

# **Department of Psychology**

## **Syllabus for Ph.D. Entrance Test for Session 2023-24**

### **Section- A**

#### **(Research Methodology)**

##### **RESEARCH METHODS AND STATISTICS IN PSYCHOLOGY**

Parametric Vs Non-Parametric Statistics. Scales of Measurement, Tests of Significance: t-test, z-test, chi-square test. Correlation: Nature, assumptions and types: Pearson's product Moment Method Spearman's Rank order correlation. Biserial, Point-Biserial, Tetrachoric and Phi-co-efficient methods. Partial and Multiple correlation (Three Variables). Simple and Multiple Regression (Three Variables). Factor Analysis: Nature and Basic Assumptions, Principal Axis, Principal Component and Centroid methods, Rotation, Problems of factor analysis.

Types of Research: Naturalistic observation, Experimental and Correlational research, Field Studies, Survey Research, Ex-post Facto research. Quasi-Experimental Designs and Single Subject Designs Nature and Assumptions of ANOVA. Randomized Group and Randomized Block Designs, Latin Square. Factorial Designs: Two way and three way ANOVA Multiple Comparison tests: Duncan's and Newmankeuls Tests. ANCOVA of Randomized Group Design.

Tests: Nature and types of Psychological tests. Test construction and standardization: Item writing, Item Analysis, Item difficulty and Item Discrimination. Reliability: Nature and types, Factors influencing reliability of test, Reliability of speed tests. Validity: Nature and Types, Factors influencing validity of test Norms: Nature and types (Age norms, grade norms, percentiles, standard scores) Attitude Scales: Bogardus, Thurstone, Guttman and Likert Ethical issues in testing.

Scientific Research: Meaning, Stages of research, Types of research : Observation, Experimental and Correlational research. Sampling: Concept and Types. Cross Cultural Research: Types- Emic and Etic Strategies. Qualitative Research: Nature and methods: Phenomenology, Ethnography, Grounded theory and Focused groups. Sociometry: Concept, Method of analysis. Interview: Nature and types of Interview.

### **SECTION- B**

#### **(SUBJECT)**

##### **SYSTEMS OF PSYCHOLOGY**

Structuralism & Functionalism: Basic postulates & their contributions to the emergence of psychology as a science. Behaviorism & Gestalt Psychology: Basic Postulates & their contributions to Psychology. Psychoanalysis: Postulates and Contribution (Freud, Adler and Jung) Humanistic Psychology: Postulates & Contributions. Phenomenological and Existential perspectives in Psychology.

##### **SOCIAL PSYCHOLOGY AND ITS APPLICATIONS**

Social Psychology: Nature and Research Methods. Social Psychology in the New Millennium: Evolutionary, Multi-cultural and Cognitive Perspective. Nature of Groups . Major Group Processes: Social Facilitation, Social Loafing, Deindividuation. Theories of Social Psychology: Social Consistency (Cognitive Dissonance Theory, Balance Theory), Social Exchange Theory, Attribution Theory (Kelley, Jones & Davis, Weiner). Social Influence Processes: Altruism: Nature & Theoretical Perspectives. Interpersonal Attraction: Concept & Theoretical Perspectives. Aggression: Nature & Theoretical Perspectives.

##### **PHYSIOLOGICAL PSYCHOLOGY**

Physiological Psychology: Nature. Research Methods: Stimulation, Ablation, Behavioural & Neuropsychological Testing: Neuron: Types & Functions. Central Nervous System and Peripheral Nervous System: Structure & Functions. Endocrine Glands: Characteristics, Types and Functions.

##### **COGNITIVE PROCESSES**

Cognitive Psychology: Nature, Domains of Cognitive Psychology: Cognitive neuroscience, Pattern Recognition, Artificial Intelligence and consciousness Attention: Characteristics, Models. Perception: Nature, Determinants, Perceptual Organization, Perceptual Constancy. Memory: Types and Models. Forgetting: Nature and Theories. Thinking: Types, Tools, Problem Solving: Strategies & Factors. Concept Formation: Nature, Types, Factors. Reasoning: Types and Errors. Intelligence: Theories and Assessment

## ENVIRONMENTAL PSYCHOLOGY

Environmental Psychology-Nature and Scope Theoretical Perspective: Brunswik, Gibson, Barker, Brofenbrenner. Personal Space: Nature and Theories. Territoriality: Theories and Measurement. Environmental Problems with reference to India: Population density, Pollution: Noise, air and water Environment and Role of Psychologist in environment management

## PERSONALITY THEORIES AND ASSESSMENT

Personality : Concept, Assumptions concerning Human Nature. Nature of Personality Theory. Psychoanalytic Theory and Post Freudian developments : Freud, Jung, Adler, Fromm, Erikson. Trait Theories : Allport, Cattell, Eysenck, Big Five Model. **Socio** Learning Theory : Bandura Cognitive Theory : Kelley's Personal-Construct Theory Humanistic Phenomenological Perspective : Rogers, Maslow Personality Assessment : Foundations, Assumptions.

Clinical versus Statistical Prediction Psychometric Tests : MMPI, CPI,EPI, Cattell's 16 PF, NEO Five factor Inventory Projective Tests : Rorschach Inkblot technique, TAT, Word Association Test, Sentence Completion Test Testing of Cultural and Linguistic Minorities Ethical Issues in Testing