Syllabus for the Recruitment Test for the post of

Assistant Professor (College Cadre) in the subject of

Psychology

1. Perceptual Processes

Approaches to the Study of Perception : Gestalt and physiological approaches.

Perceptual Organization: Gestalt, Figure and Ground, Laws of Organization.

Perceptual Constancy: Size, Shape and Brightness, Illusion; Perception of Depth and Movements.

Role of motivation and learning in perception.

Signal detection theory, subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles. Ecological perspective on perception.

2. Learning Process

Classical conditioning: Procedure, Phenomena and related issues.

Instrumental learning: Phenomena, Paradigms and theoretical issues.

Reinforcement: Basic variables and schedules.

Verbal learning: Methods and materials, organizational processes.

Learning theories: Hull, Tolman, Skinner.

Cognitive approaches in learning: Latent learning, observational learning.

Experimental analysis of behaviour: Behaviour modification, shaping Discrimination learning.

Neurophysiology of learning.

3. Memory and forgetting

Memory Processes: Encoding, Storage, Retrieval.

Stages of Memory: Sensory memory, Short - term Memory (STM) and Long - term Memory (

LTM).

Episodic and Semantic memory.

Theories of Forgetting: Interference, decay, retrieval.

Models of memory: Atkinson and Shiffrin, Craik and Lockhart, Tulving.

Semantic memory: Episodic, trace model and network model.

Long – term memory : Retrieval cues, flashbulb memory, constructive processes in memory, eyewitness testimony, autobiographical memory.

Biological basis of memory: The search for the engram, PET scan, and biochemical factors in memory.

Improving memory: Strategies.

4. Thinking and Problem Solving

Theories of thought processes: Associationism, Gestalt, Information processing.

Concept formation: Rules and strategies.

Reasoning: Deductive and inductive.

Problem – Solving: Type and strategies.

Role of concepts in thinking.

Cognitive Strategies : Algorhythms and heuristics.

Convergent and divergent thinking.

Decision – making; impediments to problem – solving.

Creative thinking and problem – solving.

Language and thought.

5. Motivation and Emotion

Basic Motivational Concepts: Instincts, needs, drives, incentives, motivational cycle.

Approaches to the Study of Motivation : Psychoanalytical, ethological, S – R Cognitive, humanistic.

Biological Motives: Hunger, thirst, sleep and sex.

Social Motives: Achievement, affiliation, approval

Exploratory behaviour and curiosity

Physiological correlates of emotions.

Theories of emotions: James – Lange, Canon – Bard, Schachter and Singer.

Conflicts: Sources and types.

Historical antecedents of motivation from Mechanism to Cognition.

Cognitive bases of motivation: Intrinsic motivation, Attribution, Competence.

Measurement of motives: Issues and techniques.

Cross – cultural perspectives of motivation : Achievement, Aggression.

Components of Emotion: Physiological, expressive and cognitive.

Neural mechanism of emotion: Central and peripheral.

Measurent of Emotions: Physiological, expressive and cognitive measures.

Current theories of emotions and facial feedback hypothesis.

Stress and coping: Reactions to stress, outcomes of stress.

6. Human Abilities

Intelligence: Biological, Social, Eco – cultural determinants.

Theories of intelligence: Spearman, Thurston, Guilford.

Individual and group differences: Extent and causes.

Measurement of human abilities.

Theories of intelligence: Cattell, Jensen, Sternberg Goleman.

Creativity: Views of Torrance, Getzels, Guilford.

Intelligence and creativity: Relationship.

Abilities and achievement: Concept and role of emotional intelligence.

7. Personality

Determinants of personality: Biological and socio – cultural.

Approaches to the study of personality: Psychoanalytic, neo – freudian, social learning, trait and type, cognitive.

Personality Assessment: Psychometric and projective tests.

Self – Concept: Origin and development.

Clinical and growth approaches to personality.

Existential and humanistic theories of personality: Frankl, Rollo May, Maslow, Rogers.

Personality assessment: Projective, psychometric and behavioural measures.

Psychology of self: Western and Eastern perspectives, measurement of self.

8. Research Methodology

Research problems, hypothesis, variables and their operationalization

Types of psychological research.

Methods of Psychological Research : Experimental, Quasi – experimental, case studies, field studies and cross – cultural studies.

Methods of data collection : Observation, interview, questionnaire, tests and scales. Non – parametric tests

Research designs: Correlational, factorial, randomized block, matched group, quasi - experimental,

time series design.

ANOVA: Randomized and repeated.

Correlational analysis: Partial, multiple and regression analysis.

Factor analysis: Assumptions, methods, rotation and interpretation.

9. Measurement and Testing

UGC NET Test Construction: Item writing, item analysis.

UGC NET Test Standardization: Reliability, validity and norms.

Types of Tests: Intelligence, aptitude, personality – characteristics and important examples.

Attitude scales and interest inventories.

Educational measurement and evaluation.

Psychological scaling: Purpose and methods.

Sources of bias in psychological testing.

Ethical issues in psychological testing.

Application of factor analysis in standardization of tests – with Important illustrations.

10. Biological Basis of Behaviour

Receptors, effectors and adjuster mechanisms.

Neural impulse: Origin, conduction and measurement.

Sensory system: Vision and Audition.

Methods of Physiological psychology: Lesion and Brain Stimulation.

Sleep and waking: Stages of sleep, Disorders of sleep and Physiological mechanisms of sleep and

waking.

Ingestive Behaviour: Drinking and its neural mechanism; hunger and its neural mechanism.

Endocrine System: Chemical and glandular.