

## **M.Phil/Ph.D Entrance Exam, July 2014**

NOTE: The questions are divided into two parts: (a) the first 25 questions are objective type and compulsory. Each question carries equal mark (two). There will not be any negative marking, and (b) Each candidate has to write a research proposal on one of the topics given in Section B.

Cell phones, calculators and electronic gadgets are not allowed inside the exam hall.

Time: 90 minutes

### **A. OBJECTIVE QUESTIONS (25):**

Q1. What is the “probing question”?

- a. One that inquires about a sensitive or deeply personal issue.
- b. One that encourages the interviewee to say more about a topic.
- c. One that asks indirectly about people’s opinions.
- d. One that moves the conversation on to another topic.

Q2. 1. Inductive reasoning moves from specific instances to general principles.

2. Deductive reasoning starts from general principles to specific facts.

- a. Both are correct.
- b. 1) is correct.
- c. 2) is incorrect.
- d. Both are incorrect.

Q3. Why is it helpful to prepare an interview guide before conducting semi-structured interviews?

- a. So that the data from different interviews will be comparable and relevant to your research questions.
- b. So that you can calculate the statistical significance of the results.
- c. In order to allow participants complete control over the topics they discuss.
- d. To make the sample more representative

Q4. Which of the following is the first step in starting the research process?

- a. Searching sources of information to locate problem.
- b. Survey of related literature
- c. Identification of problem
- d. Searching for solutions to the problem

Q5. Action research means

- a. A longitudinal research
- b. An applied research
- c. A research initiated to solve an immediate problem
- d. A research with socioeconomic objective

Q6. The main role of the control group in an experiment is that it

- a. ensures that there is no chance of any interference from the experimenter.
- b. Provides a basis for comparison against which the behaviour of the experimental group can be assessed.
- c. Balances the overall sample to eliminate all confounding variables.
- d. Ensures that statistical analysis can confirm the hypothesis

Q7. What is missing in a quasi experimental design?

- a) Manipulation
- b) Comparison
- c) Control of threat
- d) All of the above

Q8. Religion of an individual can be noted on:

- a) Interval scale
- b) Nominal scale
- c) Ordinal scale
- d) Ratio scale

Q9. Which of the following are major threats to validity?

- a) History
- b) Selection
- c) Testing
- d) All of the above

Q10. Reliability measures the:

- a) Consistency
- b) Stability
- c) Dependability
- d) All of the above

Q11. Randomization does not control for:

- a) Differential mortality
- b) Selection
- c) Maturation
- d) History

Q 12. How is variance of sample estimate related with increase sample size?

- (A) No relation
- (B) Increases
- (C) Decreases
- (D) No change

Q 13. Choose two causes of non-sampling error from the following (tick two):

- (A) Faulty sampling frame
- (B) Measurement error
- (C) Investigator bias
- (D) No stratification

Q 14. What is the main demerit of systematic sampling?

- (A) Mean cannot be estimated
- (B) Give biased estimate of mean
- ( C) Give inconsistent estimate
- (D) Variance cannot be estimated

Q15. Choose two merits of cluster sampling from the following (tick two):

- (A) Save travelling time and cost
- (B) Sample units are scatter
- (C) Duplication of information
- (D) Operationally convenient

Q16. Which one of the following sampling method is appropriate for heterogeneous population?

- (A) Simple random sampling
- (B) Probability proportional to size sampling
- (C) Two stage sampling
- (D) Stratified sampling

Q17: Qualitative research refers to the 'quality' of the methods applied and findings in social sciences, which are of ethnographic in nature.

- (A) True
- (B) Not True
- (C) Can't say
- (D) None of the above.

Q18: As in quantitative research, the qualitative research is also uses sampling to select the samples, but the selected samples are usually:

- (A) Small
- (B) Cover more depth of information
- (C) Purposive
- (D) All the above.

Q19: Sampling in qualitative research is non-probabilistic and purposive, and the types of sampling applied are:

- (A) Intensity; homogenous
- (B) Convenience; criterion
- (C) Snowball or chain; typical case
- (D) All of the above.

Q20: In case of a community-based health study, which of the 'key informants' would be the most suitable respondents in a qualitative research:

- (A) Medical doctors
- (B) Community leaders, village heads
- (C) Outreach Health workers (ANMs, AWC, ASHA, etc)
- (D) All of the above.

Q.21: Some of the research tools used by qualitative researchers to discover peoples' explanatory models and cultural domains include:

- (A) Free listing; Pile sorting
- (B) Rating; Ranking
- (C) Test of significance
- (D) Only A and B.

Q22. UN Manual Three refers to:

- (A) Family Planning
- (B) Migration
- (C) Evaluation and adjustment of data
- (D) Indirect methods of estimation.

Q23. Which series of the Indian Census give information on Children ever born and children surviving:

- (A) C
- (B) D
- (C) F
- (D) None of the above.

Q24. Which statistical test can be performed to check association between attributes:

- (A) Chi square
- (B) Wald test
- (C) Student T test
- (D) Hausman test

Q25. If the two variables have reverse causation, which of the technique should be used:

- (A) Ordinary least square taking reverse coefficient
- (B) Two stage least squares
- (C) Simultaneous equation
- (D) Path Analysis

**B. TOPICS FOR PROPOSAL WRITING (Choose any ONE):**

1. Malnutrition among children in India
2. Women left behind due to male migration
3. Ageing in lowest-low fertility population
4. Fertility differentials across religions
5. Causes of death in India.