

Syllabus for the post of Assistant Professor in Psychology-Collegiate Education

Module 1 Attention and Perception –Early selection theories and Late selection theories-Neurological organisation and Attention

Bottom up theories and Top down theories-Classical Psychophysics-Psychophysical methods-Weber's law-Fechner's law-Steven's power law-Signal Detection Theory and its applications-Receiver operating curve

Theories of illusions-Practical Applications of illusion-Colour Perception and its theories-Pain perception and its theories.

Module 2 Cognition and Memory-Theories of cognitive organization-Network Models-ACT and ACT*,The connectionist model(PDP)-Representation of Knowledge-Categories,Prototypes,Schemas and Scripts-Meta cognition-Psycholinguistics-Bilingualism

Structure of language-phonology,syntax,semantics,pragmatics

Reasoning-Types-Inductive,deductive,propositional,syllogistic,analogical,categorical

Classification of problems-Algorithms,heuristics,search strategy,means end analysis,hill climbing,analogical transfer,working backward,back tracking,schema based models,multiple trace model.

Factors affecting problem solving-set effects,functional fixedness,incubation,incorrect representations,lack of expertise.

Computer simulation and Artificial intelligence

Memory-Registration,representation and characteristics-Atkinson-Shiffrin three stage model,Levels of processing model,Transfer appropriate processing,Baddely-Hitch model of working memory,Newell's Soar model

Types of memory-Narrative and autobiographical memory,Semantic and episodic memory,Declarative and procedural memory,Implicit and explicit memory,Flash bulb memories.

Theories of forgetting-Decay theory,interference theory,Tulving's cue dependant theory ,state dependent memory and forgetting,Retrieval inhibition as a theory of forgetting,Trace dependent forgetting,Motivated forgetting.

Biogenic and psychogenic forgetting-Alzheimer's disease,infantile amnesia,Korsakoff's syndrome,Retrograde amnesia,anterograde amnesia,Posttraumatic amnesia.

Neurological basis of memory.

Module 3 Intelligence-Factor theories,Process oriented theories,Theories of Hunt,Gardner and Jenson,PASS model.Views of Torrance,Getzel and Guilford on creativity

Emotional intelligence and its relevance.

Module 4 Learning

Habituation and sensitization-opponent process theory-Appetitive and aversive conditioning-Stimulus control of behavior,Verbal learning.

Learning theories-Pavlov,Skinner,Hull,Tolman,Guthrie,Mowrer,Razran.

Learning and cognition-sign learning,Latent learning,insight learning,set learning,observational learning,blocking,sensory preconditioning,Learned helplessness.

Neurological basis of learning.

Module 5 Motivation and Emotion Biological aspects of motivation Instinct theory and Ethology;Motivational cycle,Homeostasis and arousal theory; Biological needs and drive reduction . Psychological aspects of motivation Locus of control and motivation; John Hollands theory of motivation; Psychoanalytic theory and unconscious motivation;Hedonistic and Activation theories of Young,Mc Clelland,Schlosberg,Lindsley, Theories of Erikson, Murray, and Maslow, Motivation in behaviouristic theory-SR theory of Hull and Spence,Cognitive theory of Tolman ,Intrinsic and extrinsic motivation; Level of aspiration; Social needs; Knowledge of result; Prestige suggestion, Achievement,Affiliation and Approval; Humanistic model; Frustration aggression model . Types of emotion, Theories of emotion (James-Lange theory, Cannon-Bard theory, Schachter-Singer theory, Cognitive mediational theory, Facial feedback theory); Stress and coping.The concept of cortical arousal and ARAS; Neurological basis of motivation and emotion.

Module 6 Psychometry and Research Methodology Psychological Measurement Qualitative Vs. quantitative approach in the study of behavior Scales of measurement : Nominal, Ordinal, Interval, and Ratio Scales Classification of Psychological tests : Individual and group tests, Speed and Power tests, Verbal and Non-verbal tests, Paper and pencil tests and Performance tests, Culture free and culture fair Psychometric assessment by Intelligence tests: The Stanford-Binet Tests, The Wechsler Scales , Aptitude tests: Tests of special abilities, Differential aptitude tests , Achievement test : General achievement batteries, Special achievement test , Tests of Creativity : Guilford, Torrance , Personality test : Interviews, observation, Situational tests, Self-reports, inventories, questionnaires, rating scales, forced choice methods, check-lists, Q-sorts, Semantic differential, sociometry, content analysis, projective techniques , Test Construction Test conceptualization : Item preparation, Item analysis, Estimation of reliability, validity, and norms, Preparation of test manual Reliability: Concept, reliability estimate,types: test-re-test, parallel forms, split –half, other methods of estimating internal consistency,inter-scorer reliability, purpose of reliability co-efficient Validity : Concept, types: face, content, criterion, construct, convergent, divergent, relationship between validity to reliability Norms : Meaning of norm-referencing and criterion referencing Steps in developing norms Types: age-equivalent norms, grade equivalent norms, percentile norms, standard score norms

Quantitative research methods Nature of quantitative data The concept of variance : Partitioning of variance, controlling error variance through research designs Different kinds of quantitative research methods : Experimental research methods Characteristic features of experimental research methods Between group designs : Two group designs,ANOVA designs,

Factorial designs Within group designs, Quasi-Experimental research methods , Time series, equivalent time-samples, onequivalent control group designs, counterbalanced design, separate-sample pretest-posttest design, patched –up, design, longitudinal design,cross-sectional design, cohort design. Ex-post-facto research : Correlational design, criterion-group design - Non-experimental designs : Observational research,Archival research,Case study research Small N designs : Advantages and disadvantages of small N designs, Different kinds of small N designs

Qualitative Research Methods Nature of qualitative data Different kinds of qualitative research : Action research,Case study research,Ethnography,Grounded theory, Phenomenology. Historical research Techniques to collect qualitative data : Interview,Narrative and metaphor,Observation,Focus group discussion Techniques to analyze qualitative data : Thematic Analysis,content analysis,Narrative analysis,Discourse analysis,Visual analysis,Hermeneutics, Semiotics.

Sampling and Data Processing Different sampling techniques - Probability sampling methods,Non-probability sampling methods Data processing - Tabulation and coding, Statistical analysis of the data, Estimating differences among the groups : t-tests, Anova, Manova, Discriminant analysis, Chi square and other major nonparametric methods. Estimating relationships among variables : Pearson r, Rank correlation, Multiple correlations, point-biserial,phi,bi serial,tetrachoric coefficients,Multiple Regression,Discriminant analysis,Path analysis,Analysis of Co variance,Factor Analyses.Report writing

Module 7 Personality Describing Personality,Development of self,Role of temperament in Personality development,Components of a personality theory, Philosophical perspectives, personality research:True experiments,Quasi experi ments, Correlational studies, Case and epidemiological studies,Personality assessment: objective methods, projective methods, behavioural assessment methods Perspectives of personality Biological and evolutionary perspective : Social Darwinism and Eugenics.The genetic dimension of evolution, Contributions of Darwin , Lamarck, Mendel, Evolutionary Psychology : Natural selection of psychological mechanisms, Genes and behavior, Eysenck’s Model of nervous system temperament Psychodynamic perspective : Classical Psychoanalysis: Sigmund Freud, Neoanalytic theories:Carl Jung,Alfred Adler,Karen Horney,Eric Fromm,HarryStack Sullivan,Erik Erikson, Henry Murray’s Personology, Object relations and attachment theories: Margaret Mahler, Bowlby, Melanie Klein,Heinz Kohut, Winnicott, OttoKernberg. Behavioural Perspective:Dollard & Miller,B.F.Skinner,Albert Bandura Trait Perspective : G.W. Allport,R. B.Cattell Cognitive and social cognitive perspective: Lewin’s Field theory, Kelley’sPersonal ConstructTheory,Rotter’s locus of control approach ,Bandura’s SocialCognitive learning theory Humanistic Existential Perspective: Carl Rogers Rollo May, VictorFrankl, Abraham Maslow.Narrow band theories of Personality-Type A,Type B,Type C.Authoritarian,Self – monitoring. Eastern Perspective:Yoga, The Bhagavad Gita, Sufism, Buddhism Jainism, Taoism

Module 8 Social perception Social self : Sources of self-knowledge, Aspects of self-knowledge: self-schemas, self-discrepancies, Self-regulation, The selfconcept, Self-esteem, Self-presentation Perceiving persons : Impression formation and impression management ,

Attribution: attribution theories, attribution biases, culture and attribution, motivational biases, Information integration Confirmation biases: Perseverance of beliefs, confirmatory hypothesis testing, the self-fulfilling prophecy Stereotypes, prejudice, and discrimination : Nature and origin-social categories and intergroup conflict, social identity theory, culture and social identity, culture and socialization, how stereotypes distort perceptions and resist change, automatic stereotype activation, prejudice : origin, sources, targets and consequences, Reducing stereotypes, prejudice, and discrimination, intergroup contact, intergroup friendships and extended contact

Attitudes: Measurement, formation, attitudes and behavior, persuasion by communication, persuasion by our own actions, role playing, cognitive dissonance theory, changing attitudes Conformity : Classical studies, compliance, obedience: Milgram's research, social impact theory Groups: fundamentals of groups, individuals in groups, social facilitation, social loafing, group performance, brain storming, group polarization, group think, escalation effects Conflict: Mixed motives and social dilemmas, conflict escalation and reduction, negotiation.

Social relations Need to belong, the initial attraction, close relationships, interdependent relationships, romantic relationships Pro-social behaviour, evolutionary and motivational factors, situational influence bystander effect, time pressure, location and helping, culture, moods, pro-social media effects, role models and social norms Altruistic personality, interpersonal influences: perceived characteristic of the person in need, gender and helping Aggression-culture, gender and individual difference, causes of human aggression, the frustration-aggression hypothesis, negative affect, prevention and control of aggression. Psychosocial aspects of Anger, Hostility, Violence, Harassment and Discrimination.

Module 9 Psychopathology Diagnosis and classification of Mental disorders: DSM & ICD classifications. case taking practices- MSE, MMSE, clinical interview, case study, common signs and symptoms of mental disorders.

Neurodevelopmental disorders: Intellectual disabilities, pervasive and specific developmental disorders, communication disorders, autism spectrum disorders, specific learning disorders, behavioural and emotional disorders with onset in childhood and adolescence.

Major Mental Disorders Schizophrenia spectrum and other psychotic disorders- schizophrenia, schizo-typal, delusional, and other non-psychotic disorders, affective disorders- bipolar – depressive disorders

Personality disorders , sexual dysfunctions, gender dysphoria, mental and behavioural disorders due to psycho active substance use.

Anxiety disorders, dissociative disorders, trauma – stress related, somatoform disorders, obsessive – compulsive related disorders.

Neurocognitive disorders organic mental disorders, vascular dementia, amnesic disorder, delirium, personality and

behavioural disorders due to known physiological conditions, unspecified organic mental disorders.

Module 10 Applied Psychology Psychology in Organizational Setting Approaches to organizational behaviour – Training for Organizational Managers – Sensitivity training, Cultural diversity training, protection against sexual harassment training, 360 degree feedback, Mentoring, Organizational Counseling – Chronic absentees, accident prone employee, alcoholism and drug addition, indisciplined employees.

Psychology in School Setting Characteristics of learner, Characteristics of effective teacher. Approaches to Behavioral Management – Reality Model, Decisive discipline, Assertive Discipline – Class room management – Dealing with problem behavior, Communication strategies, Positive behaviors support - School counseling – Therapeutic intervention - Home & School, Psychosocial implication of disabilities, Special education.

Psychology in clinical setting Psychodynamic Psychotherapies – Supportive Psychotherapies, Crisis intervention, Hypnosis, Group Therapies Behaviour Therapies – Relaxation and Systematic Desensitization – Progressive muscular relaxation, Guided – Somato Psychic relaxation, Assertive training, Modeling, Contingency Management, Response elimination and Extinction procedure, punishment and aversion procedures, applied behavior analysis. CBT, Beck cognitive Therapy, RET, Biofeedback, Stress inoculation.

Counselling Psychology- Goals of counselling, Process of counselling, Characteristics, qualities, skills and strategies of an effective counsellor.

Types-individual, group, online

Areas-Pre-marital, Marital, Family, Adolescent etc

Counselling in special settings-HIV, AIDS, Disabled, Geriatric, Genetic, Crisis Intervention, Grief counselling

Psychology of health and wellbeing : Bio-psychosocial approaches - Promotion of psychological, social and physical well being. health related beliefs and attitudes, health enhancing behavior, health compromising behaviour, Type A and Type B personalities, Psycho-neuro-immunology, Pain & its management, Stressors and coping strategies.

Emerging trends in Psychology: Sports -Personality profile of athletes – Team cohesion – Combating drug abuse in Sports Persons

Forensic – Biological evidence: DNA finger printing, Brain mapping; Detection of deception; Interrogation, Polygraph, Narcoanalysis

Environmental Psychology – Psychological roots of Environmental Psychology – Climate and well being – Pollution and its effect on human being – Disaster management

Current views of mind-Biopsychological, evolutionary explanation, Sociocultural view.

Current research interests in Psychology-Positive Psychology, Cultural Psychology, Feminist perspective, critical Psychology

Role of Psychologist in Social Engineering in a Developing country-including

Environmental problems and Applications-Human behavior and global climate change, Influencing public opinion, Adopting responsible environment-related behavior

Social Media Usage-Use and abuse of social networking/technology and its role in social life and politics.

Gender-Sex and gender, gender equality, gender sensitive politics, gender minorities

Marginalization-Issues of the aged, Urban slums, institutionalization