

The IIHMR University, Jaipur

Institute of Health Management Research

MBA Pharmaceutical Management (2014-2016)

Research Methods

Time: 3 Hrs

M.M-70

Roll. No.-----

Note:

- a. All the sections are compulsory.
- b. Marks are indicated against each question.
- c. Attempt section A in question paper.
- d. Attach examination paper with the answer sheet.

Section A

Q. 1 Circle the correct option.

(10 * 1 = 10 marks)

1. There is no relationship between children's time in day care and later academic achievement. This is an example of which of the following?
 - a. A research question
 - b. A factorial design
 - c. A correlation
 - d. A null hypothesis
2. The independent variable in a research study is:
 - a. The variable that is measured.
 - b. A confounding variable.
 - c. The variable that is manipulated.
3. A researcher is interested in studying the relationship between gender differences and verbal ability. This is an example of what type of research?
 - a. Descriptive
 - b. Quasi-experimental
 - c. Correlation
 - d. Gender research

4. The most critical section of a research article to read is the:
 - a. Literature review
 - b. Results
 - c. Limitations
5. What is not a necessary part of a research proposal?
 - a. Literature review
 - b. A Gantt chart/ work plan
 - c. Outline of the research methods that you plan to use
6. What is a sample?
 - a. A segment of a population that is selected for an investigation
 - b. A list of all units in a population
 - c. The enumeration of an entire population
 - d. A source of non-sampling errors
7. What is a sampling frame?
 - a. A frame that reflects the number of the population under investigation
 - b. A framework that displays a random set of numbers
 - c. A list of all the units in a population from which a sample will be selected
 - d. None of the above
8. Asking people whether they wish to participate in a study after telling them all of the potential risks and benefits is called informed consent.
 - a. True
 - b. False
9. You wish to make a precise estimate about the characteristics of a population of individuals. You should use:
 - a. Quota sampling
 - b. Probability sampling
 - c. Accidental sampling
10. Which is most likely to yield qualitative data?
 - a. Mail survey
 - b. Focus group
 - c. Telephone interview

Section B

Q. 2 Attempt any **three** from the following: **(3 * 10 = 30 marks)**

- a. Importance of research in pharmaceutical development
- b. How research questions and hypothesis are related? explain with example
- c. Define Validity and reliability with example
- d. Explain various types of non-intervention (observational) study designs
- e. Explain probability and non-probability sampling with its advantages and limitations
- f. Methods of quantitative data collection with the respective tool
- g. Discuss ethical principles of research in pharmaceutical research with the help of example

Section C

Q. 3 Calculate the required sample size to estimate the percentage of pharmacies with drive-through prescription pick-up provision. An approximate proportion estimate is 37%. (Confidence level at 95%, margin of error/degree of accuracy at 5%). What would be the total sample size after considering 10% non-response? **(10 marks)**

Section D

Q. 4 You have to conduct a research project on **"STUDY ON SELLING OF NON-OTC DRUGS AS AN OTC DRUGS"** / **"ATTRITION RATE IN INDIAN PHARMACEUTICAL INDUSTRY"**. Prepare an outline of the project proposal on any of the above given issues. **(20 marks)**