



7-6-2016
Fourth Year students (Total marks 40)
Time allowed: 2hour

Fayoum University
Faculty of Nursing

Statistics

a. Answer the following Questions:

1. Give short account on

(Total 8 marks)

- Factors affecting sample size
- Case control study

2. Define:

(Total 6 marks)

- Clinical trial.
- Relative Risk.
- Sensitivity of screening test.

3. Enumerate:

(Total 6 marks)

- Data collection tools.
- Types of variables with examples.

4. Calculate:

(Total 6 marks)

The body's weights of 8 children of 1 year old are 10, 9, 8, 10, 12, 7, 13, and 11 calculate the following

1. Mean
2. Mode
3. Median
4. Range
5. Midrange
6. Standard deviation

b. Put (T) in case of true and (F) in case of false (6 marks).

1. Clinical trial is analytical observational study ()
2. Large sample size is needed with more variable studied ()
3. Open ended questions in questionnaire take short time and are easy analyzed ()
4. Specific objectives of research specify what will be done in the study , where, when.
()
5. Bar chart and histogram are graphs used to present qualitative data ()
6. Losses to follow up are the main side effects of cohort study ()
7. Median is one of central tendency measures affected by extreme values ()
8. Odds ratio can be calculated from case control study ()

c. MCO (write the question number and choose one answer only) (10 marks).

1. The strongest analytical observational study type in concluding case- effect relationship

- a- Cross-sectional study
- b- Cohort study
- c- Case-control study
- d- Clinical trail

2. The following are probability sample techniques

- a. cluster random sample
- b. convenience sample
- c. purposive sample
- d. Quota sample

3. The following are measures of central tendency

- A. Median and percentiles and mean deviation
- b. Mean, median and range
- c. Mean , Median and midrange
- d. Mode, standard deviation and range

Fill in space

A-cross-sectional	B- Randomized controlled trial	C. Case- control	D. Cohort study
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1-provides the strongest evidence within the different types of epidemiological study designs

2-study can be both descriptive and analytic

3-best used in studying rare diseases

4- Incidence rate can be calculated from.....study

3-----
4-----

V- Differentiate between the qualitative and quantitative research design according to the following topics: (Total marks 5)

- Objectives
- Sample
- Data collection
- Data analysis
- Outcome

VI- Give a short account on: (Total marks 6)

- 1- Recommendation
- 2- Steps in Research process

“Good Luck”