis 4. Content Validity
5. Conceptual Frame work 6. Variable

Que. 2. Answer Following (5x2)

[10]

- (a) List characteristic of True experimental design and explain any one of them
(b) Illustrate and discuss the Solomon four group experimental design with example

Que. 3. As a ward in charge you have identified that the rate infection following initiation Of IV Therapy has increase in ward.

(a) Develop research problem statement for the above problem.

[3]

(b) What would be your research approach for the above problem statement?

[3]

(c) Draw the conceptual frame work for above Problem Statement

[4]

[20]

Que. 4. Write Short Notes (Any Four)

- (i) Ethics in Nursing Research
(ii) Sample and Sampling Technique
(iii) Literature Review
(iv) Types of tools for Data collection
(v) Reporting and utilizing Research findings

SECTION - II

Que. 5. The following is the frequency distribution of 500 workers according to Their weekly income (In Rs) Find the average income

Income:	0-50	50-100	100-150	150-200	200-250	250-300
Person:	90	150	100	80	70	10

Que. 6. Explain (i) Graphical Presentation of the data
(ii) Tabular Presentation of the data.

[05]

OR

Que. 6. Following numbers give the incubation period in days in ten consecutive Patient of infectious hepatitis: 26, 22, 36, 15, 27, 19, 24, 18, 23, 25.
Calculate standard deviation

Que. 7. (A) In 9 patient following are the findings of temperature and pulse rate

	98	99	100	101	102	103	104	105	100
Temperature:	98	99	100	101	102	103	104	105	100
Pulse Rate:	72	80	92	111	116	128	132	130	90

Find out correlation coefficient between temperature and pulse and list the properties of correlation coefficient.

(B) Explain any two

- i. Split Half method
ii. Merit and demerit of the Mean
iii. Vital Health Statistic

SECTION II

Q1. Memory capacity of 10 students was tested before and after training. State whether the training was effective or not from the following scores at level of significance of 5%.

Roll No.	1	2	3	4	5	6	7	8	9	10
Before Training	12	14	11	8	7	10	3	0	5	6
After Training	15	16	10	7	5	12	10	2	3	8

For 9 d.f. at 5% level of significance table value of $t=2.26$

(10)

OR

Q1. Compute the correlation coefficient between X and Y

X	2	4	5	6	8	11
Y	18	12	10	8	7	5

(10)

Q2. In the estimation of regression equation of two variables the following results were obtained. Obtain the two regression equations.

$$\bar{X} = 90 \quad \bar{Y} = 70 \quad \Sigma(X - \bar{X})(Y - \bar{Y}) = 3900 \quad n = 10$$

$$\Sigma(X - \bar{X})^2 = 6360 \quad \Sigma(Y - \bar{Y})^2 = 2860$$

(10)

OR

Q2. Calculate the Median and mode from the following data

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. of Students	2	6	12	18	25	20	10	7

(10)

Q3. Write short notes on any two

(5)

1. Type I and Type II error
2. Properties of Normal Curve
3. Graphical and tabular Presentation of Data
4. Use of Statistical packages

First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics

Date : 08-04-2017, Saturday
Time : 3 Hours]

[Max. Marks : 75

- Instructions :
- (1) Figure to the right indicate marks.
 - (2) Write legibly.
 - (3) Draw diagrams wherever necessary.
 - (4) Use separate answer book for each section.

Section-I (50 Marks)

- Q. 1. a) Define sample & sampling. 3+6+6=15
b) Discuss different types of sampling techniques.
c) Describe the factors influencing sampling process.
- Q. 2. a) Define Research & Nursing research. 3+6+6=15
b) Discuss in brief purposes and characteristics of research.
c) Describe the importance of nursing research in relation to quality patient care.
- Q. 3. Write explanatory notes on any four of the following. 4X5=20
a) Importance of Review of literature in nursing research.
b) Critiquing of research report.
c) Characteristics of measuring tools.
d) Ethical considerations in nursing research.
e) Hypothesis, formulation & types.

Section-II (25 Marks)

- Q. 4. a) What do you mean by confidence interval ? 2+5+6=13
b) Why median is used when there are extreme scores in a distribution.
c) Describe the data with appropriate central tendency & Variability:-

Marks	No. of students
0-80	80
10-80	78
20-80	70
30-80	55
40-80	35
50-80	23
60-80	13
70-80	10

- Q. 5. Write explanatory notes on any three of the following 4X3=12
a) Descriptive and inferential statistics.
b) Mann Whitnev test-
c) Conceptual framework.
d) Standard Deviation.

1016E069

Candidate's Seat No : 10007

First Year M.Sc. (Nursing) Examination

Nursing Research & Statistics

[Max. Marks : 75]

05-10-2016, Wednesday]
3 Hours]

- Instructions :
- (1) Figure to the right indicates marks.
 - (2) Write legibly and to the point.
 - (3) Draw diagrams wherever necessary.
 - (4) Write each section in separate answer books.

Section -I (50 Marks)

4 X 5 = 20

1. Short answers (Any 5)

- a. Hypothesis and its types
- b. Importance of review of literature
- c. Conceptual framework
- d. Evidence based practices
- e. Reliability of tool
- f. Review of literature
- g. Pilot study

10+5+5= 20

2. Descriptive/Essay type

- a. Describe the steps of a research process
- b. Discuss the methods of controlling the extraneous variables
- c. Explain true experimental design using suitable examples

5+5 = 10

3. Write explanatory notes on any two of the following

- a. Non-probability sampling
- b. Critiquing a research report
- c. Merits and demerits of structured questionnaire

Section -II (25 marks)

2X 5=10

4. Short answers

- a. Chi-square test
- b. Median
- c. Bar graph
- d. Nominal scale
- e. Standard deviation

0412E138

First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics

Candidate's Seat No : _____

Date : 10-04-2012, Tuesday
Time : 3 Hours

Instructions : (1) Figure to the right indicates full marks.
(2) Write legibly.
(3) Draw diagram wherever necessary.
(4) Each section use the separate answer book

[Max. Marks : 75]

SECTION - I

Q.1 Define the following (any five):

- a) Variable
- b) Reliability
- c) Evidence based practice
- d) Research Design
- e) Deductive Reasoning
- f) Content Validity

10

Q.2 a) Discuss briefly Historical Evolution of 'Research in Nursing'.

b) How will you identify a problem for your M.Sc. thesis?

5, 5

Q.3 Differentiate between the following:

- a) Assumption vs Hypothesis
- b) Limitation vs Delimitation
- c) Quantitative vs Qualitative Research Methods
- d) True Experimental vs Quasi Experimental Design
- e) Basic vs Applied Research

2x5= 10

Q.4 Develop a data collection tool to gather information from First Year B.Sc. nursing students about their knowledge of HIV/AIDS.

10

Q.5 Write short notes on any two of the following:

- a) Conceptual Frame work
- b) Ethics in Nursing Research
- c) Literature Review

5x2=10

[P.T.O.]

0412 E 138-3

OR

Q.2(a) Define normal distribution and state its characteristics.

[5]

(b) A certain stimulus administered to each of the 12 patients resulted in the following increase of blood pressure:

7, 3, 8, -2, 4, 0, -3, 2, 6, 1, 5 and 9

Can it be concluded that the stimulus will, in general, be accompanied by an increase in blood pressure? Given that $t = 1.80$ at 5% level of significance for 11 degrees of freedom.

[5]

Q.3 Explain any two of the following terms:

[5]

- (i) Frequency distribution
- (ii) Sign test
- (iii) Split half method
- (iv) Measures of mortality

0415E163

116-Copy
Candidate's Seat No. _____

First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics

[Max. Marks : 75]

Date : 10-04-2015, Friday]
Time : 3 Hours]

- Instructions :
- (1) Figure to the right indicate marks.
 - (2) Write legibly.
 - (3) Draw diagrams wherever necessary.
 - (4) Use separate answer book for each section.

SECTION - I (50 Marks)

Q - 1. Short answers (Any 5)

10

1. Outcome research.
2. Elements of informed consent in research.
3. Purposes of literature review.
4. Threats of Experimental designs.
5. Instruments for data collection.
6. Hypothesis testing.

Q - 2. Descriptive type/Essay type

1. Define nursing research. Briefly overview the steps of research process. 12
2. Methods of data collection. 14
3. Types of research approaches. Explain the characteristics & types of experimental research design. 14

SECTION - II (25 Marks)

Q - 3. Short Answers (Any 5)

10

1. Cumulative Frequency.
2. Variance.
3. Skewness.
4. Frequency polygon.
5. Confidence interval.
6. Power of statistical test.

Q - 4. Long Essay (Any one)

10

1. Methods of analysis & interpretation of data.
2. A) What are the barriers of utilising nursing research? (5)
B) How will you bridge the gap between research & practice? (5)

Q - 5. Short Essay (Any one)

05

1. What are the steps of hypothesis testing?
2. Scales of measurement of data.

0610E196

First Year M.Sc. (Nursing) Examination

Candidate's Seat No : _____

Nursing Research

Time : 3 Hours]

Instructions :

- (1) Write legibly. No marks are given for material which cannot be read.
- (2) Marks are indicated on the right. [Max. Marks : 80]
- (3) Answers to the point, irrelevant writing decreases the value of answers.
- (4) Draw labelled diagram if necessary.
- (5) Write each section in Separate answer books

SECTION I

- 1 (a) Define Nursing Research. 2 + 8
- (b) How can the standards of nursing practice improved through Nursing Research ?
Support your views with examples. 5 - 5

- 2 (a) Classify Nursing Research designs.
- (b) State a problem where you can use retrospective Research design. 5 + 4 = 20

- 3 Write short notes on (any four) :
(1) Ethical issues in Nursing Research.
(2) Sampling
(3) Steps in Research process
(4) Reliability and Validity of a Research tool.
(5) Hypotheses.
(6) Utilisation of Research in Nursing.

SECTION II

- 4 (a) What is literature Review ? 5 - 5
- (b) List the sources of Literature Review.
- (c) Briefly explain the step you would follow while collecting the literature for your master's study. 5 - 5

- 5 (a) What is the importance of statistics in Research ? 5 - 5
- (b) How will you present data in graphical form ?
- (c) Differentiate between Descriptive and inferential statistics. 5 - 5

- 6 Write short notes on (any four) : 5 - 5
- (1) Pilot study
- (2) Steps in organising Research Report
- (3) Critiquing Nursing studies
- (4) Independent and dependent variables.
- (5) Areas of Nursing Research.
- (6) Evidence Based Practice.

0412 E 138-2

(9)

SECTION-II

(STATISTICS)

Q.1(a) Explain mean and quartile deviation with examples. [5]

(b) Calculate standard deviation and 25th percentile from the following frequency distribution: [5]

<u>Marks</u>	<u>No. of Students</u>	<u>Marks</u>	<u>No. of Students</u>
0-10	9	40-50	18
10-20	14	50-60	19
20-30	16	60-70	21
30-40	38		

OR

Q.1(a) Calculate median and mode from the following frequency distribution: [5]

<u>Variable</u>	<u>Frequency</u>	<u>Variable</u>	<u>Frequency</u>
10-15	8	30-35	20
15-20	10	35-40	15
20-25	15	40-45	9
25-30	31		

(b) Explain: (i) Scatter diagram method

(ii) Randomized block design. [5]

Q.2(a) Obtain the rank correlation coefficient between variables X and Y from the following data: [5]

X: 78 89 99 60 58 80 68 62

Y: 126 136 156 112 108 137 123 109

(b) From the following data, use chi-square test and conclude whether inoculation is effective in preventing tuberculosis: [5]

	Attacked	Not attacked
Inoculated	32	267
Not inoculated	86	914

Given that $\chi^2 = 3.84$ at 5% level of significance for 1 degree of freedom.

0411E106

Candidate's Seat No : _____

First Year M.Sc. (Nursing) Examination

Nursing Research & Statistics

[Max. Marks : 75]

06-04-2011, Wednesday]

3 Hours]

- Instructions : (1) Figure to the right indicates full marks.
(2) Write legibly.
(3) Draw diagram wherever necessary.
(4) Each section use the separate answer book

SECTION I

10

Write the following (any five) :

- a) Content validity
- b) Pilot Study
- c) Probability
- d) Assumption
- e) Ethnography
- f) Variables.

05

05

g) Explain empirical phase of nursing research.

h) Explain sources of research problem.

06

i) What information you must provide to the respondent before collection of data.

06

j) Explain characteristics of true experimental study.

08

k) Explain conceptual frame work with example.

10

Write short notes (any two) :

- a) Statistical analysis
- b) Purposive sampling techniques
- c) Research tool
- d) Qualitative research.

[P.T.O.]

**First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics**

Date : 10-04-2015, Friday]
Time : 3 Hours]

[Max. Marks : 75

- Instructions : (1) Figure to the right indicate marks.
(2) Write legibly.
(3) Draw diagrams wherever necessary.
(4) Use separate answer book for each section.

SECTION - I (50 Marks)

Q - 1. Short answers (Any 5)

10

1. Outcome research.
2. Elements of informed consent in research.
3. Purposes of literature review.
4. Threats of Experimental designs.
5. Instruments for data collection.
6. Hypothesis testing.

Q - 2. Descriptive type/Essay type

1. Define nursing research. Briefly overview the steps of research process. 12
2. Methods of data collection. 14
3. Types of research approaches. Explain the characteristics & types of experimental research design. 14

SECTION - II (25 Marks)

Q - 3. Short Answers (Any 5)

10

1. Cumulative Frequency.
2. Variance.
3. Skewness.
4. Frequency polygon.
5. Confidence interval.
6. Power of statistical test.

Q - 4. Long Essay (Any one)

10

1. Methods of analysis & interpretation of data.
2. A) What are the barriers of utilising nursing research? (5)
B) How will you bridge the gap between research & practice? (5)

Q - 5. Short Essay (Any one)

05

1. What are the steps of hypothesis testing?
2. Scales of measurement of data.

First Year M.Sc. (Nursing) Examination
Nursing Research & Statistics

Date : 07-04-2018, Saturday]
Time : 3 Hours]

[Max. Mark

- Instructions :** (1) Figure to the right indicate marks.
(2) Write legibly.
(3) Draw diagrams wherever necessary.
(4) Use separate answer book for each section.

Section-I (50 Marks)

- Q. 1. a) Define Research.
b) Enlist the features of good research.
c) Ex-post Facto Design. 3+6+6=15
- Q. 2. a) Define Dependent variable.
b) What is the importance of Conceptual framework.
c) Write steps of literature review. 3+6+6=15
- Q. 3. Write explanatory notes on any four of the following. 4X5=20
✓ a) Snowball sampling.
✓ b) Types of Sampling technique
✓ c) Rating Scale.
✓ d) Observation method
✓ e) Qualitative research method.

Section-II (25 Marks)

- Q. 4. a) Level of Measurement. 2+5+6=13
b) Criteria for selection of good research problem.
c) Patient staying in Hospital for Schizophrenia 50 and Neurotic 72
carryout the significant of difference between the mean level of
Schizophrenia and Neurotic.
- Q. 5. Write explanatory notes on any three of the following. 4X3=12
a) Pitman's permutation test.
✓ b) Ethical consideration.
✓ c) Likert Scale.
✓ d) Use of Regression in research.
-

0419E146

First Year MSc. (Nursing) Examination

Candidate's Seat No. _____

Date : 08-04-2019, Monday]

Time : 3 Hours]

Nursing Research & Statistics

[Max. Marks : 70]

- Instructions :**
- (1) Figure to the right indicates marks.
 - (2) Write legibly and to the point.
 - (3) Draw diagrams wherever necessary.
 - (4) Write each section in separate answer books.

Section: I (Marks 50)

Que.1

- (a) What is Research? What is the Scope in Nursing?
- (b) Discuss the concept of Evidence Based Practice.

4 + 6 =

OR

- (a) Why review of Literature is important in Research?
- (b) Discuss the overview of Nursing Research Process.

Que.2

- (a) List different types of "Research Approaches"
- (b) Discuss the steps in "Review of Literature"

4 + 6 =

Que.3 Differentiate between the following. Support your answer with examples. 5 X 2 =

- (1) Hypothesis and Assumption
- (2) Experimental and Quasi Experimental Design.
- (3) Quantitative and Qualitative Research.
- (4) Probability and Non- Probability Sampling.
- (5) Limitations and Delimitations in Research Project.

Que.4 Write Short Notes on any four:

5 X 4 =

- (1) Pilot Study
- (2) Critiquing a research article
- (3) Content Validity
- (4) Ethics in Research
- (5) Formulation of Research Tool
- (6) Conceptual Framework

P. T. O.

Section: II Statistics (Marks 25)

Que.5

- (a) Define Probability and Explain Characteristics of a Normal curve.
 (b) Describe with the help of examples different methods of Sampling.

OR

Calculate if there is significant difference in mean blood pressure of 4 groups in order to assess role of occupation in causation of blood pressure.

Officers	Clerks	Lab Technicians	Attendants
125	120	115	118
130	122	115	120
135	110	120	118
120	115	130	120
115	125	120	120
120	122	125	115
130	120	122	120
135	120	115	115
135	126	126	125
140	120	118	125

Table F value for 3 degree of freedom across (→) and 36 degree of freedom vertically at 5% level of Significance = 2.86

Que.6 Write Short Notes (Any Three)

1. Steps involved in Testing of hypothesis.
2. Uses of vital statistics.
3. Explain how linear regression equations are useful in prediction.
4. Normal distribution.
5. Chi-Square test.

5 x 3 = 15

First Year M.Sc. (Nursing) Examination

Nursing Research & Statistics

Date : 21-07-2020, Tuesday]

Time : 3 Hours]

[Max. Marks : 70]

- Instructions :** (1) Figure to the right indicates marks.
(2) Write legibly and to the point.
(3) Draw diagrams wherever necessary.
(4) Write each section in separate answer books.

SECTION – I (38 Marks)

- Q.1. a).** Define Quantitative research. 02
b). Enlist the types of quantitative research. 04
c). Explain experimental research in detail. 08
- Q.2. Write Short Notes. (Any FOUR)** (6x4=24)

1. Characteristics and scope of research
2. Identification and formulation of research problem with example.
3. Critical Review of literature.
4. Development of conceptual framework
5. Non experimental research

SECTION – II (37Marks)

- Q.3. a).** Define Sampling. 02
b). Discuss the factors influencing sampling process. 04
c). Explain probability sampling technique in detail. 06
- Q.4. Write Short Notes. (Any FOUR)** (5x4=20)

1. Application of statistics in health
2. Graphical presentation of data
3. Normal distribution of the data
4. Use of computers in data analysis.
5. Calculate the mean and median of the following data.
102, 56, 34, 99, 89, 101, 10, 54

- Q.5** Random Blood sugar level of the 10 persons are 240, 260, 290, 245, 255, 288, 05
272, 263, 277, 257. Calculate the standard deviation of these data.