PSYCHOLOGY
SYLLABUS AND SAMPLE QUESTIONS

PAPER—II

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

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

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

4. Thinking and Problem Solving
   Theories of thought processes: Associationism, Gestalt, Information processing
   Concept formation: Rules and strategies
   Reasoning: Deductive and inductive
   Problem-solving: Types and strategies
   Role of concepts in thinking

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

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

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

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

9. Measurement and Testing
   Test construction : Item writing, item-analysis
   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

10. Biological Basis of Behaviour
    Receptors, effectors and adjuster mechanisms
    Neural impulse : Origin, conduction and measurement
    Sensory System : Vision and Audition
    Human nervous system : Structure and functions
Unit—I
Signal detection theory, subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles, Ecological perspective on perception.

Unit—II
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

Unit—III
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

Unit—IV
Cognitive strategies: Algorhythms and heuristics
Convergent and divergent thinking
Decision-making: impediments to problem-solving
Creative thinking and problem-solving
Language and thought

Unit—V
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
Measurement of emotions: Physiological, expressive and cognitive measures
Current theories of emotions and facial feedback hypothesis
Stress and coping: Reactions to stress, outcomes of stress
Unit—VI
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

Unit—VII
Clinical and growth approaches to personality
Existential and humanistic theories of personality: Frankl, Rollo May, Maslow, Rogers
Personality assessment: Projective, psychometric and behavioural measures

Unit—VIII
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

Unit—IX
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

Unit—X
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

PAPER—III (B)
(ELECTIVE/OPTIONAL)

Elective—I
Current trends in Social Psychology
Social cognition
Social influence
Prosocial behaviour
Anti-social behaviour
Applied social psychology: Health, Environment and Law
Elective—I

Elective—III
Human development and individual differences
Motivation and learning
Factors in educational achievement
Social psychology of education
Teacher effectiveness
Guidance in schools: Needs organizational set up and techniques
Counselling: Process and areas

Elective—IV
Development of industrial and organizational psychology
Selection processes in organization
Organizational training
Performance appraisal
Motivation and work
Leadership
Work environment
Organizational behaviour: Theories, socialization, effectiveness

Elective—V
Psychopathology: Concepts, classification and causes; clinical diagnostics
Common clinical disorders
Mental retardation
Mental Health: Intervention models and psychotherapies

SAMPLE QUESTIONS
PAPER—I

1. Delayed conditioning is known as
   (A) CS begins far before the US is presented
   (B) CR gets established but it changes
   (C) CS elicits the CR
   (D) CS is more powerful than CR

2. Match the item of List-I with List-II

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Needs</td>
<td>1. Mcdougall</td>
</tr>
<tr>
<td>B. Instincts</td>
<td>2. Allport</td>
</tr>
<tr>
<td>C. Sentiments</td>
<td>3. Murray</td>
</tr>
<tr>
<td>D. Traits</td>
<td>4. Freud</td>
</tr>
</tbody>
</table>
3. Mohit is a young man who strives for excellence and feels satisfied when he can master a new task. Mohit has need for
(A) Competence
(B) Power
(C) Approval
(D) Achievement