Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Department of Psychology

Pre Ph.D. Exam

Revised Syllabus in Psychology 2016-17

Note: The syllabus is as per the UGC norms, 50% research methodology and 50% subject knowledge.

Section A - Research Methodology

Unit 1: PROBLEM, HYPOTHESIS AND VARIABLES: -

Problem: Meaning, characteristics, Types, Sources, Important consideration in

Selecting a problem

Hypothesis: Meaning, characteristics, Formulating & Ways of stating a hypothesis

Variables: Meaning, types, important consideration in selecting of variables

Techniques of controlling extraneous variables

Unit 2: SAMPLING

Meaning and advantages of sampling method, need for sampling, types of sampling :probability sampling methods and its sub types, non-probability sampling methods and its sub types.

Unit 3: EXPERIMENTAL DESIGNS

Experimental designs: Definition, principles and functions, Within-group designs: Carry over effect. Between-group designs: Block designs- a) two group designs, b) randomized block designs with more than two groups, Factorial designs: Simple factorial designs, factorial designs with covariate, randomized block factorial designs. Characteristics and types of quasi-experimental designs: Single-group designs, pre test-post test designs, Non-equivalent control group designs, , time series designs.

Unit 4: INFERENTIAL STATISTICS

Inferences: Standard error of mean and other statistics, Significance of difference for means, variances and correlation coefficients. Assumptions of Analysis of Variance, and One-way ANOVA, Two-way ANOVA, Analysis of Covariance: Concept.

Unit 5: CORRELATION AND REGRESSION

Concept and meaning of correlation, Pearson's Product-Moment Correlation

Point – Biserial Correlation and Phi-coefficient, Bi-serial and tetra choric correlation

Partial and Multiple Correlation, Simple Linear Regression: Concept and uses

Section B

Unit 1: SENSATION, ATTENTION AND PERCEPTION

Sensation - Introduction to psychophysics: Basic concepts and methods.

Attention: (a) Theories of attention process. (b) Signal Detection Theory.

Perception-approaches: Gestalt, Physiological. Information processing approach.

Ecological Perspective, Application: Subliminal perception & perceptual defence.

Unit 2: PROBLEM SOLVING, CREATIVITY AND DECISION MAKING

Problem: Definition, problem solving cycle, types, obstacles and aids

Problem solving approaches – Algorithm; heuristics. Definition of creativity, measurement creativity. Decision-making and Reasoning: Types of reasoning – Deductive & Inductive Utility models of decision making.

Unit 3. LEARNING THEORIES & TYPES OF MEMORY

Functionalistic Theories (Thrndike, Skiiner, and Hull); Associationistic Theories (Pavlov, Guthrie, and Estes); Cognitive Theories (Gestalt, Piaget, Tolman, and Bandura); Biological Theories (Hebb, and Bolles). Sensory memory- Iconic and echoic, Memory types- Short Term Memory. Long Term Memory, Models of memory,

Unit 4: THEORIES OF PERSONALITY AND INTELLIGENCE

Psychoanalysis: Sigmund Freud, Stimulus Response Theory -Dollard & Miller

Social Learning Theories: Albert Bandura, Water Mischel, Trait Theories: Gordon Allport, Raymond Cattell. Humanistic Theories: Abraham Maslow, Carl Rogers. Cognitive Theories: Gorge Kelly, Albert Ellis. Characteristics of Intelligence tests, Types of Intelligence tests, Theories of Intelligence: spearman's two-factor theory,thorndike's multifactor theory, thurstone's theory, guilford's model of structure of intellect,cattell's,gardener's theory of multiple intelligence

Unit 5: BIOLOGICAL BASIS OF BEHAVIOR

Neurons; Nerve impulse propagation; Structure and functions of Nervous system; Diversity of life; Structure of genes; Protein synthesis; Cell division; Mendel and post Mendellian developments; Evolution; Behavior genetics – Introduction and Methods.