



JSPM UNIVERSITY PUNE



# SYLLABUS



Research Program Entrance Test

## **Subject Concerned Syllabus**

### **Psychology**

#### **Chapter 1: SENSATION, ATTENTION AND PERCEPTION**

1. Sensation - Introduction to psychophysics: Basic concepts and methods.
2. Attention:
  - (a) Functions of attention: Divided attention, selective attention
  - (b) Theories of attention process
  - (c) Signal Detection Theory and vigilance.
3. Perception-approaches: Gestalt, Bottom-Up (feature analysis, template matching, prototypes), Top-Down and Pandemonium
4. Perception: Cross-cultural studies

#### **Chapter 2: PROBLEM SOLVING, CREATIVITY AND DECISION MAKING**

1. Problem: Definition, problem solving cycle, types, obstacles and aids
2. Problem solving approaches – Algorithm; heuristics: means-end analysis, computer simulation, and analogy
3. Meaning and measurement of creativity
4. Reasoning and decision-making: Types of reasoning – Syllogistic and Conditional
5. Factors influencing decision-making.

#### **Chapter 3: RELIABILITY**

1. Correlation coefficient: Meaning, statistical significance, reliability coefficient
2. Definition and types of reliability
3. Reliability of speeded tests
4. Dependence of reliability on the sample tested
5. Using reliability information

#### **Chapter 4: VALIDITY**

1. Validity: Definition and evolving concepts
2. Content-description validation procedures
3. Criterion-prediction procedures
4. Construct-identification procedures
5. Test validity and decision theory

#### **Chapter 5: TYPES OF MEMORY**

1. Sensory memory- Iconic and echoic
2. Short Term Memory

3. Long Term Memory: Types
4. Determinants of memory
5. Memory improvement techniques

### **Chapter 6: NEUROLOGICAL BASIS OF LEARNING AND MEMORY**

1. Brain areas associated with learning and memory
2. Types of Amnesia- Amnesia after concussion (Anterograde, Retrograde), Korsakoff, Alzheimer's disease
3. Role of brain in learning and conditioning
4. Synaptic mechanisms and synaptic plasticity of learning and memory
5. Application: Neuro-linguistic programming.

### **Chapter 7: INTRODUCTION TO PERSONALITY**

1. Nature and meaning of personality
2. Approaches to the study of personality: Idiographic, Nomothetic, and Person-situation interaction
3. Applications of personality: Clinical, industrial, and educational areas.
4. Personality Assessment: MMPI, NEO-FFI, Projective techniques.

### **Chapter 8: APPROACHES OF PERSONALITY**

1. Psychodynamic approaches: Psychoanalysis, ego and object relations—Carl Jung, Adler, Horney, Erickson and Freud
2. Trait and biological approaches: Allport, Cattell, Eysenck, Costa & McCrae
3. Phenomenological Approaches: Carl Rogers, Maslow
4. Behavioral approaches: Dollard & Miller, Skinner, Rotter
5. Social Cognitive-Affective Approaches: Bandura, George Kelly,
6. Existential approaches: Victor Frankl, Rollo May's theory

### **Chapter 9: FOUNDATION AND THEORIES OF MOTIVATION**

1. The Nature, concept and component of motivation
2. Approaches of motivation: Physiological, socio-cultural, cognitive, ethical and developmental- interactionistic
3. Theories of motivation: Murray, Maslow, McClelland, and Atkinson
4. Theories of aggression: Lorenz, Bandura and Walter's theory
5. Mechanism of hunger and thirst, sleep and sex, social attachment

### **Chapter 10: FOUNDATION AND THEORIES OF EMOTION**

1. Nature and concept of emotion
2. Emotions and culture

3. Biological bases of emotion: Autonomic nervous system, endocrine system, immune system, psycho-physiological measures
4. Theories of motivation: James-Lange, Cannon-Bard, Schachter and Singer, Frizda, Papez & McLean's theory of emotion, Broaden & Build theory of positive emotion
5. Self-esteem, optimism and emotional intelligence

### **Chapter 11: PSYCHOLOGICAL TESTING APPLICATIONS**

1. Educational applications: SPM, WAIS, Binet-Kamath test, Malin's intelligence scale, DAT, GATB
2. Clinical applications: MMPI, California Psychological Inventory, 16 PF, NEO-PIR, EPQ-R, Mooney's Problem Checklist, Projective tests
3. Industrial applications: MBTI, FIRO-B, Role plays & situational tests, Inbasket Exercise
4. Counseling applications: STAI, STAXI, FES
5. Neuropsychological testing: Bender-Gestalt, NAB