

PSYCHOLOGY
(Subject Code-37)

UNIT- 1. Foundations of Psychology

Historical roots of psychology; Schools of psychology
Approaches to Psychology: Behaviouristic, Psychodynamic, Gestalt, Cognitive, & Humanistic
Methods of psychology: Experimental, Correlational, Survey, Longitudinal & Cross-sectional, and Case study.
Biological bases 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.
Neurophysiological methods: EEG, PET, MRI, & fMRI.
Neuropsychological assessment: Approaches and popular neuropsychological assessment batteries: Luria-Nebraska, AIIMS neuropsychological assessment battery.
Endocrine system and human behaviour.

UNIT- 2. 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, Interview, Narrative, Questionnaires, Field studies, Experimental & Quasi-experimental and
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.
Correlation and Regression: Correlation [Product Moment, Rank Order], Partial correlation, multiple correlation. Special Correlation Methods: Biserial, Point biserial, tetrachoric, phi coefficient. Simple linear regression,
Multivariate Statistics: Multiple & Logistic regression: Assumptions, strategies, tabulation and interpretation of results. Factor analysis: Assumptions, Methods, Steps, Rotation, and Interpretation.
Basic understanding of Cluster analysis and Multiple Discriminant Analysis
Experimental Designs: Randomized group design: ANOVA [One-way, Factorial], Randomized Block Designs, Repeated Measures Design, MANOVA, ANCOVA. Single-subject designs.

UNIT- 3. Psychometrics & Psychological testing

Classical Test Theory and Item Response Theory; Approaches of test construction: Rationale, empirical and factor analytic.
Types of psychological tests
Test construction: Item writing, item analysis
Test standardization: Reliability, validity and Norms
Areas of testing: Intelligence & Aptitude, Creativity, Personality, interest, Attitude.
Applications of psychological testing in various settings: Clinical, Organizational and business, Education, Counseling, Military. Career guidance.

UNIT- 4. Attention and Perception

Attention: Concept, types- selective, divided, and sustained. Attentional automaticity, Theories of selective and sustained attention
Perception: Approaches to the Study of Perception: Gestalt approach – Figure and Ground, Law of perceptual Organization; information processing approach to perception- Pattern recognition and its models.
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, culture and perception.

UNIT- 5. Learning, Memory and Forgetting

Fundamental theories of learning: Thorndike, Guthrie, Hull, Tolman
Classical Conditioning: Procedure, phenomena, and related issues
Instrumental learning: Procedure, phenomena, and theoretical issues; Reinforcement and reinforcement schedules.
Applications of classical and instrumental conditioning in behaviour modification.
Cognitive approaches in learning: Latent learning, observational learning.
Verbal learning and Discrimination learning
Biological bases of learning
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
Biological bases of Memory

UNIT- 6. 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
Intelligence: Concept; Theories: Spearman; Thurstone; Guilford; Jensen; Cattell; Gardner; Stenberg; Mayer & Salovey; Goleman; Das, Kar & Parrila
Creativity: Concept; Theories: Torrance, Getzels & Jackson, Guilford, Wallach & Kogan
Relationship between Intelligence and Creativity

UNIT- 7. Personality, Motivation and Emotion,

Personality: Concept; Approaches: Trait and Type; Determinants: - Biological and socio-cultural
Theories of personality: Psychoanalytical, Neo-Freudian, Social learning, Cognitive, Humanistic, Existential.
Basic motivational concepts: Instincts, Needs, Drives, Arousal, Incentives, Motivational Cycle.
Approaches to the study of motivation: Psychoanalytical, Ethological, S-R Cognitive, Humanistic
Social motives: Achievement, Affiliation and Power
Motivational Competence and Self-regulation

Biological bases of motivation
Emotions: Concept and components; Physiological correlates
Theories of emotions: James-Lange, Canon-Bard, Schachter and Singer, Lazarus, Lindsley, Facial-feedback hypothesis of emotion. Emotion regulation
Biological bases of emotions.

UNIT- 8. Social Psychology

Nature, scope and history of social psychology
Traditional theoretical perspectives: Field theory, Cognitive Dissonance, Sociobiological, Psychodynamic Approaches.
Social cognition and person perception: Impression formation and its theories; attribution and its theories.
Social attitude: Nature and determinants; Theories of attitude formation and change
Group and Social influence [Social Facilitation; Social loafing; prosocial behaviour]; 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]

UNIT- 9. Life-span Human Development

Developmental processes: Nature, Principles, Factors in development, Stages of Development.
Theories of development: Psychoanalytical, Behaviouristic, and Cognitive
Various aspects of development: Sensory-motor, cognitive, language, emotional, social and moral.
Piaget's cognitive development theory; Information processing and social learning theories; Kohlberg's theory of Moral development.

UNIT- 10. Applications of Psychology

Stress, health, and well-being:
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].
Wellbeing and self-growth: Types of wellbeing [Hedonic and Eudemonic], Character strengths, Resilience and Post-Traumatic Growth. Health: Health promoting and health compromising behaviors, Life style and Chronic diseases [Diabetes, Hypertension, Coronary Heart Disease], Psychoneuroimmunology [Cancer, HIV/AIDS]
Clinical Psychology: Psychopathology: Concept, Classification (DSM-5 & ICD-11) and Causes; Mental Status Examination
Psychotherapies: Psychoanalytic; Person-centered; Gestalt; Existential, Acceptance Commitment Therapy; Behaviour therapy; Cognitive therapy: REBT, CBT, MBCT; Play therapy; Transactional Analysis, Group and Family therapy.
Guidance and counselling: Needs, organizational set up, and techniques of guidance and counselling; Counselling process and skills.
Organizational Psychology:
Historical developments in OB, the organizational system; structural characteristics of organizations; organizational designs; challenges and opportunities for organizational behaviour
Organizational culture: Nature and types; developing and maintaining organizational culture and customer responsive culture; promoting ethics in organizational culture

Introduction to Organizational Development: Nature and scope of organizational development, Management of change.
Meaning and process of organizational communication, perspectives; direction of communication flow, communication barriers, Communication for organizational effectiveness.