

# Syllabus for Ph.D. (Psychology) Entrance Exam Paper -II

#### **UNIT-1**

# **Emergence of Psychology systems**

- 1.1 Psychological thought in some major Eastern Systems: Bhagavad Gita, Buddhism, Sufism and Integral Yoga. Academic psychology in India: Pre-independence era; post-independence era; 1970s: The move to addressing social issues; 1980s: Indigenization; 1990s: Paradigmatic concerns, disciplinary identity crisis; 2000s: Emergence of Indian psychology in academia.
- 1.2 Issues: The colonial encounter; Post colonialism and psychology; Lack of distinct disciplinary identity.
- 1.3 Western: Greek heritage, medieval period and modern period. Structuralism, Functionalism, Psychoanalytical, Gestalt, Behaviorism, Humanistic-Existential, Transpersonal, Cognitive revolution, Multiculturalism. Four founding paths of academic psychology Wundt, Freud, James, Dilthey.
- 1.4 Issues: Crisis in psychology due to strict adherence to experimental-analytical paradigm (logical empiricism). Indic influences on modern psychology. Essential aspects of knowledge paradigms: Ontology, epistemology, and methodology.
- 1.5 Paradigms of Western Psychology: Positivism, Post-Positivism, Critical perspective, Social Constructionism, Existential Phenomenology, and Co-operative Enquiry. Paradigmatic Controversies.
- 1.6 Significant Indian paradigms on psychological knowledge: Yoga, Bhagavad Gita, Buddhism, Sufism, and Integral Yoga. Science and spirituality (avidya and vidya). The primacy of self-knowledge in Indian psychology.

#### UNIT-2

# **Research Methodology and Statistics**

- 2.1 Research: Meaning, Purpose, and Dimensions. Research problems, Variables and Operational Definitions, Hypothesis, Sampling.
- 2.2 Ethics in conducting and reporting research Paradigms of research: Quantitative, Qualitative, Mixed methods approach
- 2.3 Methods of research: Observation, Survey [Interview, Questionnaires], Experimental, Quasiexperimental, Field studies, Cross-Cultural Studies, Phenomenology, Grounded theory, Focus groups, Narratives, Case studies, Ethnography Statistics in Psychology: Measures of Central Tendency and Dispersion.
- 2.4 Normal Probability Curve. Parametric [t-test] and Non-parametric tests [Sign Test, Wilcoxon Signed rank test, Mann-Whitney test, Kruskal-Wallis test, Friedman]. Power analysis. Effect size.
- 2.5 Correlational Analysis: Correlation [Product Moment, Rank Order], Partial correlation, multiple correlation. Special Correlation Methods: Biserial, Point biserial, tetrachoric, phi coefficient. Regression: Simple linear regression, Multiple regression.
- 2.6 Factor analysis: Assumptions, Methods, Rotation and Interpretation.
- 2.7 Experimental Designs: ANOVA [One-way, Factorial], Randomized Block Designs, Repeated Measures Design, Latin Square, Cohort studies, Time series, MANOVA, ANCOVA. Single-subject designs.

# UNIT-3 Psychological testing

- 3.1 Types of tests Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms
- 3.2 Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories
- 3.3 Attitude scales Semantic differential, Staples, Likert scale.
- 3.4 Computer-based psychological testing.
- 3.5 Applications of psychological testing in various settings: Clinical, Organizational and business, Education, Counseling, Military. Career guidance.

#### **UNIT-4**

#### **Biological basis of behavior**

- 4.1 Sensory systems: General and specific sensations, receptors and processes Neurons: Structure, functions, types, neural impulse, synaptic transmission.
- 4.2 Neurotransmitters. The Central and Peripheral Nervous Systems Structure and functions. Neuroplasticity.
- 4.3 Methods of Physiological Psychology: Invasive methods Anatomical methods, degeneration techniques, lesion techniques, chemical methods, microelectrode studies.
- 4.4 Non-invasive methods EEG, Scanning methods. Muscular and Glandular system: Types and functions.
- 4.5 Biological basis of Motivation: Hunger, Thirst, Sleep and Sex. Biological basis of emotion: The Limbic system, Hormonal regulation of behavior. Genetics and behavior: Chromosomal anomalies; Nature-Nurture controversy [Twin studies and adoption studies]

#### **UNIT-5**

## Attention, Perception, Learning, Memory and Forgetting

- 5.1 Attention: Forms of attention, Models of attention
- 5.2 Perception: Approaches to the Study of Perception: Gestalt and physiological approaches Perceptual Organization: Gestalt, Figure and Ground, Law of Organization
- 5.3 Perceptual Constancy: Size, Shape, and Color; Illusions Perception of Form, Depth and Movement
- 5.4 Role of motivation and learning in perception. Signal detection theory: Assumptions and applications.
- 5.5 Subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles, Pattern recognition, Ecological perspective on perception.
- 5.6 Learning Process: Fundamental theories: Thorndike, Guthrie, Hull Classical Conditioning: Procedure, phenomena and related issues
- 5.7 Instrumental learning: Phenomena, Paradigms and theoretical issues; Reinforcement: Basic variables and schedules; Behaviour modification and its applications
- 5.8 Cognitive approaches in learning: Latent learning, observational learning. Verbal learning and Discrimination learning
- 5.9 Recent trends in learning: Neurophysiology of learning Memory and Forgetting
- 5.10 Memory processes: Encoding, Storage, Retrieval Stages of memory: Sensory memory, Short-term memory (Working memory), Long-term Memory (Declarative Episodic and Semantic; Procedural)
- 5.11Theories of Forgetting: Interference, Retrieval Failure, Decay, Motivated forgetting.

#### IINIT-6

# Thinking, Intelligence and Creativity

- 6.1 Theoretical perspectives on thought processes: Associationism, Gestalt, Information processing, Feature integration model
- 6.2 Concept formation: Rules, Types, and Strategies; Role of concepts in thinking
- 6.3 Types of Reasoning Language and thought
- 6.4 Problem solving: Type, Strategies, and Obstacles Decision-making: Types and models
- 6.5 Metacognition: Metacognitive knowledge and Metacognitive regulation

- 6.6 Intelligence: Spearman; Thurstone; Jensen; Cattell; Gardner; Stenberg; Goleman; Das, Kar & Parrila
- 6.7 Creativity: Torrance, Getzels& Jackson, Guilford, Wallach & Kogan Relationship between Intelligence and Creativity

#### **UNIT-7**

## Personality, Motivation, emotion, stress and coping

- 7.1 Determinants of personality: Biological and socio-cultural
- 7.2 Approaches to the study of personality: Psychoanalytical, Neo-Freudian, Social learning, Trait and Type, Cognitive, Humanistic, Existential, Transpersonal psychology.
- 7.3 Other theories: Rotter's Locus of Control, Seligman's Explanatory styles, Kohlberg's theory of Moral development.
- 7.4 Basic motivational concepts: Instincts, Needs, Drives, Arousal, Incentives, Motivational Cycle.
- 7.5 Approaches to the study of motivation: Psychoanalytical, Ethological, S-R Cognitive, Humanistic Exploratory behavior and curiosity Zuckerman's Sensation seeking Achievement, Affiliation and Power.
- 7.6 Motivational Competence Self-regulation Flow Emotions: Physiological correlates
- 7.7 Theories of emotions: James-Lange, Canon-Bard, Schachter and Singer, Lazarus, Lindsley.
- 7.8 Emotion regulation Conflicts: Sources and types Stress and Coping: Concept, Models, Type A, B, C, D behaviors,
- 7.9 Stress management strategies [Biofeedback, Music therapy, Breathing exercises, Progressive Muscular Relaxation, Guided Imagery, Mindfulness, Meditation, Yogasana, Stress Inoculation Training].

#### **UNIT-8**

## **Social Psychology**

- 8.1 Nature, scope and history of social psychology
- 8.2 Traditional theoretical perspectives: Field theory, Cognitive Dissonance, Socio-biology, Psychodynamic Approaches, Social Cognition.
- 8.3 Social perception [Communication, Attributions]; attitude and its change within cultural context; prosocial behavior
- 8.4 Group and Social influence [Social Facilitation; Social loafing]; Social influence [Conformity, Peer Pressure, Persuasion, Compliance, Obedience, Social Power, Reactance].
- 8.5 Aggression. Group dynamics, leadership style and effectiveness. Theories of intergroup relations [Minimal Group Experiment and Social Identity Theory, Relative Deprivation Theory, Realistic Conflict Theory, Balance Theories, Equity Theory, Social Exchange Theory]
- 8.6 Applied social psychology: Health, Environment and Law; Personal space, crowding, and territoriality.

#### **UNIT-9**

#### **Human Development and Interventions**

- 9.1 Developmental processes: Nature, Principles, Factors in development, Stages of Development.
- 9.2 Successful aging. Theories of development: Psychoanalytical, Behavioristic, and Cognitive Various aspects of development: Sensory-motor, cognitive, language, emotional, social and moral.
- 9.3 Psychopathology: Concept, Mental Status Examination, Classification, Causes
- 9.4 Psychotherapies: Psychoanalysis, Person-centered, Gestalt, Existential, Acceptance Commitment Therapy, Behavior therapy, REBT, CBT, MBCT, Play therapy, Positive psychotherapy, Transactional Analysis, Dialectic behavior therapy, Art therapy, Performing Art Therapy, Family therapy.
- 9.5 Applications of theories of motivation and learning in School Factors in educational

achievement Teacher effectiveness Guidance in schools: Needs, organizational set up and						
techniques Counselling: Process, skills, and techniques.						

UNIT-10 Emerging Areas

- 10.1 Issues of Gender, Poverty, Disability, and Migration: Cultural bias and discrimination. Stigma, Marginalization, and Social Suffering; Child Abuse and Domestic violence.
- 10.2 Peace psychology: Violence, non-violence, conflict resolution at macro level, role of media in conflict resolution.
- 10.3 Wellbeing and self-growth: Types of wellbeing [Hedonic and Eudemonic], Character strengths, Resilience and Post-Traumatic Growth.
- 10.4 Health: Health promoting and health compromising behaviors, Life style and Chronic diseases [Diabetes, Hypertension, Coronary Heart Disease], Psychoneuroimmunology [Cancer, HIV/AIDS]
- 10.5 Psychology and technology interface: Digital learning; Digital etiquette: Cyber bullying; Cyber pornography: Consumption, implications; Parental mediation of Digital Usage.

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