Attempt any One of the following:

1. What is meaning of scientific research? Describe the foundations of scientific research.

Ans: Scientific research may be defined as a systematic, controlled, empirical, and critical investigation of hypothetical propositions about the presumed relations among observed phenomena. This definition contains the basic terms necessary in defining the method of scientific research, and describes a procedure that has been accepted for centuries. “Foundations of Scientific Research” (Foundations of Research Activities) is aimed at training students in methodological foundations and organization of scientific research; organization of reference and information retrieval on the topic of research in system of scientific and technical libraries and by local and global computer information networks; analysis and evaluation of information and research and development processes in civil aviation and in another fields of national economy; guidance, principles and facilities of optimization of scientific research; preparation of facts, which documenting results of research scientific work (scientific report, article, talk, theses, etc.). The main tasks of the discipline are to familiarize students with basic terminology, theoretical and experimental methods of scientific research as well as methods of analysis of observed results, their practical use and documentation facilities. The tasks of mastering the discipline “Foundations of scientific research” are the following: to learn professional terminology of scientific research; to be able to perform the reference and information retrieval on the topic of research; to be able to formulate methodological foundations of scientific research on specialty;

- to understand the organization of scientific research;
- to make scientific report (talk) on professional and socio-political topics defined by this syllabus. Practical skills in the foundations of scientific research enable students to be aware of world scientific results and new technologies, to understand novel scientific results, papers, computer manuals, software documentation, and additional literature with the aim of professional decisions - making. Prolific knowledge and good practical skills in the foundations of scientific research allow students to study in novel scientific results make investigations, reports, summaries and comments, develop scientific projects and be engaged in foundations of scientific research.

2. Describe the methods of sampling in social research.

Ans: Five sampling methods used in sociology

Random sampling – an example of random sampling would be picking names out of a hat. In random sampling everyone in the population has the same chance of getting chosen. This is easy because it is quick and can even be performed by a computer. However, because it is down to chance you could end up with an unrepresentative sample, perhaps with one demographic being missed out.

Systematic sampling – an example of a systematic sample would be picking every 10th person on a list or register. This carries the same risk of being unrepresentative as random sampling as, for example, every 10th person could be a girl.

Stratified sampling – this method attempts to make the sample as representative as possible, avoiding the problems that could be caused by using a completely random sample. To do this the sample frame will be divided into a number of smaller groups, such as social class, age, gender, ethnicity etc. Individuals are then drawn at random from these groups. If you are observing doctors and you had split the sample frame into ethnic groups you would draw 8% of the participants from the Asian group, as you know that 8% of doctors in Britain are Asian.

Quota sampling – In this method researchers will be told to ensure the sample fits with certain quotas, for example they might be told to find 90 participants, with 30 of them being unemployed. The researcher might then find these 30 by going to a job centre. The problem of representativeness is again a problem with the quota sampling method.

Multistage sampling – With multistage sampling, a researcher selects a sample by using combinations of different sampling methods. For example, in Stage 1, a researcher might use systematic sampling, and in Stage 2, he might use random sampling to select a subset for the final sample.

Snowball sampling – With this method, researchers might find a few participants, and then ask them to find participants themselves and so on. This is useful when a sample is difficult to obtain. For example Laurie Taylor used this method when investigating criminals. It would be difficult for him to find a sample as he didn’t know many criminals; however these criminals know a lot of people who would be willing to participate, so it is more efficient to use the snowball method.

3. What is phenomenology? Explain the phenomenological approaches in social research.

Ans: Phenomenology is the philosophical study of the structures of experience and consciousness. Phenomenology is primarily concerned with the systematic reflection on and study of the structures of consciousness and the phenomena that appear in acts of consciousness. Phenomenology can be clearly differentiated from the Cartesian method of analysis which sees the world as objects, sets of objects, and objects acting and reacting upon one another.

Phenomenological Approaches in Social Research

Hermeneutical Phenomenology

Hermeneutical Phenomenology One of the most influential phenomenologies for ethnographic field work is that of Paul Ricoeur (Rasmussen 1971), a French student of Edmund Husserl. Hermeneutics has been derived from the Greek verb hermenéuein, meaning to make something clear, to announce or to unveil a message. Hermeneutics involves a dialogue between a text (e.g., myth, drama, fairy story, dream report, oral history, etc.) and the experiences evoked in people participating in the text. The meaning of the text is developed within the consciousness of living people, so that there is a movement from an initial hearing of the text that may then lead.