Ph.D. Entrance Test - SYLLABUS - 2020

Education

Part - 1

Research Methodology (50%)

1.0 Concept of Educational Research

1.1 Concept of educational research: meaning, characteristics and contribution to knowledge

1.2 Types of research: Basic, Applied, and Action research and basic concept of Qualitative and Quantitative research

1.3 Areas of educational research

1.4 Steps of the research process

2.0 Resources for Research

2.1 Purpose of literature review

2.2 Major steps in a literature review

2.3 Types of sources:

2.4 Library skill: Reading skill and Note taking

2.5 Internet search

3.0 Selection of the Research Problem

3.1 Standards of selection: novelty, uniqueness, originality and researcher skill

3.2 Sources of the selection of the problem

3.3 Narrowing the scope of the problem

3.4 Drafting a research proposal

3.5 Defining the related terms of research problem

4.0 Variables and Hypotheses

4.1 Meaning and types of variables

4.2 Meaning and types of hypotheses

4.3 Hypothesis construction: bases, involving variables

4.4 Testing a hypothesis

5.0 Tools of Research

5.1 Psychological Test: (a) types and its uses (b) general information about construction procedure

5.2 Questionnaire: (a) types, format and basic guidelines for constructing questions and questionnaire, (b) advantages and disadvantages of questionnaire

5.3 Interview: (a) types of interview such as individual & group and structured & unstructured, (b) conduction of interview / interview schedule

5.4 Rating Scales: types, format and basic guidelines for constructing scale

5.5 Measurement of Attitude: Thurston and Likert technique

5.6 Concept of some other tools: format and use of (a) Checklist, (b) Opinionnair (c) observation schedule

5.7 Standardization of research tool: Reliability, Validity , and Norms

6.0 Sampling Technique

6.1 Meaning of population and sample

6.2 Importance of sampling

6.3 Characteristics of a good sample

6.4 Sampling technique: (a) Probability sampling: simple random sampling, stratified random sampling, systematic sampling, cluster sampling. (b) No-probability Sampling: incidental sampling, purposive sampling, quota sampling

6.5 Determining sample size.

7.0 Methods of Research-1

7.1 Historical Method: (a) purpose and steps in doing historical studies, (b) primary and secondary sources including external and internal criticism of source materials, and (c) interpretations in historical research.

7.2 Survey: Problems and method of school surveys, job analysis, documentary analysis, public opinion surveys, community surveys

7.3 Inter Relationship Studies: problems and method of case study, causal comparative study, correlation study

7.4 Developmental Studies: Nature of longitudinal and cross sectional studies

8.0 Methods of Research-2

8.1 Experimental Studies: (a) meaning and characteristics of experimental research, (b) method of control, (c) criteria for selecting (evaluating) an experimental design-appropriateness, adequacy of control, internal validity and external validity, and (d) various types of experimental designs: pre, true and quasi-experimental design.

8.2 Concept of qualitative research., Comparison of qualitative and quantitative research, Brief understanding of methods of qualitative research

9.0 Treatment of Data

9.1 Level of measurement of data

9.2 Treatment of data: editing, coding, classification, tabulation, visualization

9.3 Selection of technique for analysis of data: Descriptive statistics and inferential statistics

9.4 Deriving Conclusions, generalization, and educational implications.

10.0 Writing Research Report

10.1 Divisions of a report: (a) Preliminary part, (b) Content part: problem identification, review of related literature, methodology, analysis and interpretation of data and result section, (c) supplementary part: appendices, references, abstract, glossary of terms

10.2 Format, style, typing, quotations, footnotes, bibliography, pagination, tables, figures, and graphics in the report

10.3 Criteria for evaluating research report

Part - 2

Core Papers (Content) (50%) (UGC NET PAPER II SYLLABUS)

1. Philosophical Foundation of Education

Relationship of Education and Philosophy

Western Schools of Philosophy :

Idealism, Realism. Naturalism, Pragmatism, **E3dstc**;ntialism, Marxism with special reference to the concepts of knowledge, reality and values their educational implications for alms, contents and methods of education.

Indian Schools of Philosophy (Sankhya, Vedanta,. Buddhism, Jainism, Islamic traditions) with special reference to the concept of knowledge, reality and values and their educational implications

Contributions of Vlvekananda, Tagore, Gandhi and Aurobindo to educational thinking

National values as enshrined in the Indian Constitution, and their educational implications

Modern concept of Philosophy : Analysis—Logical analysis. Logical empiricism and Positive relativism—(Morris L. Prigge)

2. Sociological Foundations of Education

Relationship of Sociology and Education

Meaning and nature of Educational sociology and Sociology of education Education—as a social

subsystem—specific characteristics Education and the home

Education and the community with special reference to Indian society

Education and modernization

Education and politics

Education and religion

Education and culture

Education and democracy

Socialization of the child

Meaning and nature of social change

Education as related to social stratification and social mobility

Education as related to social equity and equality of educational opportunities

Constraints on social change in India (caste, ethnicity, class, language, religion, regionalism)

Education of the socially and economically disadvantaged sections of the society with special reference to scheduled castes and scheduled tribes, women and rural population

3. Psychological Foundations of Education

Relationship of Education and Psychology Process of

Growth and Development

—- physical, social, emotional and intellectual

— development of concept formation, logical reasoning, problem solving and creative thinking; language development

— individual differences—detenninants; role of heredity and environment; implications of individual differences for organising educational programmes

Intelligence—its theories and measurement

Learning and Motivation

Theories of learning—Thorndike is connectionism; Pavlov's classical and Skinner's operant conditioning; Learning by insight; Hull's reinforcement

theory and Tolman's theory of learning;' Lewin's-Field theory

— Gagne's hierarchy of learning ~

— Factors influencing learning

— Learning and motivation

— Transfer of learning and its theories

Psychology and education of exceptional children—creative, gifted, backward, learning disables and mentally retarded

Personality—type and trait theories—measurement of personality

Mental health and hygiene—process of adjustment, conflicts and defence mechanism, mental hygiene and mental health. Sex Education

Guidance

4. Methodology of Educational Research

Nature and Scope of Educational Research-Meaning and

Nature Need and Purpose

Scientific Inquiry and Theory Development—some emerging trends in **research** Fundamental—

Applied and Action Research

Formulation of Research Problem

Criteria and sources for identifying the problem

Delineating and Operationalizing variables

Developing assumptions and hypothesis In various types of research

Collection of Data Concept of population and

sample Various methods of sampling

Characteristics of a good sample

Tools and Techniques

Characteristics of a good research tool

Types of research tools and techniques and their uses

Questionnaire-Interviews-Observations

Tests and scales, projective and sociometric techniques

Major Approaches to Research Descriptive

Research Ex-post facto Research Laboratory

Experiment Field Experiment Field Studies

Historical Research

Analysis of Data

Descriptive and Inferential Statistics. The null hypothesis, test of significance, types of error, one-tailed and two-tailed tests

The t-test

The F-test (one-way and ANOVA) Non-parametric tests

(Chi-square test)

Biserial, point-biserial. tetrachoric and phi-coefficient of correlation Partial and multiple correlations