FACULTY OF ARTS

PSYCHOLOGY DEPARTMENT
UNIVERSITY OF ALLAHABAD
ALLAHABAD

LECTURE LIST
2018-19

BA./B.Sc. Part-I
THREE YEAR DEGREE COURSE

B.A./B.Sc. Part I

Paper I-Basic Psychological Processess and Behavior

1. Introduction

The science of Psychology. Methods of Psychology. A brief history of Psychology. Psychology in India. Approaches to Psychology-behavioristic, psychodynamic, cognitive and humanistic, Ethical issues in psychology.

2. Biological Bases of Behavior

Structure of a neuron, synaptic transmission. The nervous system; central and peripheral. Cortical areas and their functions. The endocrine system.

3. Sensation and Perception

Sensory processes- stimulus detection-the absolute and difference threshold. Gestalt principles of perceptual organization. Depth perception. Perceptual constancies and illusion. Perceptual defense; Characteristics of perceiver and perception-Some illustrative experiments.

4. Learning

Features of classical and operant conditioning. Cognitions in Learning-latent learning and acquisition of cognitive maps. Observational Learning. Principles of Behavior Modification.

5. Memory

The memory process-Encoding, storage and retrieval.

Memory as information prosessing-Atkinson's stage model, Levels of prosessing approach to memory.

Types of Long term memory-episodic, semantic and procedural memory.

Forgetting-Ebbinghaus's forgetting curve. Explanations of forgetting; decay, interference and retrieval related forgetting.

Memory as a consructive process-Memory distortions and schema.

6. Thinking

Concepts and propositions, inductive and deductive reasoning. Steps in problem solving. Decision making-heuristics and biases.

7. Intelligence

Nature of intelligence. Intelligence as general and specific mental ability; Crystallized and Fluid intelligence, Emotional intelligence. A brief idea about measurement of intelligence.

8. Motivation

Concept and characteristics of motivated behavior. Perspectives on motivation-Instincts and drives Maslow's need hierarchy. Biogenic motive-hunger. Sociogenic motive-achievement.

9. Emotion

Nature of emotions; the eliciting stimuli, appraisals, physiological response and expressions in emotion.

Overview of theories of emotion. Classical and Contemporary theories; James Lange, Cannon Bard, Schachter and Singer, Lazarus and Facial Feedback hypothesis.

Books-

1. Passer, Michael W & Smith, Ronald E. (2013) Psychology : The Science of Mind and Behavior. McGraw hill Education (Indian Edition).
2. Baron, Robert A & Misra G. (2014) Psychology : Indian subcobtinent edition, Pearson. Delhi.
3. Ciccarelli S.K. & Meyer G.E. (2008) Psychology : South Asian Edition Pearson, Delhi.
4. Singh A.K. (2003) आधुनिक सामान्य मनोविज्ञान/Motilal Banarasidas, Delhi.

B.A./B.Sc. Part 1
Paper II-Psychological Statistics

I. An Introduction to Statistics

Basic concepts, use of statistics in psychology, variables-continuous and categorical.

Scales of measurement-nominal, ordinal, interval and ratio.

Descriptive and inferential statistics, data-organising and processing of data.

II. Descriptive statistics

Organising data in frequency distribution.

Calculation of mean, median and mode from raw and grouped data.

Concept of variability-calculation of semi interquartile range, standard deviation by raw score, deviation score formula and grouped data, variance.

Centiles and percentile rank (PR).

III. Graphic representation

Graphic representation of data-frequency polygon, histogram, bar diagram, ogive and line graph. Direct determination of statistics from graph centiles and PR.

IV. Correlation

Measurement of association between variables, nature of relationship, Pearson's coefficient of correlation (r)-Computation of r by raw score method and deviation method, factors influencing the correlation coefficient, interpretation of r.

Other methods of correlation-Spearman's rank order coefficient of correlation.

V. Normal Distribution

Concept of probability.

Nature and characteristics of normal probability curve (NPC) , Standard score (z score), applications of NPC.

Curves other than NPC, concept and calculation of skewness and kurtosis.

VI. Inferential Statistics

Purpose of statistical inference, population and samples, sample representativeness.

Sampling distribution of means, standard error of mean.

VII. Hypothesis testing t test

Testing hypothesis about single mean, null and alternate hypothesis, region of rejection, confidence limits, One tailed and two tailed test.

Testing hypothesis about differences between sample means-Nature and assumptions of t test, degrees of freedom, levels of significance, computation and interpretation of t values, t test for independent and dependent samples, Type I and type II errors.

VII. Hypothesis testing II-Analysis of Variance

Analysis of variance-computation of one-way Analysis of variance, interpretation of results.

IX. Non parametric statistical tests-X^2 test

Differentiation between parametric and Non-parametric tests : concept of distribution free tests.

Chi Square (X^2) test-computation for one and two variable (contingency) X^2 tests, Interpretation of X^2 Value.

Books

1. Minium and Clarke (1978) Elements of Statistical Reasoning. Wiley Publication.
2. मिश्रा बब्बन एवं त्रिपाठी लाल बचन (१९९४) मनोवैज्ञानिक सांख्यिकी। आगरा : हर प्रसाद भार्गव।
3. Ferguson (1982), Statistical Analysis in Psychology and Educations : Mc Grow Hill publication.

B.A. I

Papper III-Practical

Max. Marks -50

Part I : Designing of Experiments

1. Nature of Scientific Method

(a) Definition of Science, Methods and Goals of science, Rules of science.

II. Experimental Approach in Psychology

A. Scientific explanation in psychology; principles of making causal inferences.

B. Experiments in laboratory setting. Experiments in natural setting. Ex. post-facto studies.

III. Basics of Experimentation

A. Formulation of research problem.

B. Derivation of hypothesis.

C. Identifying Variables : Independent, dependent and extraneous. Operationalization of variables.

D. Techniques of controlling extraneous variables. Exercises in the above topics.

IV. Experimental Desing

A. Pre-post single group design, matched group design advantages and limitations.

B. Design involving more than one levels of independent variables.

V. Exercise the above topics

A. Analysis of data, interpreting results and report writing.

B. Tabulation of raw-data, analysis and report writing.

C. Exercises in the above topics.

VI Exercises in Designing Experiments

Part II. Conducting experiments in laboratory.

VII. The students are required to conduct at least one experiment from each of the areas listed below:

A. Attention Perception
B. Memory/Forgetting
C. Learning
D. Thinking/Problem Solving
E. Motivation/Emotion.

Students are required to complete six experiments. All experiments must be conducted under the guidance of the instructor without which a student will not be permitted to appear in the examination.