

**DEPARTMENT OF PSYCHOLOGY**  
**ESWARI SCHOOL OF LIBERAL ARTS AND SOCIAL SCIENCES**  
**SRM UNIVERSITY AP**

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**Ph.D. Entrance Exam Syllabus (2023 - 24 onwards)**

**1. Research Methodology and Statistics Research:**

Meaning, Purpose, and Dimensions. Research problems, Variables and Operational Definitions, Hypothesis, Sampling. Ethics in conducting and reporting research Paradigms of research: Quantitative, Qualitative, Mixed methods approach Methods of research: Observation, Survey [Interview, Questionnaires], Experimental, Quasi-experimental, Field studies, Cross-Cultural Studies, Phenomenology, Grounded theory, Focus groups, Narratives, Case studies, Ethnography Statistics in Psychology: Measures of Central Tendency and Dispersion. 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. 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. Factor analysis: Assumptions, Methods, Rotation and Interpretation.

**2. Psychological testing Types of tests Test construction:**

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

**3. Biological basis of behaviour Sensory systems:**

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

**4. Attention, Perception, Learning, Memory and Forgetting Attention:**

Forms of attention, Models of attention Perception: Approaches to the Study of Perception: Gestalt and physiological approaches. Perceptual Organization: Gestalt, Figure and Ground, Law of Organization Perceptual Constancy: Size, Shape, and Colour; Illusions Perception of Form, Depth and Movement Role of motivation and learning in perception. Signal detection theory: Assumptions and applications, Subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles, Pattern

recognition, Ecological perspective on perception. Learning Process: Fundamental theories: Thorndike, Guthrie, Hull Classical Conditioning: Procedure, phenomena and related issues Instrumental learning: Phenomena, Paradigms and theoretical issues; Reinforcement: Basic variables and schedules; Behaviour modification and its applications Cognitive approaches in learning: Latent learning, observational learning. Verbal learning and Discrimination learning Recent trends in learning: Neurophysiology of learning Memory and Forgetting Memory processes: Encoding, Storage, Retrieval Stages of memory: Sensory memory, Short-term memory (Working memory), Long-term Memory (Declarative – Episodic and Semantic; Procedural) Theories of Forgetting: Interference, Retrieval Failure, Decay, Motivated forgetting.

### **5. Thinking, Intelligence and Creativity Theoretical perspectives on thought processes:**

Associationism, Gestalt, Information processing, Feature integration model Concept formation: Rules, Types, and Strategies; Role of concepts in thinking Types of Reasoning Language and thought Problem solving: Type, Strategies, and Obstacles Decision-making: Types and models Metacognition: Metacognitive knowledge and Metacognitive regulation Intelligence: Spearman; Thurstone; Jensen; Cattell; Gardner; Stenberg; Goleman; Das, Kar & Parrila Creativity: Torrance, Getzels & Jackson, Guilford, Wallach & Kogan Relationship between Intelligence and Creativity.

### **6. Personality, Motivation, emotion, stress and coping Determinants of personality:**

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

### **7. Social Psychology**

Nature, Scope, and History of social psychology, Traditional theoretical perspectives: Field theory, Cognitive Dissonance, Sociobiology, Psychodynamic Approaches, Social Cognition. Social perception [Communication, Attributions]; attitude and its change within cultural context; prosocial behaviour Group and Social influence [Social Facilitation; Social loafing]; Social influence [Conformity, Peer Pressure, Persuasion, Compliance, Obedience, Social Power, Reactance]. 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] Applied social psychology: Health, Environment and Law; Personal space, crowding, and territoriality.

### **8. Emerging Areas**

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

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