

# Syllabus for Ph.D. Entrance Test

## Unit I: Perception, Learning, Memory and Forgetting

**Perception:** Theories of perception- Gestalt, Behaviouristic and Physiological theory;

**Learning:** Theories of Learning- Thorndike, Pavlov's Classical Conditioning; Cognitive approaches in learning- Latent learning, Observational learning, Verbal learning and Discrimination learning; **Memory:** Types of memory; Models of memory- Structural model, Information processing model, Level of processing model; **Forgetting:** Theories of forgetting-Decay theory, Interference theory, Failure of retrieval theory and Motivated forgetting theory;

## Unit II: Thinking, Intelligence and Creativity

**Thinking:** Thinking and Imagination; cognitive map; Theories of Thinking; Role of set in thinking; Problem solving-Types and strategies; Decision making-Types and models;

**Intelligence:** Theories of Intelligence- Spearman, Thurston and Thorndike, Measurement of Intelligence **Creativity:** Nature and stages; Factor influencing Creativity; **Artificial intelligence;** Relationship between intelligence and creativity.

## Unit III: Personality, Motivation, Emotion

**Personality:** Indian approaches to personality; Psychoanalytic Theory; Neo-Freudian Theory; Social Learning Theory- Dollard and Miller, Bandura; The Humanistic Theories- Carl Rogers' Self theory; Maslow's Self- Actualization theory; Determinants of Personality- Biological and Socio-cultural; **Motivation:** Basic motivational concepts: Instincts, Needs, Drives, Arousal, Incentives; Motivational Cycle; Social Motives- Achievement, Affiliation and Power; **Emotion:** Theories of emotions- James-Lange, Canon-Bard.

## Unit IV: Biological basis of Behaviour

**Neuron:** Structure, functions, types, nerve impulse, synaptic transmissions; Neurotransmitters; **The Central and Peripheral Nervous Systems-** Structure and functions. Methods of Physiological Psychology; **Biological basis of Motivations-** Hunger,

Thirst, Sleep, Pain and Sex; **Biological basis of Emotion**- The Limbic system, Hormonal regulation of behaviour.

### **Unit V: Psychological Research**

**Types of research**; Stages of research; **Hypothesis**-Types of hypothesis- Directional - Non directional and Null hypothesis; **Research design**-Types of research design-Experimental and Non-Experimental research design; **Sampling**- Probability and Non-probability sampling; **Research Method**- Interview, Observation and Questionnaire-Nature and types of questionnaire.

### **Unit VI: Social Psychology**

Status of social psychology in India; **Social perception** and Group affiliation; Subliminal perception; **Self-perception** and Social cognition; **Group dynamics** and Group cohesiveness; Group and social influence; **Intergroup conflict**; Leadership styles and effectiveness; **Pro-social behaviour**-Nature and factors; Ways of increasing pro-social behaviour.

### **Unit VII: Abnormal Psychology**

**Models of abnormal behavior**-Psychodynamic Model; Humanistic Model; Biological Model; Socio-cultural Model.**Types of Psychosomatic disorder**- Hypertension, Gastro-Intestinal disorder, Asthma, Peptic ulcers, Skin disorder and Endocrine disorder. **Anxiety Disorders**: Generalized anxiety disorder; Post-Traumatic Stress disorder. Anti-Social Personality Disorder; **Mental Retardation**.

### **Unit VIII: Statistics**

Application of statistics in psychology; Measurement in psychology; **The Normal Distribution**: Nature and properties of Normal distribution curve; Application of normal distribution curve; **co-efficient of correlation**:

Nature, Types and Utility of correlation; Pearson's product moment correlation; **Null Hypothesis**: Computation of t- value- For correlated and uncontrolled means, Interpretation

of t- value; **Analysis of Variance (ANOVA):** Parametric and Non-parametric statistics- **Chi-Square Test.**

### **Unit IX: Developmental Psychology**

Aims and Uses of Development Psychology, Developmental stages, Various aspects of development: Sensory-motor, emotional and social; Factors influencing social development; Nature vs. Nurture; **Play Behaviour**-Theories of play; Importance of play behaviour.

### **Unit X: Psychological Testing**

**Test construction:** Item writing, Item analysis; **Test standardization:** Reliability, Validity and Norms; **Types of Test:** Intelligence, Creativity, Aptitude, and Personality; **Personality assessment-** Inventory, Questionnaire and Projective Technique- RT, TAT; **Attitude scales-** Semantic differential and Likert scale; **Application of Psychological testing in various settings-** Clinical, Organizational, Education, Counseling, Military, Career and Guidance.

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