SYLLABUS FOR M.A. PART I & II
(Semester Credit-point system to be implemented from 2009-10 at University Department)

*The present programme will consist of four semesters, each semester carrying 16 credits.

Syllabus for M.A. Part I
Semester I

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Credit points</th>
<th>Paper title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP 101</td>
<td>PSY 01 to PSY 04</td>
<td>Cognitive Processes</td>
</tr>
<tr>
<td>EP 102</td>
<td>PSY 05 to PSY 08</td>
<td>Psychological Testing: Theory</td>
</tr>
<tr>
<td>EP 103</td>
<td>PSY 09 to PSY 12</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>EP 104</td>
<td>PSY 13 to PSY 16</td>
<td>Psychology Practical: Tests</td>
</tr>
</tbody>
</table>

Semester II

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Credit points</th>
<th>Paper title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP 201</td>
<td>PSY 17 to PSY 20</td>
<td>Learning and Memory</td>
</tr>
<tr>
<td>EP 202</td>
<td>PSY 21 to PSY 24</td>
<td>Psychological Testing: Applications</td>
</tr>
<tr>
<td>EP 203</td>
<td>PSY 25 to PSY 28</td>
<td>Research Methodology</td>
</tr>
<tr>
<td>EP 204</td>
<td>PSY 29 to PSY 32</td>
<td>Psychology Practical: Experiments</td>
</tr>
</tbody>
</table>
SEMESTER I

EP 101: COGNITIVE PROCESSES
(Credits 4: PSY 01 to PSY 04)

OBJECTIVES:
1. To acquaint the students with the processes involved in sensation and perception
2. To develop insight into one’s own and others’ behaviour and underlying mental processes,
3. To enrich students’ understanding of major concepts, theoretical perspectives, and empirical findings in cognitive psychology

PSY 01: NATURE AND IMPORTANCE OF COGNITIVE PSYCHOLOGY  [09]
1. Cognitive Psychology: Definition and domains
2. History and methods of cognitive psychology
3. Theories of cognitive development – Piaget, Vygotsky
4. Current paradigms of cognitive psychology – Information processing approach, ecological approach
5. Application: Cognitive style and cognitive map

PSY 02: SENSATION, ATTENTION AND PERCEPTION       [11]
1. Sensation - Introduction to psychophysics: Basic concepts and methods.
2. Attention: (a) Functions of attention: Divided attention, selective attention
   (b) Theories of attention process (c) Signal Detection Theory and vigilance.
3. Perception-approaches: Gestalt, Bottom-Up (feature analysis, template matching, prototypes), Top-Down and Pandemonium
4. Perception: Cross-cultural studies
5. Application: Subliminal perception, perceptual defence, and extra-sensory perception.

PSY 03: LANGUAGE AND RELATED COGNITIVE PHENOMENA       [11]
1. Understanding spoken language: Speech perception, constituent structure, transformational grammar and factors affecting comprehension
2. Reading: Perceptual process; theories of word recognition, reading and comprehension
3. Speaking: Selecting the content of speech, speech errors, gestures, social context of speech
4. Writing: Comparing speaking and writing, cognitive tasks involved in writing
5. Application: Development in reading ability, Multilingualism.
PSY 04: PROBLEM SOLVING, CREATIVITY AND DECISION MAKING  [09]
1. Problem: Definition, problem solving cycle, types, obstacles and aids
2. Problem solving approaches – Algorithm; heuristics: means-end analysis computer simulation, and analogy
3. Definition of creativity, measurement creativity
4. Reasoning and decision making: Types of reasoning – Syllogistic and Conditional; factors influencing decision making.
5. Application: Artificial intelligence

Books for Reading-
SEMESTER I

EP 102: PSYCHOLOGICAL TESTING: THEORY
(Credits 4: PSY 05 to 08)

OBJECTIVES:
1. To acquaint them with the characteristics of standardised tests.
2. To familiarize the students with psychometric theory and principles of test construction.

PSY 05: NATURE AND SCOPE OF PSYCHOLOGICAL TESTING [10]
1. Definition and characteristics of psychological tests
2. Classification and uses of psychological tests
3. General steps in test construction
4. Item analysis
5. [A] Issues in test administration: Ethics, bias, cultural fairness
   [B] Factors influencing test performance- Examiner, situational variables and test-taker’s perspective

PSY 06: NORMS AND THE MEANING OF TEST SCORES [10]
1. Basic statistical concepts in psychological testing
2. Developmental norms
3. Within-group norms- Percentiles, standard scores, the Deviation IQ
4. Relativity of norms
5. Computers and the interpretation of test scores

PSY 07: RELIABILITY [10]
1. Correlation coefficient: Meaning, statistical significance, reliability coefficient
2. Definition and types of reliability
3. Reliability of speeded tests
4. Dependence of reliability on the sample tested
5. Using reliability information

PSY 08: VALIDITY [10]
1. Validity: Definition and evolving concepts
2. Content-description validation procedures
3. Criterion-prediction procedures
4. Construct-identification procedures
5. Test validity and decision theory
Books for Reading-
SEMESTER I

EP 103: STATISTICAL METHODS
(Credits 4: PSY 09 to PSY 12)

OBJECTIVES:
1. To acquaint the students and make them understand the different statistical methods with their uses and interpretations,
2. To develop computational skills in students,
3. To enable them to analyze the data of practical and project work.

PSY 09: OVERVIEW OF DESCRIPTIVE STATISTICS AND PROBABILITY [10]
1. Overview of measures of Central tendency, variability, curves and graphs
2. Percentiles, percentile ranks and standard scores
3. Probability: Concept, definition, and principles
4. Characteristics of normal distribution curve
5. Applications of normal distribution curve.

PSY 10: CORRELATION AND REGRESSION [10]
1. Concept and meaning of correlation
2. Pearson’s Product-Moment Correlation
3. Point – Biserial Correlation and Phi-coefficient
4. Bi-serial and tetra choric correlation
5. Partial and Multiple Correlation
6. Simple Linear Regression: Concept and uses

PSY 11: INFERENTIAL STATISTICS [10]
1. Inferences: Standard error of mean and other statistics
2. Significance of difference for means, variances and correlation coefficients.
3. Assumptions of Analysis of Variance, and One-way ANOVA-Independent, concept of repeated measures
4. Two-way ANOVA - Independent, concept of repeated measures
5. Analysis of Covariance: Concept.

PSY 12: NON-PARAMETRIC STATISTICS [10]
1. Difference between Parametric and Non-parametric statistics
2. Chi Square tests
3. Non-parametric tests for correlated data- Rank Difference Correlation, Sign Test, Wilcoxon Signed Rank test
4. Non-parametric tests for uncorrelated data - Mann-Whitney U-test and Kruskal-Wallis Test
5. Statistical software: An introduction – SPSS, Excel
NOTE-
1) Students can use non-scientific calculator during examination.
2) Calculation exercises in the question paper shall be restricted to the following:
   a. Percentile, Percentile Ranks and Standard Scores
   b. Application of Normal Probability Curve
   c. Product Moment Correlation
   d. Scatter-Diagram
   e. t-test
   f. One-way and Two-way ANOVA
   g. Chi-square Tests

Books for Reading-
SEMMESTER I

EP 104: PSYCHOLOGY PRACTICAL - TESTS
(Credits 4: PSY 13 to PSY 16)

OBJECTIVES:
To acquaint the students with:
1. The administration of psychological tests, interpretation of scores and report-writing,
2. The evaluation procedures and evaluation of psychological tests,
3. Certain skills of psychological counselling on the basis of psychological test results.

* Note: Only standardized tests should be used.

PSY 13: GENERAL ABILITY TESTS (any two):
1. Intelligence tests: Verbal Test
2. Intelligence tests: Performance Test
3. Creativity
4. Thinking
5. Judgment and Reasoning

PSY 14: SPECIAL ABILITY TESTS (any two):
1. Multiple Aptitude Test (any one)
2. Special Aptitude Test (any one)

PSY 15: PERSONALITY TESTS (any three):
1. Self-report inventory
2. Projective test: Verbal
3. Projective test: Pictorial
4. Interest inventory
5. Adjustment inventory
6. Attitude / Values

PSY 16: OTHER TESTS (any three):
1. Stress / Frustration
2. Environmental Assessment
3. Development Assessment
4. Achievement Test
5. Cognitive Style
6. Self Concept
7. Neuropsychological Assessment
8. Social Skill / Behavioural Skill

Note:
Departmental committee will decide the evaluation system of the students.
Books for Reading-

15. Test manuals of respective tests.
OBJECTIVES:
To acquaint the students with:
1. Various types, models and theories of learning and memory,
2. Neurological basis of learning and memory,
3. Applications of the principles of learning and memory

PSY 17: LEARNING: THEORIES AND APPLICATIONS  [10]
1. Classical Conditioning: Concepts, types and applications
2. Operant Conditioning: Reinforcement, types, schedules of reinforcement, shaping and applications
3. Cognitive approaches to learning: Latent learning, observational learning, and applications
4. Cultural influences on learning

PSY 18: TYPES OF MEMORY  [10]
1. Sensory memory- Iconic and echoic
2. Short Term Memory
3. Long Term Memory: Types
4. Determinants of memory
5. Applications: Memory improvement techniques

PSY 19: MODELS AND THEORIES OF MEMORY  [10]
1. Unitary and dual process view: Waugh and Norman
2. Multi-process view: Atkinson and Shiffrin; Craik and Lockhart
3. Connectionist model: Rumelhart and McClelland
4. Theories of forgetting: Psychoanalytical, Trace, Trace Decay, Interference, and recent trends.
5. Application: Distortion of memory

PSY 20: NEUROLOGICAL BASIS OF LEARNING AND MEMORY  [10]
1. Brain areas associated with learning and memory
2. Types of Amnesia- Amnesia after concussion (Anterograde, Retrograde), Korsakoff, Alzheimer’s disease
3. Studies on role of brain in learning and conditioning
4. Synaptic mechanisms and synaptic plasticity of learning and memory
BOOKS FOR READING-

SEMESTER II
EP 202: PSYCHOLOGICAL TESTING: APPLICATIONS
(Credits 4: PSY 21 to PSY 24)

OBJECTIVES:
To acquaint the students with:
1. Various psychological assessment techniques
2. Application of psychological tests in different fields.

Notes:
- While teaching these tests in the context of the specified area, teachers are supposed to acquaint the students with their applications in other areas, too.
- Teachers are supposed to familiarize the students with Indian adaptation of tests.

PSY 21: TESTING IN EDUCATIONAL SETTING [09]
1. General mental ability tests: Group tests – SPM, Cattell’s Culture-fair Test of Intelligence
2. General mental ability tests: Individual tests- Binet - Kamath test, WISC, WAIS, Malin’s Intelligence Scale for Indian Children (MISIC)
3. Differential Aptitude Test (DAT)
4. Personality and interest inventories- CPQ, CAT, HSPQ, SVIB
5. School and college entrance tests- SAT, GRE

1. Testing based on the logical-content strategy- Woodworth Personal Data Sheet, Mooney Problem Checklist
2. Tests based on the Criterion-Group Strategy- MMPI, California Psychological Inventory
4. Tests based on the Theoretical Strategy- EPPS, self concept inventories, Jackson Personality Inventory
5. Projective and neuropsychological testing

1. The selection of employees- Concepts of base rates and hit rates; Taylor Russell tables; Utility theory and decision analysis; incremental validity.
2. Personality tests used for personnel selection- MBTI
3. Dexterity tests - O’Conner Finger Dexterity Test, Bennett Hand-Tool Dexterity Test, Minnesota Manual Dexterity Test, Mechanical Reasoning Test
4. Situational testing (games, role play) and in-basket exercises
PSY 24: TESTING IN COUNSELING SETTING

1. General ability testing: Individual tests, and group tests (SPM, NVTI, Passi Creativity Tests)
2. Multiple aptitude tests - DAT, GATB
3. Strong Vocational Interest Blank (SVIB)
4. Anxiety and adjustment test- STAI, STAXI, Bell’s Adjustment Inventory, Moos’ Family Environment Scale (FES)
5. Sack’s Sentence Completion Test

BOOKS FOR READING-
SEMMESTER II
EP 203: RESEARCH METHODOLOGY
(Credits 4: PSY 25 to PSY 28)

OBJECTIVES:
To acquaint the students with:
1. The basic research concepts,
2. Steps in research process,
3. The basic terminology of advanced research techniques so that they can follow the research reports and papers in different branches of psychology,
4. Some commonly used research designs and the APA style of preparing research proposal and writing research report.

PSY 25: OVERVIEW OF RESEARCH PROCESS AND SURVEY RESEARCH[09]
1. Overview of basic research concepts (problem, hypothesis, variables and operational definitions)
2. Sampling techniques
3. Methods of data collection: Observation, mail surveys (questionnaires), personal interviews, telephone interviews, and internet surveys
4. Survey research designs- Cross-sectional, successive independent samples, longitudinal
5. Problems, issues, and applications of survey research

1. Experimental designs: Definition, principles and functions
2. Between-group designs: Randomised group designs
3. Between-group designs: Block designs- a) two group designs, b) randomized block designs with more than two groups
4. Factorial designs: Simple factorial designs, factorial designs with covariate, randomized block factorial designs
5. Conceptual distinction among between group designs, repeated measures designs, and mixed designs.

PSY 27: QUASI-EXPERIMENTAL DESIGNS AND SCALING [10]
1. Characteristics and types of quasi-experimental designs: Single-group designs, pre test-post test designs
2. Non-equivalent control group designs, discontinuity promotion designs, time series designs, cohort designs
3. Application of quasi-experimental designs in program evaluation research.
4. Scaling: Purpose, psychophysical scaling
5. Scaling: Psychological scaling: Thurstone-type scales (i.e. differential), and Likert-type scales (i.e. Summated)
PSY 28: OTHER MULTIVARIATE DESIGNS AND REPORT WRITING  

1. Factor analysis: Basic terms, overview of extraction methods
2. Overview of rotation methods, higher order factor analysis
3. Confirmatory factor analysis
4. Other multivariate techniques: Multiple regression, multivariate analysis of variance, discriminant functions analysis, canonical correlations, and path analysis and structural equation.
5. APA style of preparing research proposal and writing research report.

BOOKS FOR READING-


-----------------------------------
SEMMESTER II
EP 204: PSYCHOLOGY PRACTICAL: EXPERIMENTS
(Credits 4: PSY 29 to PSY 32)

OBJECTIVES:
To acquaint the students with:
1. The different areas of experimentation in psychology,
2. Various skills of conducting experiments in psychology,
3. Applications of experimental design,

PSY 29: COGNITIVE PROCESSES (ANY 3):
1. Signal Detection - ROC
2. Perceptual Defence
3. Concept Formation
4. Problem Solving
5. Study of Mental Imagery
6. Peterson’s Test of Rational Learning
7. Stroop Effect in Visual Perception
8. Illusion
9. Time perception

PSY 30: LEARNING (ANY 3):
1. Learning by Insight (Bolt Head Maze)
2. Interference
3. Paired Associate Learning
4. Serial Learning
5. Verbal Conditioning
6. Transfer of training in maze learning

PSY 31: MEMORY (ANY 2):
1. Short Term Memory
2. Effect of Mnemonic Strategy on Memory
3. Immediate Memory Span: Meaningful Vs. Meaningless Material
4. Organization in Memory
5. Memory for Unattended Material
6. Memory for Associated and Un-associated Pairs of Words- Najma

PSY 32: MOTIVATION AND EMOTION (ANY 2):
1. Zeigarnik Effect
2. Effect of Anxiety on Performance
3. Feedback / KoR
4. Goal Setting
5. Level of Aspiration

Note: Departmental committee will decide the evaluation system of the students.
BOOKS FOR READING:

******************************************************************************