

Psychology Syllabus for Ph.D. Entrance Exam

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Part I

Research Methodology

Introduction

Meaning, objectives and motivations in research, Characteristics and limitations of Research – Components of research work - Criteria of good research, Research Process – Types of Research, Fundamental, Pure or Theoretical Research –Applied Research –Descriptive Research – Evaluation Research –Experimental Research – Survey Research – Qualitative Research – Quantitative Research – Historical Research.

Research Design

Research Design – definition – essentials and types of research design – errors and types of errors in research design. Research problem: Selecting and analyzing the research problem – problem statement formulation – formulation of hypothesis. Literature review: purpose, sources, and importance - literature review procedure.

Measurement. Scaling and Sampling

Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument. Data Collection methods – primary and secondary data – Construction of questionnaire and instrument – validation of instruments. Sample size determination - Sample design and sampling techniques.

Data Analysis and Tools

Processing of Data: Editing of Data – Coding of Data – Classification of Data – Statistical Series. Qualitative vs Quantitative data analyses – Univariate, Bivariate and Multivariate statistical techniques

Measures of Central Tendency, Dispersion, correlation and Regression, Chi-square test: Applications, Steps, characteristics, limitations, Analysis of Variance and Co-variance, Factor analysis – Discriminant analysis – cluster analysis – multiple regression and correlation – multidimensional scaling – Conjoint Analysis -Application of statistical software for data analysis.

Research Report Writing

Research report – Different types – Contents of report –executive summary –chapterization – contents of chapter – report writing – the role of audience –readability – comprehension – tone – final proof – report format – title of the report– Ethical issues in research: Code of Ethics in Research – Ethics and ResearchProcess – Importance of Ethics in Research.

Part II

PSYCHOLOGY

Cognitive Psychology and Cognitive Science

Introduction to cognitive Psychology and Cognitive Science; Cognition and Brain: Basic Principles; Behavioral, Electrophysiological, and Neuroimaging methods; Attention and consciousness; Memory: Visual Memory, STM and Working memory, and Long term Memory; Language, Brain and Cognition; Speech Recognition; Language Development; Reading development; Reading process; Reasoning and Decision making; Gene-Brain-Behavior Link.

Psychological Testing Clinical Assessment and Clinical Assessment

Functions, origins, and application of psychological testing; Item development and item validation; Development of norms and the meaning of test scores; Reliability and Validity of tests; Types of tests. Principles and methods of clinical assessment; Assessment of cognitive functions; Assessment of personality; Assessment of deviance and pathology.

Biological basis of behavior

Neurons; Nerve impulse propagation; Structure and functions of Nervous system; Diversity of life; Structure of genes; Protein synthesis; Cell division; Mendel and post Mendellian developments; Evolution; Behavior genetics – Introduction and Methods.

Learning Theories

Functionalistic Theories (Thurndike, Skinner, and Hull); Associationistic Theories (Pavlov, Guthrie, and Estes); Cognitive Theories (Gestalt, Piaget, Tolman, and Bandura); Biological Theories (Hebb, and Bolles).

Personality

Psychodynamic perspective (Freud, Jung, Adler, Horney, Erikson); Humanistic and Existential perspective (Erich Fromm, Carl Rogers, Maslow); Cognitive perspective (George Kelly, Rotter, Bandura); and Eastern perspective (Indian).

Child and Adult Psychopathology

Attention Deficit Disorder; Oppositional Defiant and Conduct Disorder-causes and management; Childhood Anxiety and Depression Disorders; Enuresis, Encopresis, Sleep walking-Causes and Management; Learning Disability; Autism-causes and management; Mental Retardation-Types, Classifications-causes, prevention and Management. Theories and Models of Anxiety Disorders; Theories and Models of: Somatization, Somatoform and Dissociative disorders; Theories and Models of: Mood, Schizophrenia, and Delusional disorders; Models of personality disorder (Psychodynamic, Behavioral, Cognitive and Biological models).

Psychotherapy and Counseling

Psychoanalytic Technique; Techniques based on Counter Conditioning; Techniques based on Operant conditioning; Techniques based on Cognitive Behavioral Approaches: Beck, Ellis. Person-centred and Gestalt therapies; Family and marital therapies; Transpersonal approach; Body-centred therapy, Yoga and Holistic approach. Individual counseling – approaches and techniques; Group counseling – approaches and techniques; Counseling for career planning and decision making, Life skills and counseling.

Organizational Behavior and Organizational Development:

Introduction to Organizational Behavior; Leadership and Teams at work; Motivation in Organization; Communication and Decision Making. Overview of organization Development; The Process of Organization Development - Diagnosing the problems; Designing Interventions and Leading and Managing Change.

Organizational Psychology and Human Resource Development

The field of organizational behavior (history, subject matter, and scope); Leadership and Teams at work; Motivation in Organization; Communication and Decision Making; Training and development; Need Assessment, Training Design & Implementation; Evaluating the training Effectiveness; Performance Appraisal; HR Planning and recruitment; Future challenges: Indian & Global.