

## **SEMESTER-II**

### **EP-201: COGNITIVE PSYCHOLOGY: ADVANCES AND APPLICATION**

#### **Objectives and learning outcomes:**

1. To understand the advances in cognitive psychology
2. To study the application of cognitive psychology in different fields

#### **Unit-1: Advance in Cognitive Psychology- I**

- 1.1. **Definition and Nature:** Consciousness
- 1.2. **Definition and Nature:** Critical Thinking
- 1.3. **Definition and Nature:** Neuropsychology
- 1.4. **Conceptual Understanding:** Metacognition
- 1.5. **Application :** Brain Assessment Tools : CT Scan, MRI, fMRI, PET Scan

#### **Unit-2: Advances in Cognitive Psychology-II**

- 2.1. Thought and Language
- 2.2. Sex Differences and Cognitive Abilities
- 2.3. IQ, EQ and Creative Thinking
- 2.4. Reading, Writing, Speaking and Cognitive Phenomenon
- 2.5. **Application:** Develop Critical Thinking

#### **Unit-3: Applications of Cognitive Psychology- I**

- 3.1. **Application in Clinical Psychology :** Brain and Behaviour Problems
- 3.2. **Application in Clinical Psychology:** Psychotherapies
- 3.3. **Application in Education Psychology:** (i) Child development (ii) Learning styles
- 3.4. **Application in Education Psychology:** (i) Forgetting (ii) Moral development
- 3.5. **Application:** Cognitive Stages of Development and Teaching methods/techniques

## Unit-4: Applications of Cognitive Psychology- II

**4.1. Application in Forensic Psychology :** (i) Cognitive interview (ii) Lie Detector

**4.2. Application in Forensic Psychology:** (iii) Eyewitness testimony (iv) Face Recognition

**4.3. Application in Computer Science:** Memory Models and Computer Science

**4.4. Application in Computer Science :** Information processing, SDT

**4.5. Application:** Identity Kit

### READINGS:

1. Anderson, J. R. (2015). Cognitive psychology and its implications. New York: Worth Publishers
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  5. Horton, D. L. and Turnage, T. W. (1976). *Human learning*. ND: Prentice-Hall
  6. Kellogg, R. T. (2007). *Fundamentals of Cognitive Psychology*. N.D. Sage Publications
  7. Matlin, M. (1994). *Cognition*. Bangalore: Harcourt Brace Pub.
  8. Singh, Shyam & Singh (2008) *Psychoneuroimmunology*, Global Vision, New Delhi
  9. Sternberg, R. J. (2007). *Cognitive Psychology*. Australia: Thomson Wadsworth.
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  11. बोरुडे आर.आर. .२००५ (बोधनिक मानसशास्त्र ,छाया प्रकाशन
  12. भरत देसाई आणि शोभना अभ्यंकर) २००७ (प्रायोगिक मानसशास्त्र आणि संशोधन पद्धती ,नरेंद्र प्रकाशन ,पुणे
- Note : Relevant and recent research articles will be referred in text preparation.

## **SEMESTER-II**

### **EP-202: PSYCHOMETRICS: APPLICATIONS**

#### **Objectives:**

- To understand how psychological tests are used for the purpose of assessment, guidance and enhancing the effectiveness of teaching-learning process.
- To understand the use and interpretation of various psychological tests used in educational field.
- To understand the use of psychological tests are used for better health, adjustment and related counselling.
- To understand the use of psychological tests in clinical and organizational settings

#### **Unit-1: Applications of Psychological Testing in Educational Setting**

- 1.1. Tests of ability: General Aptitude Test Battery (GATB), Fairview Social Skills Scale (FSSS), Torrance test of creative thinking (TTCT), Differential Ability Test (DAT)
- 1.2. Tests of Intelligence: Standard Progressive Matrices (SPM), Wechsler Intelligence Scale for Children (WISC), Social Intelligence Scale (SIS)
- 1.3 Interest Inventory: Strong-Campbell Interest Inventory (SCII),
- 1.4. Creativity Tests: Passi Test of Creativity, Verbal Test of Scientific Creativity
- 1.5. Application- Career Interest Inventory

#### **Unit-2: Applications of Psychological Testing in Counselling and Guidance**

- 2.1. Child-Rearing Practices: Child-rearing Practices Questionnaire,
- 2.2. Self-concept Scales: Tennessee Self-Concept Scale, Self-Concept Inventory
- 2.3. Adjustment Tests: College adjustment and study skills inventory,
- 2.4. Attitude Tests: Brief Criminal Attitude Scale (BCATS), Tobacco Use Questionnaire
- 2.5. Application- Family Environment Scale (FES)

### **Unit-3: Applications of Psychological Testing in Clinical Setting**

- 3.1. Tests of Personality-I: Sixteen Personality Factor (16 PF) Questionnaire, Thorndike Dimensions of Temperament, Myers-Briggs Type Indicator (MBTI)
- 3.2. Tests of Personality-II: Structural Clinical Interview, Choice Dilemmas Questionnaire (CDQ), Kundu's Neurotic Personality Inventory (KNPI)
- 3.3. Rosenzweig Picture-Frustration study for children, State-Trait Anger Test, Anxiety Scale
- 3.4. Minnesota Multiphasic Personality Inventory (**MMPI**), Rorschach and Rotter Incomplete Sentence **Test**,
- 3.5. Application- TAT

### **Unit-4: Applications of Psychological Testing in Organisational Setting**

- 4.1. On the Job: Minnesota Satisfaction Questionnaire, Overall Job Satisfaction Scale, Organizational Commitment Scale, Organizational Effectiveness Scale
- 4.2. Motivation: Intrinsic Job Motivation Scale, Motivation Scale
- 4.3. Leadership Opinion Questionnaire, Workers Attitude Scale, BIRO-P / FIRO-B
- 4.4. Occupational Stress Index, Interpersonal Trust Scale
- 4.5. HRD Function Questionnaire/ EQ Test

## READINGS:

- Aiken L.R. (1996) Rating Scales and Checklists: Evaluating Behavior, Personality and Attitudes
- Anastasi, A. & Urbina, S. (1997). Psychological testing. N.D.: Pearson Education.
- Chadha, N. K. (1996). Theory and practice of psychometry. N. D.: New Age International Ltd.
- Cronbach, L. J. 5th ed. (1990). Essentials of psychological testing. New York: Harper Collins Publishers
- Freeman, F.S. 3rd ed. (1965). Psychological testing. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.
- Ghiselli, E. E., Campbell, J. P. & Zedek, S. (1981). Measurement theory for the behavioural sciences. W.H. Freeman.
- Gregory, R.J. (2005). Psychological testing: History, principles and applications. New Delhi: Pearson Education.
- Kaplan, R.M. & Saccuzzo, D.P. (2007). Psychological Testing: Principles, Applications, and Issues. Australia: Thomson Wadsworth.
- Kline, P. (1983). Personality measurement and theory. Hutchinson.
- Murphy, K. R., Davidshofer, R. K. (1988): Psychological testing: Principles and applications. New Jersey: Prentice Hall Inc.
- Nunnally, J.C. (1981). Psychometric theory. ND: Tata McGraw-Hill.

## **SEMESTER-II**

### **EP-203: RESEARCH METHODOLOGY - II (QUALITATIVE METHODS AND MULTIVARIATE ANALYSIS)**

#### **Objectives:**

- To learn about the philosophical foundations, goals and scope of qualitative methodology.
- To develop an understanding about the relationship between paradigms of science and methods of qualitative inquiry.
- To understand basic procedures of using qualitative methodology.
- To learn about scientific rigour in the use of qualitative methodology.
- To make them learn the statistical rigours in multivariate analysis.

#### **Course Contents:**

##### **1. Introduction to qualitative research tradition and its scope**

- 1.1. What research problems in psychology require qualitative inquiry?
- 1.2. Basic assumptions, principles and promises of qualitative research.
- 1.3. The critical understanding of experience within socio-historical context.
- 1.4. Brief history of qualitative research.
- 1.5. Introduction to some important methods: Ethnography, grounded theory, narrative inquiry, and phenomenological inquiry.

##### **2. Basic procedures in qualitative inquiry**

- 2.1. Formulating research questions.
- 2.2. Developing semi-structured interview schedule.
- 2.3. Building research relationship.
- 2.4. Generating qualitative data: The role of researcher's reflexivity.
- 2.5. Quality and rigour in qualitative research.

##### **3. Analyzing qualitative data: A reflexive exercise**

- 3.1. Researcher's reflexivity about his/her experiential and theoretical standpoint.
- 3.2. Empathy and reflexivity in qualitative data analysis.
- 3.3. Coding and memo writing.
- 3.4. Identifying and developing narrative structure.
- 3.5. Theoretical saturation and theoretical sampling.

#### **4. Multivariate Statistical Analysis**

- 4.1. Multivariate analysis- Introduction.
- 4.2. MANOVA, ANCOVA
- 4.3. Multiple Regression, Factor Analysis
- 4.4. Causal modelling, SEM
- 4.5. Using computer programs for statistical analysis

#### **READINGS:**

- Charmaz, K. (2004). Premises, principles, and practices in qualitative research: Revisiting the foundations. *Qualitative Health Research*, 14, 976-993.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.
- Creswell, J. W., Hanson, W. E., Plano, V. L. C., & Morales, A. (2007). Qualitative research design: Selection and implementation. *The Counseling Psychologist*, 35, 236-264.
- Denzin, N. K., & Lincoln, Y. (2005). *Handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Ellingson, L. L. (1998). —Then you know how I feel||: Empathy, identification, and reflexivity in fieldwork. *Qualitative Inquiry*, 4, 492-514.
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- Frank, A. W. (2000). The standpoint of storyteller. *Qualitative Health Research*, 10, 354-365.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52, 126-136.
- Sampson, E. E. (1993). Identity politics: Challenges to psychology's understanding. *American Psychologist*, 48, 1219-1230.
- Smith, J. A., Harre, R., & Langenhove, L. V. (Eds.) (1995). *Rethinking methods in psychology*. London: Sage.
- Willig, C., & Stainton-Rogers, W. (Eds.) (2008). *Handbook of qualitative research in psychology*. London: Sage.

## **SEMESTER-II**

### **EP-204: PSYCHOLOGY PRACTICAL: EXPERIMENTS**

#### **Objectives:**

To acquaint the students with:

1. The various areas of experimentation in psychology
2. Skills required in conducting experiments in psychology
3. Applications of experimental design and report writing style

#### **UNIT:1 EXPERIMENTS ON LEARNING (ANY THREE)**

1. Problem solving ( Hanoi's Tower, Heart & Bow Puzzle, Wiggly Blocks)
2. Method of serial anticipation
3. Conditioning: Verbal or hand withdrawal
4. Retroactive or proactive interference
5. Paired Associate learning
6. Bilateral transfer in Mirror Tracing/maze learning

#### **UNIT-2 :EXPERIEMENTS ON MEMORY (ANY TWO)**

1. Forgetting
2. Short term Memory
3. Effect of Mnemonic strategy on memory
4. The effect of coding on memory
5. Immediate memory
6. Memory for Associated and Un-associated pairs of words
7. Recall and Recognition

#### **UNIT-3: EXPERIMENTS ON MOTIVATION AND EMOTION (ANY THREE)**

1. Determining aspiration level
2. Knowledge of Result (KoR)
3. Zeigarnik Effect
4. Goal Setting
5. Effect of anxiety on performance

#### **UNIT-5:EXPERIMENTS ON COGNITIVE PROCESS (ANY TWO)**

1. Perceptual Defense
2. Concept formation
3. Mental imagery
4. Rational Learning
5. Stroop effect in serial learning
6. Time perception
7. Phi-Phenomenon
8. Measurement of illusion

## READINGS:

1. Rajamanickam, M. (2005). Experimental Psychology: with Advanced Experiments, Volume 1 & 2. New Delhi: Concept Publishing Company.
2. Mohsin, S. M. (1975). Experiments in psychology. Orient Longman.
3. Mohanthy. Experiments in psychology.
4. Parameshwaran, E. G. & Rao, B. T. (1968). Manual of experimental psychology. Bombay: Lalvani Publishing House.
5. Tinker, M.A. & Russell, W.A. Introduction to methods in experimental psychology. Appleton – Century Crofts.
6. Jalota, S. (1962). Experiments in psychology. Asia Publishing House.
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8. Sternberg, R.J. (1996). Cognitive psychology. NY: Harcourt Brace College Publishers.
9. Guenther, R.K. (1998). Human cognition. NJ: Prentice-Hall.
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13. Fergusson, E. D. (1976). Motivation: An experimental approach. Holt Rinehart & Winston.
14. Friedenberg, J., Silverman, G. (2006). Cognitive science: An introduction to the study of mind. London: Sage Publications.
15. Collins, M. & Drever, J. (1930). Experimental Psychology. London: Methuen & Co. Ltd.
16. Snodgrass J. G., Levy-Berger, Hyden (1985). Human Experimental Psychology. New York: Oxford University Press.
17. Kuppuswamy, B. (1952). Elementary Experiments in Psychology. London: Oxford University Press.