

AIM AND OBJECTIVES

AIM

The aim of this course is to prepare the trainee to function as a qualified professional Clinical Psychologist in the areas of mental and physical health by offering Diagnostic, Therapeutic, Rehabilitative, Administrative services, and to work towards promoting the well-being and quality-of-life of individuals.

OBJECTIVES

The course is developed as a rigorous two-year program with extensive theoretical inputs and widespread clinical experience to acquire the necessary skills in the area of Clinical Psychology. On completion of the course, the trainee is expected to perform the following functions:

- Diagnose mental health problems.
- Conceptualize specific adult and child mental health problems within a psychological framework, giving due consideration to psychosocial/ contextual factors, and carryout relevant treatment/management.
- Apply psychological principles and techniques in rehabilitating persons with mental health problems and disabilities.
- Work with the psychosocial dimensions of physical diseases, formulate and undertake focused/targeted psychosocial interventions.
- Work with community to promote health, quality-of-life and psycho-logical well-being.
- Undertake research in the areas of clinical psychology such as, mental health/illness, physical health/diseases and relevant societal issues viz. misconception, stigma, discrimination, social tension, gender construction, life style etc.
- Undertake responsibilities connected with teaching and training in core and allied areas of Clinical Psychology.
- Undertake administrative and supervisory/decision-making responsibilities in mental health area.
- Provide expert testimony in the court of law assuming different roles.

REGULATIONS OF THE COURSE

Entry requirement

Minimum educational requirement for admission to this course will be M.A./M.Sc. degree in Psychology from a university recognized by the UGC with a minimum of 55% marks in aggregate, preferably with special paper in Clinical Psychology. For SC/ST/OBC category, minimum of 50% marks in aggregate is essential, as per GOI.

Admission Procedure

A selection committee that includes Head of the Department of Clinical Psychology shall make admission on the basis of an entrance examination, consisting of a written test, interview and practical. List of candidates so selected/admitted to the course should be sent to RCI within a month of admission formalities are completed. No changes shall be permitted once the list of admitted candidates for the academic year is sent to the council.

Duration

This is a fulltime clinical training course providing opportunities for appropriate practicum and apprenticeship experiences for 2 academic years, divided as Part - I and II.

Attendance

- Course of the study must, unless special exemption is obtained, continuously be pursued. Any interruption in a candidate's attendance during the course of study, due to illness or other extraordinary circumstances must be notified to the Head of the Institution/concerned authority and permission should be obtained. Under any circumstances the course must be completed within 4-yr from the date of enrollment.
- A minimum attendance of 80% (in the academic year) shall be necessary for taking the respective examination.
- Thirty days of causal leave, maximum of fifteen days per academic year, shall be permitted during the two-year course period.

**CURRICULUM
&
EXAMINATION SCHEME**

Syllabus - First Year (Part-I)

PAPER-I: PSYCHOSOCIAL FOUNDATION OF BEHAVIOR AND PSYCHOPATHOLOGY

Course Code: PSY5101

Credit Units: 12

Aims: The psychosocial perspectives attempt to understand human cognition, motives, perceptions and behavior as well as their aberrations as product of an interaction amongst societal, cultural, familial and religious factors. The overall aim is to introduce conceptualizations of mental health problems within the psychosocial framework, giving due considerations to contextual issues. Each Module in this paper pays attention to the different types of causal factors considered most influential in shaping both vulnerability to psychopathology and the form that pathology may take.

Objectives: By the end of Part-I, trainees are required to demonstrate ability to:

- Demonstrate a working knowledge of the theoretical application of the psychosocial model to various disorders.
- Make distinctions between universal and culture-specific disorders paying attention to the different types of sociocultural causal factors.
- Demonstrate an awareness of the range of mental health problems with which clients can present to services, as well as their psychosocial/contextual mediation.
- Carry out the clinical work up of clients with mental health problems and build psychosocial formulations and interventions, drawing on their knowledge of psychosocial models and their strengths and weaknesses.
- Apply and integrate alternative or complementary theoretical frameworks, for example, biological and/or religious perspectives, sociocultural beliefs and practices etc. in overall management of mental health problems.
- Describe, explain and apply current code of conduct and ethical principles that apply to clinical psychologists working in the area of mental health and illness.
- Describe Mental Health Acts and Policies, currently prevailing in the country and their implications in professional activities of clinical psychologists.

Academic Format of Modules: Learning would be mainly through clinical workup of clients presenting with range of mental health problems, and supplemented by lectures, seminars and tutorials, allowing trainees to participate in collaborative discussion.

Evaluation: Theory – involving long and short essays

Course Contents: Part-A (Psychosocial Foundations of Behavior)

Module - I: Introduction

Overview of the profession and practice; history and growth; professional role and functions; current issues and trends; areas of specialization; ethical and legal issues; code of conduct

Module - II: Mental health and illness

Mental health care – past and present; stigma and attitude towards mental illness; concept of mental health and illness; perspectives – psychodynamic, behavioral, cognitive, humanistic, existential and biological models of mental health/illness;

Module - III: Epidemiology

Studies in Indian context; tools available/standardized for epidemiological surveys; socio-cultural correlates of mental illness; religion and mental health; psychological well-being and quality of life - measures and factors influencing

Module - IV: Self and relationships

Self-concept, self-image, self-perception and self-regulations in mental health and illness; learned helplessness and attribution theories; social skill model; interpersonal and communication models of mental illness; stress diathesis model, resilience, coping and social support.

Module - V: Family influences

Early deprivation and trauma; neglect and abuse; attachment; separation; inadequate parenting styles; marital discord and divorce; maladaptive peer relationships; communication style; family burden; emotional adaptation; expressed emotions and relapse.

Module - VI: Societal influences

Discrimination in race, gender and ethnicity; social class and structure, poverty and unemployment; prejudice, social change and uncertainty; crime and delinquency; social tension & violence; urban stressors; torture & terrorism; culture shock; migration; religion & gender related issues with reference to India.

Module - VII: Disability

Definition and classification of disability; psychosocial models of disability; impact, needs and problems; issues related to assessment/certification of disability – areas and measures.

Module - VIII: Rehabilitation

Approaches to rehabilitation; interventions in the rehabilitation processes; models of adaptation to disability; family and caregivers issues; rights of mentally ill; empowerment issues; support to recovery.

Module - IX: Policies and Acts

Rehabilitation Policies and Acts; assistance, concessions, social benefits and support from government and voluntary organizations; contemporary challenges; rehabilitation ethics and professional code of conduct

Course Contents: Part-B (Psychopathology)**Module - X: Introduction to psychopathology**

Definition; concepts of normality and abnormality; clinical criteria of abnormality; continuity (dimensional) versus discontinuity (categorical), and prototype models of psychopathology; classification and taxonomies – reliability and utility; classificatory systems, currently in use and their advantages and limitations.

Module - XI: Signs and symptoms

Disorders of consciousness, attention, motor behavior, orientation, experience of self, speech, thought, perception, emotion, and memory.

Module - XII: Psychological theories

Psychodynamic; behavioral; cognitive; humanistic; interpersonal; psychosocial; and other prominent theories/models of principal clinical disorders and problems, viz. anxiety, obsessive-compulsive, somatoform, dissociative, adjustment, sexual, substance use, personality, suicide, childhood adolescence, psychotic, mood disorders, and culture-specific disorders.

Module - XIII: Indian thoughts

Concept of mental health and illness; nosology and taxonomy of mental illness; social identity and stratification (Varnashrama Vyawastha); concept of – cognition, emotion, personality, motivation and their disorders

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		

Weightage	10	5	10	5	70	100
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CT-Class Test; **H**-Home Assignment; **P**-Presentation; **V**-Viva; **Q**-Quiz; **A**-Attendance; **EE**-End Term Exam

Text & References:

- An Introduction to Social Psychology, 2nd ed. Kuppaswamy, B. Konark Publishers: New Delhi
- Culture, Socialization and human development, Saraswathi, T.S (1999). Sage publications: New Delhi
- Asian perspectives in Psychology, Vol. 19. Rao, H.S.R & Sinha D. (1997). Sage publications: New Delhi
- Indian Social Problems, Vol.1 & 2, Madan G.R (2003). Allied Publishers Pvt. Ltd., New Delhi. Elements of ancient Indian Psychology, 1st ed. Kuppaswamy, B. (1990) Konark Publishers: New Delhi.
- Handbook of Social Psychology, Vol.1 & 5. Lindzey, G., & Aronson, E. (1975). Amerind Publishing: New Delhi
- Family Theories – an Introduction, Klein, D.M. & White, J.M. (1996). Sage Publications: New Delhi.
- Personality & Social Psychology: towards a synthesis, Krahe, Sage Publications: New Delhi
- Psychopathology, Buss A.H. (1966). John Wiley and sons: NY
- Making sense of illness: the social psychology of health and disease. Radley, A. (1994). Sage publications: New Delhi
- The sociology of mental illness. 3rd ed. Irallagher, B. J. (1995). Prentice hall: USA
- Textbook of Psychopathology, Millon, T., Blaney, P.H. & Davis, R.D. (1999). Oxford University Press: NY
- Abnormal Psychology, 13th ed, Carson, R.C, Butcher, T.N, Mureka, S. & Hooley, J.M. (2007). Dorling Kindersley Pvt Ltd: India
- Developmental Psychopathology, Achenback T.M. (1974). Ronald Press Co.: NY
- Fish's Clinical Psychopathology, Fish, F, & Hamilton, M (1979). John Wright & Sons: Bristol.
- Psychopathology in the aged, Cole, J.O. & Barrett, J.E. (1980). Raven Press: NY
- Abnormal Child Psychology, Mash, E.J & Wolfe, D.A. (1999). Wadsworth Publishing: U.S.A
- Handbook of Clinical Child Psychology, 3rd ed. Walker, C.E & Roberts, M.C. (2001). John Wiley & Sons: Canada.
- Clinical Child Psychology, Pfeiffer, S.I. (1985). Grune & Stratton: USA
- Mental Health of Indian Children, Kapur, (1995). Sage publications: New Delhi
- The Inner world: a psychoanalytic study of childhood and society in India, Kakar, S (1981). Oxford University press: New Delhi
- Applied Cross cultural psychology, Brislin, R. W. (1990). Sage publications: New Delhi

PAPER-II: PSYCHIATRY

Course Code: PSY5103

Credit Units: 12

Aim: The aim is to train in conceptualization of psychopathology from different etiological perspectives, eliciting phenomenology and arrive at the clinical diagnosis following a classificatory system and propose/carry out psychological interventions including psychosocial treatment/management for the entire range of psychological disorders. Also, to train in assessing the caregivers' burden, disability and dysfunctions that are often associated with mental disorders and intervene as indicated in a given case.

Objectives: By the end of Part-I, trainees are required to demonstrate ability to:

- Demonstrate an understanding of a clinically significant behavioral and psychological syndrome, and differentiate between child and adult clinical features/presentation.
- Understand that in many ways the culture, societal and familial practices shape the clinical presentation of mental disorders, and understand the role of developmental factors in adult psychopathology.
- Carryout the clinical work up of clients presenting with the range of mental health problems and make clinical formulations/diagnosis drawing on their knowledge of a pertinent diagnostic criteria and phenomenology.
- Summarizes the psychosocial, biological and socio-cultural causal factors associated with mental health problems and neuropsychological disorders with an emphasis on bio-psychosocial and other systemic models.
- Carryout with full competence the psychological assessment, selecting and using a variety of instruments in both children and adults.
- Describe various intervention programs in terms of their efficacy and effectiveness with regard to short and longer term goals, and demonstrate beginning competence in carrying out the indicated interventions, monitor progress and outcome.
- Discuss various pharmacological agents that are used to treat common mental disorders and their mode of action.
- Demonstrate an understanding of caregiver, and family burden and their coping style.
- Assess the disability/dysfunctions that are associated with mental health problems, using appropriate measures.
- Discuss the medico-legal and ethical issues in patients requiring chronic care and institutionalization.

Academic Format of Modules: The learning would be primarily through clinical workups of cases having psychiatric disorders. A mixed lectures/seminar format, allowing trainees to participate in collaborative discussion, could be adapted in addition, for imparting theory components.

Evaluation: Theory – involving long and short essays, practical/clinical exam in psychological assessment of psychiatric cases and comprehensive viva.

Course Contents:

Module - I: Introduction

Approach to clinical interviewing and diagnosis; case history; mental status examination; organization and presentation of psychiatric information; diagnostic formulation; classificatory system in use.

Module - II: Psychoses

Schizophrenia, affective disorders, delusional disorders and other forms of psychotic disorders – types, clinical features, etiology and management

Module - III: Neurotic, stress-related and somatoform disorders

Types, clinical features, etiology and management

Module - IV: Disorders of personality and behavior

Specific personality disorders; mental & behavioral disorders due to psychoactive substance use; habit and impulse disorders; sexual disorders and dysfunctions – types, clinical features, etiology and management.

Module - V: Organic mental disorders

Dementia, delirium and other related conditions with neuralgic and systemic disorders – types, clinical features, etiology and management.

Module-VI: Behavioral, emotional and developmental disorders of childhood and adolescence: types, clinical features, etiology and management.

Module - VII: Mental retardation

Classification, etiology and management

Module - VIII: Neurobiology of mental disorders

Neurobiological theories of psychosis, mood disorders, suicide, anxiety disorders, substance use disorders and other emotional and behavioral syndromes.

Module - IX: Therapeutic approaches

Drugs, ECT, psychosurgery, psychotherapy, and behavior therapy, preventive and rehabilitative strategies – halfway home, sheltered workshop, daycare, and institutionalization.

Module - X: Consultation-liaison psychiatry

Psychiatric consultation in general hospital; primary care setting

Module - XI: Special populations/Specialties

Geriatric, terminally ill, HIV/AIDS, suicidal, abused, violent and non-cooperative patients; psychiatric services in community, and following disaster/calamity

Module - XII: Mental health policies and legislation

Mental Health Act of 1987, National Mental Health Program 1982, the Persons With Disabilities (equal opportunities, protection of rights and full participation) Act 1995; Rehabilitation Council of India (RCI) Act of 1993, National Trust for Mental Retardation, CP and Autistic Children 1999, Juvenile Justice Act of 1986; ethical and forensic issues in psychiatry practice.

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		
Weightage	10	5	10	5	70	100

CT-Class Test; H-Home Assignment; P-Presentation; V-Viva; Q-Quiz; A-Attendance; EE-End Term Exam

Text & References:

- Comprehensive Textbook of Psychiatry, 6th ed., Vol. 1 & 2, Kaplan & Sadock, (1995). William & Wilkins: London.
- Oxford Textbook of psychiatry, 2nd ed., Gelder, Gath & Mayon, (1989). Oxford University Press: NY
- Symptoms in mind: Introduction to descriptive psychopathology, Sims A, Bailliere T, (1988) Textbook of postgraduate psychiatry, 2nd ed. Vol 1 & 2, Vyas, J.N. & Ahuja, N. (1999). Jaypee brothers: New Delhi.
- Child and Adolescent Psychiatry: Modern approaches, 3rd ed., Rutter, M. & Herson, L (1994) Blackwell Scientific Publications: London.

PAPER-III: STATISTICS AND RESEARCH METHODOLOGY

Course Code: PSY5106

Credit Units: 12

Aim: The aim of this paper is to elucidate various issues involved in conduct of a sound experiment/survey. With suitable examples from behavioral field, introduce the trainees to the menu of statistical tools available for their research, and to develop their understanding of the conceptual bases of these tools. Tutorial work will involve exposure to the features available in a large statistical package (SPSS) while at the same time reinforcing the concepts discussed in lectures.

Objectives: By the end of Part-II, trainees are required to demonstrate ability to:

- Understand the empirical meaning of parameters in statistical models
- Understand the scientific meaning of explaining variability
- Understand experimental design issues - control of unwanted variability, confounding and bias.
- Take account of relevant factors in deciding on appropriate methods and instruments to use in specific research projects.
- Understand the limitations and shortcomings of statistical models
- Apply relevant design/statistical concepts in their own particular research projects.
- Analyze data and interpret output in a scientifically meaningful way
- Generate hypothesis/hypotheses about behavior and prepare a research protocol outlining the methodology for an experiment/survey.
- Critically review the literature to appreciate the theoretical and methodological issues.

Academic Format of Modules: The course will be taught mainly in a mixed lecture/tutorial format, allowing trainees to participate in collaborative discussion. Demonstration and hands-on experience with SPSS program are desired activities.

Evaluation: Theory - involving long and short essays, and problem-solving exercises.

Course Contents:

Module - I: Introduction

Various methods to ascertain knowledge, scientific method and its features; problems in measurement in behavioral sciences; levels of measurement of psychological variables - nominal, ordinal, interval and ratio scales; test construction - item analysis, concept and methods of establishing reliability, validity and norms.

Module - II: Sampling

Probability and non-probability; various methods of sampling - simple random, stratified, systematic, cluster and multistage sampling; sampling and non-sampling errors and methods of minimizing these errors

Module - III: Concept of probability

Probability distribution - normal, poisson, binomial; descriptive statistics - central tendency, dispersion, skewness and kurtosis

Module - IV: Hypothesis testing

Formulation and types; null hypothesis, alternate hypothesis, type I and type II errors, level of significance, power of the test, p-value. Concept of standard error and confidence interval

Module - V: Tests of significance- Parametric tests

Requirements, "t" test, normal z-test, and "F" test including post-hoc tests, one-way and two-way analysis of variance, analysis of covariance, repeated measures analysis of variance, simple linear correlation and regression.

Module – VI: Tests of significance - Non-parametric tests

Requirements, onesample tests – sign test, sign rank test, median test, Mc Nemer test; two-sample test – Mann Whitney U test, Wilcoxon rank sum test, Kolmogorov-Smirnov test, normal scores test, chi-square test; ksamle tests - Kruskal Wallies test, and Friedman test, Anderson darling test, Cramer-von Mises test.

Module - VII: Experimental design

Randomization, replication, completely randomized design, randomized block design, factorial design, crossover design, single subject design, non-experimental design.

Module - VIII: Epidemiological studies

Prospective and retrospective studies, case control and cohort studies, rates, sensitivity, specificity, predictive values, Kappa statistics, odds ratio, relative risk, population attributable risk, Mantel Haenzel test, prevalence, and incidence. Age specific, disease specific and adjusted rates, standardization of rates. Tests of association, 2 x 2 and row x column contingency tables

Module - IX: Multivariate analysis

Introduction, Multiple regression, logistic regression, factor analysis, cluster analysis, discriminant function analysis, path analysis, MANOVA, Canonical correlation, and Multidimensional scaling.

Module - X: Sample size estimation

Sample size determination for estimation of mean, estimation of proportion, comparing two means and comparing two proportions.

Module - XI: Qualitative analysis of data

Content analysis, qualitative methods of psychosocial research

Module - XII: Use of computers

Use of relevant statistical package in the field of behavioral science and their limitations

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		
Weightage (%)	10	5	10	5	70	100

CT-Class Test; H-Home Assignment; P-Presentation; V-Viva; Q-Quiz; A-Attendance; EE-End Term Exam

Text & References:

- Research Methodology, Kothari, C. R. (2003). Wishwa Prakshan: New Delhi
- Foundations of Behavioral Research, Kerlinger, F.N. (1995). Holt, Rinehart & Winston: USA.
- Understanding Biostatistics, Hassart, T.H. (1991). Mosby Year Book
- Biostatistics: a foundation for analysis in health sciences, 8th ed, Daniel, W.W. (2005). John Wiley and sons: USA
- Multivariate analysis: Methods & Applications, Dillon, W.R. & Goldstein, M. (1984), John Wiley & Sons: USA
- Non-parametric statistics for the behavioral sciences, Siegal, S & Castellan, N.J. (1988). McGraw Hill: New Delhi
- Qualitative Research: Methods for the social sciences, 6th ed, Berg, B.L. (2007). Pearson Education, USA.

PAPER-IV: PRACTICAL: PSYCHOLOGICAL ASSESSMENT INCLUDING VIVA-VOCE

Course Code: PSY5104

Credit Units: 12

Aim: To provide hands-on experience in acquiring the necessary skills and competency in selecting, administering, scoring and interpreting psychological tests often employed in clients with mental or neuropsychological disorders. Since psychological assessment involves integration of information from multiple sources, the trainees are required to be given extensive exposure in working up of cases and carrying out the assessment at all levels. Typical areas of focus for psychological assessment includes (not necessarily limited to): cognition, intelligence, personality, diagnostic, levels of adjustment, disability/functional capacity, neuropsychological functions, clinical ratings of symptomatology, variables that help/direct treatment, and assess treatment outcomes.

Objectives: By the end of Part-I, trainees are required to demonstrate ability to:

- Use relevant criteria to assess the quality and appropriateness of a psychological test and evaluate its strengths and weaknesses for clinical purposes.
- Able to carry out the clinical work-up and discuss the diagnostic possibilities based on the history and mental status examination of the clients with psychological/neuropsychological problems.
- Synthesize and integrate collateral information from multiple sources and discuss the rationale for psychological assessment as relevant to the areas being assessed.
- Select and justify the use of psychological tests and carry out the assessment as per the specified procedures in investigating the relevant domains.
- Interpret the findings in the backdrop of the clinical history and mental status findings and arrive at a diagnosis.
- Prepare the report of the findings as relevant to the clinical questions asked or hypothesis set up before the testing began, and integrate the findings in service activities.

Academic Format of Modules: Acquiring the required competency/skills would be primarily through clinical workups of cases having psychological/neuropsychological disorders and carrying out the indicated psychological assessments within the clinical context. Demonstration and tutorials shall be held for imparting practical/theory components of the psychological tests.

Evaluation: Practical/clinical – involve working up cases and carrying out the psychological assessment within clinical context and viva voce.

Course Contents:

Module - I: Introduction

Case history; mental status examination; rationale of psychological assessment; behavioral observations, response recording, and syntheses of information from different sources; formats of report writing

Module - II: Tests of cognitive functions

Bender gestalt test; Wechsler memory scale; PGI memory scale; Wilcoxon cord sorting test, Bhatia's battery of performance tests of intelligence; Binet's test of intelligence (locally standardized); Raven's progressive matrices (all versions); Wechsler adult intelligence scale – Indian adaptation (WAPIS – Ramalingaswamy's), WAIS-R.

Module - III: Tests for diagnostic clarification

A) Rorschach psychodiagnostics, B) Tests for thought disorders – color form sorting test, object sorting test, proverbs test, C) Minnesota multiphasic personality inventory; multiphasic questionnaire, clinical analysis questionnaire, IPDE, D) screening instruments such as GHQ, hospital anxiety/depression scale etc. to detect psychopathology.

Module - IV: Tests for adjustment and personality assessment

A) Questionnaires and inventories – 16 personality factor questionnaire, NEO-5 personality inventory, temperament and character inventory, Eysenk’s personality inventory, Eysenck’s personality questionnaire, self-concept and self-esteem scales, Rottor’s locus of control scale, Bell’s adjustment inventory (students’ and adults’), subjective wellbeing questionnaires, QOL , B) projective tests – sentence completion test, picture frustration test, draw-a-person test; TAT – Murray’s and Uma Chowdhary’s.

Module - V: Rating scales

Self-rated and observer-rated scales of different clinical conditions such as anxiety, depression, mania, OCD, phobia, panic disorder etc. (including Leyton’s obsessional inventory, Y-BOCS, BDI, STAI, HADS, HARS, SANS, SAPS, PANSS, BPRS), issues related to clinical applications and recent developments.

Module - VI: Psychological assessment of children

A) Developmental psychopathology check list, CBCL, B) Administration, scoring and interpretation of tests of intelligence scale for children such as SFB, C-RPM, Malin’s WISC, Binet’s tests, and developmental schedules (Gesell’s, Illingworth’s and other) Vineland social maturity scale, AMD adaptation scale for mental retardation, BASIC-MR, developmental screening test (Bharatraj’s), C) Tests of scholastic abilities, tests of attention, reading, writing, arithmetic, visuo-motor gestalt, and integration, D) Projective tests – Raven’s controlled projection test, draw-a-person test, children’s apperception test, E) Clinical rating scales such as for autism, ADHD etc.

Module - VII: Tests for people with disabilities

WAIS-R, WISC-R (for visual handicapped), blind learning aptitude test, and other interest and aptitude tests, Kauffman’s assessment battery and such other tests/scales for physically handicapped individuals

Module - VIII: Neuropsychological assessment

LNNB, Halstead-Reitan battery, PGI-BBD, NIMHANS and other batteries of neuropsychological tests in current use

- Core Tests:**
1. Stanford Binet’s test of intelligence (any vernacular version)
 2. Raven’s test of intelligence (all forms)
 3. Bhatia’s battery of intelligence tests
 4. Wechsler adult performance intelligence scale
 5. Malin’s intelligence scale for children
 6. Gesell’s developmental schedule
 7. Wechsler memory scale
 8. PGI memory scale
 9. 16 personality factor questionnaire
 10. NEO-5 personality inventory
 11. Temperament and character inventory
 12. Children personality questionnaire
 13. Clinical analysis questionnaire
 14. Multiphasic questionnaire
 15. Object sorting/classification test
 16. Sentence completion test
 17. Thematic apperception test
 18. Children’ apperception test
 19. Rorschach psychodiagnostics
 20. Neuropsychological battery of tests (any standard version)

A certificate by the head of the department that the candidate has attained the required competence in all of the above tests shall be necessary for appearing in the university examinations of Part – I. However, if the center opts to test and certify the competency in neuropsychological tests as part of the requirements for appearing in the university examinations of Part - II (i.e. excluding it from Part - I), it could be done so. In such case, the Practical/Clinical examinations of Part – II shall include an examination in this area, in addition to examination in Psychological Therapies.

Examination Scheme:

	Internal Exam (30)			Final Exam (70)		Total Marks
Components	File demonstration	Case Conference, Seminar, Journal	A	End Term Exam	Viva	
Weightage	20	5	5	35	35	100

Text & References:

- Theory and practice of psychological testing, Freeman, F.S. (1965). Oxford and IHBN: New Delhi.
- Comprehensive handbook of psychological assessment, Vol 1 & 2, Hersen, M, Segal, D. L, Hilsenroth, M.J. (2004). John Wiley & Sons: USA
- Comprehensive Clinical Psychology: Assessment, Vol. 4, Bellack, A.S. & Hersen, M (1998). Elsevier Science Ltd.: Great Britain
- The Rorschach – A Comprehensive System, Vol 1, 4th ed., Exner, J.E. John Wiley and sons: NY.
- The Thematic Apperception Test manual, Murray H.A. (1971), Harvard University Press. An Indian modification of the Thematic Apperception Test, Choudhary, U. Shree Saraswathi Press: Calcutta.

PAPER-V: SUBMISSION OF PSYCHODIAGNOSTIC RECORDS

Course Code: PSY5105

Credit Units: 12

Course Contents:

Five full-length Psycho-diagnostic Records: out of which one record each should be related to, child and neuropsychological assessment. The records should include a summary of the clinical history organized under relevant headings, and a discussion on

- a) rationale for testing,
- b) areas to be investigated,
- c) tests administered and their rationale,
- d) test findings and
- e) impression

Examination Scheme:

Components	Submission of five cases of full-length Psycho-diagnostics Report
Weightage (%)	100

Syllabus - Second Year (Part-II)

PAPER-I: PSYCHOTHERAPY AND COUNSELLING

Course Code: PSY5301

Credit Units: 12

Aim: Impart knowledge and skills necessary to carry out psychological interventions in mental health problems with required competency. As a prelude to problem-based learning within a clinical context, the trainees are introduced to factors that lead to development of an effective working therapeutic alliance, pre-treatment assessment, setting therapy goals, evaluation of success of therapy in producing desired changes, and variables that affect the therapy processes. Further, the aim is to equip the trainees with various theories of clinical problems, and intervention techniques, and their advantages and limitations.

Objectives: By the end of Part-II, trainees are required to demonstrate ability to:

- Describe what factors are important in determining how well patients do in psychotherapy?
- Demonstrate an ability to provide a clear, coherent, and succinct account of patient's problems and to develop an appropriate treatment plan.
- Demonstrate a sense of working collaboratively on the problem and ability to foster an effective alliance.
- Demonstrate a working knowledge of theoretical application of various approaches of therapy to clinical conditions.
- Set realistic goals for intervention taking into consideration the social and contextual mediation.
- Carry out specialized assessments and interventions, drawing on their knowledge of pertinent outcome/evidence research.
- Use appropriate measures of quantifying changes and, apply and integrate alternative or complementary theoretical approach, depending on the intervention outcome.
- Demonstrate skills in presenting and communicating some aspects of current intervention work for assessment by other health professionals, give and receive constructive feedback.
- Demonstrate ability to link theory-practice and assimilate clinical, professional, academic and ethical knowledge in their role of a therapist.
- Present a critical analysis of intervention related research articles and propose their own methods/design of replicating such research.

Academic Format of Modules: Acquiring the required competency/skills would be primarily through clinical workups and carrying out of various treatment techniques, under supervision, within clinical context. The trainees are required to be involved in all clinical service activities – institutional or community based, of the center. Demonstration, clinical issue seminar, clinical seminar, clinical case conferences are required to be planned to impart the necessary knowledge and skills.

Evaluation: Theory - involving long and short essays, and practical/clinical - involving workup and assessment of clinical cases with viva voce.

Course Contents:

Module - I: Introduction to Psychotherapy

Definitions, objectives, issues related to training professional therapists; ethical and legal issues involved in therapy work; rights and responsibilities in psychotherapy; issues related to consent (assent in case of minors); planning and recording of therapy sessions; structuring and setting goals; pre- and postassessment; practice of evidence-based therapies.

Module - II: Therapeutic Relationship

Client and therapist characteristics; illness, technique and other factors influencing the relationship

Module - III: Interviewing

Objectives of interview, interviewing techniques, types of interview, characteristics of structured and unstructured interview, interviewing skills (micro skills), open-ended questions, clarification, reflection, facilitation and confrontation, silences in interviews, verbal and non-verbal components

Module - IV: Affective psychotherapies

Origin, basis, formulation, procedures, techniques, stages, process, outcome, indications, and research & current status with respect to psychodynamic, brief psychotherapy, humanistic, existential, gestalt, person-centered, Adlerian, transactional analysis, reality therapy, supportive, clinical hypnotherapy, play therapy, psychodrama, and oriental approaches such as yoga, meditation, shavasana, pranik healing, reiki, tai chi etc.

Module-V: Behavior therapies

Origin, foundations, principles & methodologies, problems and criticisms, empirical status, behavioral assessment, formulations and treatment goals, Desensitization - (imaginal, in-vivo, enriched, assisted), Extinction - (graded exposure, flooding and response prevention, implosion, covert extinction, negative practice, stimulus satiation), Skill training - (assertiveness training, modeling, behavioral rehearsal), Operant procedures - (token economy, contingency management), Aversion - (faradic aversion therapy, covert sensitization, aversion relief procedure, anxiety relief procedure and avoidance conditioning), Self-control procedures - (thought stop, paradoxical intention, stimulus satiation), Biofeedback – (EMG, GSR, EEG, Temp., EKG), Behavioral counseling, Group behavioral approaches, Behavioral family/marital therapies.

Module - VI: Cognitive therapies

Cognitive model, principles and assumptions, techniques, indications and current status of rational emotive behavior therapy, cognitive behavior therapy, cognitive analytic therapy, dialectical behavior therapy, problem-solving therapy, mindfulness based cognitive therapy, schema focused therapy, cognitive restructuring, and other principal models of cognitive therapies.

Module – VII: Systemic therapies

Origin, theoretical models, formulation, procedures, techniques, stages, process, outcome, indications, and research & current status with respect to family therapy, marital therapy, group therapy, sex therapy, interpersonal therapy and other prominent therapies.

Module – VIII: Physiological therapies

Origin, basis, formulation, procedures, techniques, stages, process, outcome, indications, and current status with respect to progressive muscular relaxation, autogenic training, biofeedback, eye-movement desensitization and reprocessing, and other forms of evidence-based therapies

Module – IX: Counseling

Definition and goals, techniques, behavioral, cognitive and humanistic approaches, process, counseling theory and procedures to specific domains of counseling

Module - X: Therapy in special conditions

Therapies and techniques in the management of deliberate self harm, bereavement, traumatic, victims of man-made or natural disasters, in crisis, personality disorders, chronic mental illness, substance use, HIV/AIDS, learning disabilities, mental retardation, and such other conditions where integrative/eclectic approach is the basis of clinical intervention.

Module - XI: Therapy with children

Introduction to different approaches, psychoanalytic therapies (Ana Freud, Melanie Klein, Donald Winnicott); special techniques (behavioral and play) for developmental internalizing and externalizing disorders; therapy in special conditions such as psycho-physiological and chronic physical illness; parent and family counseling; therapy with adolescents

Module – XII: Psycho-education (therapeutic education)

Information and emotional support for family members and caregivers, models of therapeutic education, family counseling for a collaborative effort towards recovery, relapse-prevention and successful rehabilitation with regard to various debilitating mental disorders.

Module – XIII: Psychosocial rehabilitation

Rehabilitation services, resources, medical and psychosocial aspects of disability, assessment, group therapy, supportive therapy and other forms of empirically supported psychotherapies for core and peripheral members.

Module - XIV: Psychotherapy in the Indian Context

Historical perspective in psychological healing practices from the Vedic period and the systems of Ayurveda and Yoga, contemporary perspectives; socio-cultural issues in the Indian context in practice of psychotherapy; ongoing research related to process and outcome.

Module - XV: Contemporary issues and research

Issues related evidence-based practice, managed care, and research related to process and outcome.

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		
Weightage	10	5	10	5	70	100

CT-Class Test; H-Home Assignment; P-Presentation; V-Viva; Q-Quiz; A-Attendance; EE-End Term Exam

Text & References:

- An introduction to the psychotherapies, 3rd ed., Bloch, S (2000). Oxford Medical Publications: NY Encyclopedia of Psychotherapy, Vol 1 & 2, Hersen M & Sledge W. (2002). Academic Press: USA
- The techniques of psychotherapy, 4th ed., Parts 1 & 2, Wolberg, L.R. Grune & Stratton: NY Theories of Psychotherapy & Counseling, 2nd ed., Sharf, R.S. (2000). Brooks/Cole: USA Handbook of Psychotherapy & Behavior change – An empirical analysis, Bergin, A.G. & Garfield, S. L. (1978). John Wiley & Sons: NY
- Comprehensive Clinical Psychology, Vol 6, Bellack, A.S. & Hersen, M., (1998). Elsevier Science Ltd: Great Britain
- Handbook of Individual Therapy, 4th ed., Dryden, W. (2002). Sage Publications: New Delhi. Psychotherapy: an eclectic integrative approach, 2nd ed. Garfield, S. L. (1995). John Wiley and sons: USA
- International handbook of behavior modification and therapy, Bellack, A.S., Hersen, M and Kazdin, A.E. (1985). Plenum Press: NY
- Behavior therapy: Techniques and empirical findings, Rimm D.C. & Masters J.C. (1979). Academic Press: NY.
- Handbook of Clinical Behavior therapy, Turner, S.M., Calhoun K.S and Adams H.E. (1992). Wiley Interscience: NY
- Dictionary of Behavior Therapy, Bellack, H. Pergamon Press: NY
- Comprehensive Handbook of cognitive therapy, Freeman, A., Simon, K.M., Beutler L.E. & Arkowitz, M. (1988), Plenum Press: NY
- Cognitive Behavior Therapy for psychiatric problems: A practical guide, Hawton, K. Salkovskis, P.M., Kirk, J. and Clark, D.M. (1989). Oxford University Press: NY
- Rational Emotive Behaviour Therapy, Dryden, W. (1995). Sage publications: New Delhi Cognitive Therapy: an Introduction, 2nd ed, Sanders, D & Wills, F. (2005). Sage Publications: New Delhi
- Advances in Cognitive Behavior therapy, Dobson, K S and Craig, K D. (1996). Sage publications: USA
- Science and Practice of CBT, Clark, D M and Fairburn, C. G. (2001). Oxford University press: Great Britain.

- Counseling and Psychotherapy: theories and interventions. 3rd ed. Capuzzi, D and Gross D. R. (2003). Merrill Prentice Hall: New Jersey
- Handbook of psychotherapy case formulation. 2nd ed. Eells, T.D (2007). Guilford press: USA
- Psychoanalytic techniques, a handbook for practicing psychoanalyst, Wolman BB Basic Book: NY
- The Technique and Practice of psychoanalysis Vol. 1, Greenson, R.R. (1967). International Universities Press: USA.
- Psychotherapy: The analytic approach, Aronson, M. J and Scharfman, M.A. (1992). Jason Aronson Inc: USA
- New Approach of Interpersonal Psychotherapy, Klerman, G. L., Weissman, M. M (1993). American Psychiatric press: Washington
- Handbook of clinical child psychology, 3rd ed., Walker, C.E. & Roberts, MC (2001). John Wiley and Sons: Canada.
- Abnormal child psychology, Mash, E.J & Wolfe, D.A. (1999). Wadsworth Publishing: USA
- Clinical Practice of cognitive therapy with children and adolescents, Friedberg R.D. & McClure, J.M. Guilford Press, NY
- CBT for children and families, 2nd ed., Graham, P.J. (1998). Cambridge University Press: UK
- Handbook of clinical behavior therapy, Turner, S.M, Calhour, K.S. & Adams, H.E.(1992). Wiley Interscience: NY
- Basic family therapy, Baker, P, (1992). Blackwell Scientific Pub.: New Delhi
- Handbook of family and marital therapy, Wolman, B.B. & Stricker, G, (1983). Plenum: NY
- Introduction to Counseling and Guidance, 6th ed., Gibson, R.L. & Mitchell M.H. (2006), Pearson, New Delhi.

PAPER-II: BEHAVIOURAL MEDICINE

Course Code: PSY5302

Credit Units: 12

Aim: Health psychology, as one of the subspecialties of applied psychology, has made a notable impact on almost the entire range of clinical medicine. The field deals with psychological theories and methods that contribute immensely to the understanding and appreciation of health behavior, psychosocial and cultural factors influencing the development, adjustment to, treatment, outcome and prevention of psychological components of medical problems. The aim of behavioral medicine is to elucidate the effects of stress on immune, endocrine, and neurotransmitter functions among others, psychological process involved in health choices individuals make and adherence to preventive regimens, the effectiveness of psychological interventions in altering unhealthy lifestyles and in directly reducing illness related to various systems. Further, to provide the required skills and competency to assess and intervene for psychological factors that may predispose an individual to physical illness and that maintain symptoms, in methods of mitigating the negative effects of stressful situations/events, and buffering personal resources.

Objectives: By the end of Part-II, trainees are required to demonstrate ability to:

- Appreciate the impact of psychological factors on developing and surviving a systemic illness.
- Understand the psychosocial impact of an illness and psychological interventions used in this context.
- Understand the psychosocial outcomes of disease, psychosocial interventions employed to alter the unfavorable outcomes.
- Understand the rationale of psychological interventions and their relative efficacy in chronic disease, and carry out the indicated interventions.
- Understand the importance of physician-patient relationships and communication in determining health outcomes.
- Understand of how basic principles of health psychology are applied in specific context of various health problems, and apply them with competence.
- Demonstrate the required sensitivity to issues of death and dying, breaking bad news, and end-of-life issues.
- Carry out specialized interventions during period of crisis, grief and bereavement.
- Understand, assimilate, apply and integrate newer evidence-based research findings in therapies, techniques and processes.
- Critically evaluate current health psychology/behavioral medicine research articles, and present improved design/methods of replicating such research.
- Demonstrate the sense responsibility while working collaboratively with another specialist and foster a working alliance.

Academic Format of Modules: Format would be essentially same as Paper – I on Therapies. The competency/skills are imparted through supervised workups, assessment and practical work of carrying out various treatment techniques within clinical context. Depending on availability of resources at the parent center, the trainees may be posted for extra-institutional learning. Demonstration, clinical issue seminar, clinical seminar, clinical case conferences are required to impart the necessary knowledge and skills. Evaluation: Theory - involving long and short essays, and practical/clinical - involving workup and assessment of clinical cases with viva voce.

Course Contents:

Module-I: Introduction

Definition, boundary, psychological and behavioral influences on health and illness, neuroendocrine, neurotransmitter and neuroimmune responses to stress, negative affectivity, behavioral patterns, and

coping styles, psychophysiological models of disease, theoretical models of health behavior, scope and application of psychological principles in health, illness and health care.

Module – II: Central nervous system

Cognitive, personality, behavioral, emotional disturbances in major CNS diseases like cerebrovascular (stroke, vascular dementia etc.), developmental (cerebral palsy), degenerative (Parkinson's etc.), trauma (traumatic brain and spinal cord injury), convulsive (epilepsy), and infectious (AIDS dementia), assessment and methods for psychological intervention and rehabilitation with such patients.

Module – III: Cardiovascular system

Psychosocial, personality, lifestyle, and health practice issues, psychobehavioral responses including coping with illness and functional loss in hypertension, MI, following CABG and other cardiovascular conditions, salient issues with regard to quality-of-life and well-being, empirically proven methods of psychological management of CVS diseases.

Module – IV: Respiratory system

precipitants, such as emotional arousal, and other external stimuli, exacerbants such as anxiety and panic symptoms, effects, such as secondary gain, low self-esteem in asthma and other airway diseases, psychological, behavioral and biofeedback strategies as adjunct in the management.

Module – V: Gastrointestinal system

Evaluation of psychological factors including personality characteristics and stress/coping style in functional GI disorders such as irritable bowel syndrome, inflammatory bowel disease, peptic ulcer disease, esophageal disorder etc., role of psychotherapy, behavior modification, cognitive restructuring, biofeedback and relaxation training

Module – VI: Genitourinary/renal/reproductive system

Psychosocial issues in male/female sexual dysfunctions, micturition/voiding problems including primary / secondary enuresis, end-stage renal disease, dialysis treatment, primary and secondary infertility, empirically validated psychological and behavioral interventions in these conditions.

Module – VII: Dermatology:

Role of stress and anxiety in psychodermatological conditions such as psoriasis, chronic urticaria, dermatitis, alopecia and the impact of these on self-esteem, body image and mood, role of psychological interventions such as relaxation, stress management, counseling and biofeedback strategies.

Module – VIII: Oncology

Psychosocial issues associated with cancer - quality of life, denial, grief reaction to bodily changes, fear of treatment, side effects, abandonment, recurrence, resilience, assessment tools, and goals of interventions for individual and family, and therapy techniques.

Module – IX: HIV/AIDS

Model of HIV disease service program in India, pre- and post-test counseling, psychosocial issues and their resolutions during HIV progress, psychological assessment and interventions in infected adults and children, and family members/caregivers, highly active anti-retroviral treatments (HAART), neuropsychological findings at different stages of infection, issues related to prevention/spreading awareness and interventions in at risk populations.

Module – X: Pain

Physiological and psychological processes involved in pain experience and behavior, assessment tools for acute and chronic pain intensity, behavior, and dysfunctions/disability related to pain, psychological interventions such as cognitive, behavioral, biofeedback and hypnotic therapies.

Module – XI: Terminally ill

Medical, religious and spiritual definition of death and dying, psychology of dying and bereaved family, strategies of breaking bad news, bereavement and grief counseling, management of pain and other physical symptoms associated with end-of-life distress in patients with cancer, AIDS, and other terminal illness, professional issues related to working in hospice including working through one's own death anxiety, euthanasia – types, arguments for and against.

Module – XII: Other general clinical conditions

Application of psychological techniques and their rationale in the clinical care of patients in general medical settings where psychological services appears to affect the outcome of medical management positively, for example in diabetes, sleep disorders, obesity, dental anxiety, burns injury, pre- and postsurgery, preparing for amputation, evaluation of organ donors/recipient, pre- and post-transplantation, organ replacement, hemophiliacs, sensory impairment, rheumatic diseases, abnormal illness behavior, health anxiety etc.

Module – XIII: Contemporary Issues

Research and developments in health psychology, psychophysiology, psychoneuroimmunology, psychobiology, sociobiology and their implications, and effects of psychotherapy on the biology of brain

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		
Weightage (%)	10	5	10	5	70	100

CT-Class Test; H-Home Assignment; P-Presentation; V-Viva; Q-Quiz; A-Attendance; EE-End Term Exam

Text & References:

- International handbook of behavior modification and therapy, Bellack, A.S., Hersen, M and Kazdin, A.E. (1985). Plenum Press: NY
- Behavior therapy: Techniques and empirical findings, Rimm D.C. & Masters J.C. (1979). Academic Press: NY.
- Handbook of Clinical Behavior therapy, Turner, S.M., Calhoun, K.S and Adams, H.E. (1992). Wiley Interscience: NY
- Dictionary of Behavior Therapy, Bellack Handbook of clinical psychology in medical settings, Sweet, J.J, Rozensky, R.H. & Tovian, S.M. (1991), Plenum Press: NY.
- Health Psychology, Dimatteo, M R and Martin, L.R. (2002). Pearson, New Delhi
- Biofeedback – Principles and practice for clinicians, Basmajian J.V. (1979). Williams & Wilkins Company: Baltimore
- Handbook of Psychotherapy and behaviour change, 5th ed., Lambert, M.J (2004). John Wiley and Sons: USA
- Behavioral Medicine: Concepts & Procedures, Tunks, E & Bellismo, A. (1991). Pergamon Press: USA Health Psychology, Vol 1 to Vol 4, Weinman, J, Johnston, M & Molloy, G (2006). Sage publications: Great Britain.

PAPER-III: BIOLOGICAL FOUNDATION OF BEHAVIOR

Course Code: PSY5306

Credit Units: 12

Aim: Brain disorders cause symptoms that look remarkably like other functional psychological disorders. Learning how brain is involved in the genesis of normal and abnormal behavioral/emotional manifestation would result in better clinical judgment, lesser diagnostic errors and increase sensitivity to consider and rule out a neuropsychological origin or biochemical mediation of the psychopathology. Also, current researches have indicated many pharmacological agents dramatically alter the severity and course of certain mental disorders, particularly the more severe disorders. Therefore, the aim of this paper is to provide important biological foundations of human behavior and various syndromes. The main focus is the nervous system and its command center – the brain.

Objectives: By the end of Part-I, trainees are required to demonstrate ability to:

- Describe the nature and basic functions of the nervous system.
- Explain what neurons are and how they process information.
- Identify the brain's levels and structures, and summarize the functions of its structures.
- Describe the biochemical aspects of brain and how genetics increase our understanding of behavior.
- State what endocrine system is and how it regulates internal environment and affects behavior.
- Discuss the principles of psychopharmacology and review the general role of neurotransmitters and neuromodulators in the brain.
- Describe the monoaminergic and cholinergic pathway in the brain and the drugs that affect these neurons.
- Describe the role of neurons that release amino acid neurotransmitters and the drugs that affect these neurons.
- Describe what kinds of clinical symptoms are often associated with lesions of frontal, parietal, temporal and occipital lobes of the brain.
- Describe what kinds of neuropsychological deficits are often associated with lesions of frontal, parietal, temporal and occipital lobes of the brain, and carry out the indicated neuropsychological assessment employing any valid battery of tests.
- Describe what kinds of neuropsychological deficits are often associated with subcortical lesions of the brain.
- List symptoms that are typical of focal and diffuse brain damage.
- Enumerate the characteristics of clinical syndrome and the nature of neuropsychological deficits seen in various cortical and sub-cortical dementias.
- Describe the neuropsychological profile of principal psychiatric syndromes.
- Demonstrate an understanding of functional neuro-imaging techniques and their application in psychological disorders and cognitive neuroscience.
- Demonstrate an understanding of the principles involved in neuropsychological assessment, its strengths and weaknesses, and its indications.
- Describe the nature of disability associated with head injury in the short and longer term, methods of remedial training and their strengths and weakness.

Academic Format of Modules: The learning would be primarily through clinical assessment of cases with brain lesions and disorders. Lectures, seminars and demonstrations by the experts in specific discipline, disease, topics such as by Anatomist, Biochemist, Physiologist, Psychiatrist, Neurologist and Neurosurgeons are required to impart knowledge and skills in certain domains. Depending on the resources available at the center these academic activity can be arranged.

Evaluation: Theory– involving long and short essays, practical/clinical exam in neuropsychological assessment with cases having a brain lesion/disorder and comprehensive viva.

Course Contents: Part-A (Anatomy, Physiology and Biochemistry of CNS)

Module – I: Anatomy of the brain

Major anatomical sub-divisions of the human brain; the surface anatomy and interior structures of cortical and subcortical regions; anatomical connectivity among the various regions; blood supply to brain and the CSF system; cytoarchitecture and modular organization in the brain.

Module – II: Structure and functions of cells

Cells of the nervous system (neurons, supporting cells, blood-brain barrier); communication within a neuron (membrane potential, action potential); communication between neurons (neurotransmitters, neuromodulators and hormones).

Module – III: Biochemistry of the brain

Biochemical and metabolic aspects of Brain; medical genetics; structure and function of chromosomes; molecular methods in genetics; genetic variation; population genetics; single-gene inheritance; cytogenetic abnormalities; multi-factorial inheritance; biochemistry of genetic diseases.

Module – IV: Neurobiology of sensory and motor systems

Organization of sensory system in terms of receptors, relay neurons, thalamus and cortical processing of different sensations; principle motor mechanisms of the periphery (muscle spindle), thalamus, basal ganglia, brain stem, cerebellum and cerebral cortex.

Module – V: Regulation of internal environment

Role of limbic, autonomic and the neuro-endocrine system in regulating the internal environment; reticular formation and other important neural substrates regulating the state of sleep/wakefulness

Module – VI: Neurobiology of behavior

Neurobiological aspects of drives, motivation, hunger, thirst, sex, emotions, learning and memory;

Module – VII: Psychopharmacology: Principles of psycho pharmacology (pharmacokinetics, drug effectiveness, effect of repeated administration); sites of drug action (effects on production, storage, release, receptors, reuptake and destruction); neurotransmitters and neuromodulators (acetylcholine, monoamines, amino acids, peptides, lipids).

Course Contents: Part-B (Neuropsychology)

Module - VIII: Introduction:

Relationship between structure and function of the brain; the rise of neuropsychology as a distinct discipline, logic of cerebral organization; localization and lateralization of functions; approaches and methodologies of clinical and cognitive neuro-psychologists.

Module- IX: Frontal lobe syndrome

Disturbances of regulatory functions; attentional processes; emotions; memory and intellectual activity; language and motor functions

Module-X: Temporal lobe syndrome

Special senses – hearing, vestibular functions and integrative functions; disturbances in learning and memory functions; language, emotions, time perception and consciousness

Module – XI: Parietal and occipital lobe syndromes

Disturbances in sensory functions and body schema perception; agnosias and apraxias; disturbances in visual space perception; color perception; writing and reading ability

Module–XII: Neuropsychological profile of various neurological and psychiatric conditions:

Huntington's disease, Parkinson's disease, progressive supranuclear palsy, thalamic degenerative disease, multiple sclerosis, cortical and subcortical dementias, Alzheimer's dementia, AIDS dementia complex etc., and principal psychiatric syndromes such as psychosis, mood disorders, suicide, anxiety disorders, and other emotional and behavioral syndromes.

Module – XIII: Functional human brain mapping

QEEG, EP & ERP, PET, SPECT, FMRI

Module – XIV: Neuropsychological assessment

Introduction, principles, relevance, scope and indications for neuropsychological assessment and issues involved in neuropsychological assessment of children.

Module – XV: Neuropsychological rehabilitation

Principles, objectives and methods of neuro-rehabilitation of traumatic brain injury and brain diseased; scope of computer-based retraining, neuro-feedback, cognitive aids etc.

Examination Scheme:

Components	Internal Assessment (30 Marks)				Final Exam	Total Marks
	CT	H/P/V/Q	CT	A		
Weightage	10	5	10	5	70	100

CT-Class Test; H-Home Assignment; P-Presentation; V-Viva; Q-Quiz; A-Attendance; EE-End Term Exam

Text & References:

- Clinical Neuroanatomy for Medical Students, Snell, R.S. (1992), Little Brown & Co.: Boston.
- Neuropsychology, a clinical approach, Walsh K. (1994), Churchill Livingstone: Edinburgh.
- Textbook of Medical Physiology, Guyton, A.C. Saunders Company: Philadelphia.
- Behavioral Neurology, Kirshner H.S, (1986). Churchill Livingstone: NY.
- Principles of neural science, Kandel, E. R, & Schwartz, J. H (1985). Elsevier: NY
- Foundations of physiological psychology, 6th ed., Carlson, N.R. (2005). Pearson Education Inc: India
- Essential psychopharmacology, Stahl, S.M. (1998). Cambridge University Press: UK
- Textbook of physiology, Vol 2, Jain, A.K (2005). Avichal Publishing Company: New Delhi.
- Handbook of clinical neurology, Vols, 2, 4, 45 and 46, Vinken, P J, & Bruyn, G W, (1969). North Holland Publishing Co.: Amsterdam
- Fundamentals of human neuropsychology, Kolb, B.I. Freeman & Company: NY
- Neuropsychology, a Clinical approach, 4th ed., Walsh, K (2003). Churchill Livingstone: Edinburgh
- Handbook of Cognitive Neuroscience, Gazaaniga, M. S. (1984). Plenum Press: NY
- Textbook of postgraduate psychiatry, 2nd ed., Vol 1 & 2, Vyas, J.N. & Ahuja, N (1999). Jaypee brothers: New Delhi.
- Handbook of clinical neurology, Vols, 2, 4, and 45, Vinken, PJ, & Bruyn, GW, (1969). North Holland Publishing Co.: Amsterdam
- Neuropsychological assessment of neuropsychiatric disorders, 2nd ed., Grant, I. & Adams, K.M. (1996). Oxford University Press: NY.
- Neuropsychology, a clinical approach, Walsh K. (1994), Churchill Livingstone: Edinburgh.
- Diagnosis & Rehabilitation in clinical neuropsychology, Golden, CJ, Charles, C.T. (1981). Spring Field: USA
- Principles of Neuropsychological Rehabilitation, Prigatano, G.P. (1999). Oxford University Press: NY
- Event Related brain potentials – Basic issues & applications, Rohrbaugh, J W (1990). Oxford University Press: NY.
- Neuropsychological assessment, Lezak, M.D. (1995), Oxford Univ. Press: NY
- Neuropsychological assessment of neuropsychiatric disorders, 2nd ed., Grant, I. & Adams, K.M. (1996), Oxford University Press: NY.
- Comprehensive clinical psychology- Assessment, Vol 4, Bellack A.S. & Hersen M. (1998). Elsevier Science Ltd.: Great Britain

PAPER-IV: PRACTICAL: PSYCHOLOGICAL THERAPIES INCLUDING VIVA-VOCE

Course Code: PSY5304

Credit Units: 12

Aim: Acquire and practice theoretical understanding, attitude and skills necessary to apply various psychotherapeutic interventions to mental health problems and to also develop skills and competency to intervene in stress associated with medical problems among patients as well as their care givers.

Objectives:

- Understanding the role of important client, counselor and context related factors in the psychotherapeutic process
- Systematic application of psychotherapeutic approaches in clinical conditions
- Carry out interventions considering relevant outcome research with ethical considerations
- Application and understanding of health psychology principles in various health conditions
- Working collaboratively with other health care professionals
- Appreciation of the role of social and cultural factors in intervention
- Learn strategies of raising and supporting mental health awareness

Core Topics for practical practice

1. Presenting a clear and precise account of client's problems and Skill of collaborative working
2. Developing appropriate treatment plans
3. Formulating realistic goals for intervention taking into consideration the social and contextual mediation
4. Using appropriate measures of quantifying therapeutic changes
5. Conducting specialized interventions
6. Identifying/making use of factors that help patients get better with psychotherapy
7. Skills in presenting and communicating aspects of current intervention work for assessment by other health professionals
8. Ability to link theory with practice assimilating clinical, professional, academic and ethical knowledge in their role of a therapist
9. Presenting a critical analysis of intervention related research articles and developing methods of replicating such research
10. Understanding, assimilating and integrating newer evidence based research findings in therapies, techniques and processes
11. Understanding psychosocial impact of an illness and relevant psychological interventions
12. Understanding the rationale of psychological interventions and their relative efficacy in various disorders
13. Understanding the importance of counselor-patient relationships in determining therapy outcomes
14. Application of health psychology principles in specific health problems
15. Sensitive handling of issues related to death and dying, breaking bad news and end of life concerns
16. Ability to carry out specialized interventions during periods of crisis, grief and bereavement
17. Understanding training aspects of psychotherapy and ethical/legal issues involved in therapy
18. Ability to conduct a well rounded interview in clinical settings
19. Developing interviewing and counseling micro skills
20. Understanding and application of behavior therapy approaches- classical conditioning based procedures, operant procedures, self control procedures, Biofeedback- in individual, group, family and marital counseling
21. Application of rational emotive behavior therapy, cognitive behavior therapy, cognitive analytic therapy, dialectical behavior therapy, problem solving therapy, mindfulness based cognitive therapy and schema focused therapy
22. Understanding progressive muscular relaxation, autogenic training, biofeedback, eye-movement desensitization and reprocessing
23. Application of psychoanalytic therapies (Ana Freud, Melanie Klein, Donald Winnicott); special techniques (behavioral and play) for developmental, internalizing and externalizing disorders in children

24. Understanding and application of eclectic/integrative approaches for managing deliberate self harm, traumatic conditions, victims of disasters, chronic mental illnesses
25. Understanding of Yoga, meditation, Shavasana, Pranik Healing, Reiki, Tai Chi, etc.
26. Understanding of psycho-education for family members and care givers
27. Understanding psychosocial aspects of disabilities and extending various kinds of rehabilitation services
28. Understanding of stressors, resources and support systems specific to the Indian social context
29. Understanding of Indian psychological healing practices
30. Ability to review literature, appreciate theoretical/methodological issues involved, analyze data and interpret results in a scientifically meaningful ways

Note: A certificate by the head of the department that the candidate has attained the required competence in all of the above tests shall be necessary for appearing in the university examinations of Part-I & II.

Examination Scheme:

	Internal Exam (60)			Final Exam (140)		Total Marks
Components	File demonstration	Case Conference, Seminar, Journal Club	A	End Term Exam	Viva	
Weightage	45	10	5	70	70	200

PAPER-V: SUBMISSION OF PSYCHOTHERAPY RECORDS

Course Code: PSY5305

Credit Units: 12

Course Contents:

Five fully worked-out Psychotherapy Records, out of which one should be child therapy record. The records should include a summary of the clinical history organized under relevant headings, and a discussion on

- a) reasons for intervention(s),
- b) areas to be focused including short- and long-term objectives,
- c) type and technique of intervention employed and rationale
- d) therapy processes,
- e) changes in therapy or objectives, if any, and the reasons for the same,
- f) outcome,
- g) prevention strategies,
- h) future plans

Examination Scheme:

Components	Submission of five fully worked-out Psychotherapy Records
Weightage (%)	100

PAPER-VI: DISSERTATION

Course Code: PSY5337

Credit Units: 10

Under the guidance of a Clinical Psychology faculty member with Ph.D. or minimum 2-yr experience (post-qualification) in clinical teaching or clinical research. If the research work is of interdisciplinary nature requiring input/supervision from another specialist, co guide(s) from the related discipline may be appointed as deem necessary.

GUIDELINES FOR DISSERTATION

The aim of the dissertation is to provide you with an opportunity to further your intellectual and personal development in your chosen field by undertaking a significant practical unit of activity, having an educational value at a level commensurate with the award of your degree. The dissertation can be defined as a scholarly inquiry into a problem or issues, involving a systematic approach to gathering and analysis of information / data, leading to production of a structured report.

Selecting the Dissertation Topic

It is usual to give you some discretion in the choice of topic for the dissertation and the approach to be adopted. You will need to ensure that your dissertation is related to your field of specialization.

Deciding this is often the most difficult part of the dissertation process, and perhaps, you have been thinking of a topic for some time.

It is important to distinguish here between ‘dissertation topic’ and ‘dissertation title’. The topic is the specific area that you wish to investigate. The title may not be decided until the dissertation has been written so as to reflect its content properly.

Few restrictions are placed on the choice of the topic. Normally we would expect it to be:

- relevant to business, defined broadly;
- related to one or more of the subjects or areas of study within the core program and specialisation stream;
- clearly focused so as to facilitate an in-depth approach, subject to the availability of adequate sources of;
- information and to your own knowledge; of value and interest to you and your personal and professional development.

Planning the Dissertation

This will entail following:

- Selecting a topic for investigation.
- Establishing the precise focus of your study by deciding on the aims and objectives of the dissertation, or formulating questions to be investigated. Consider very carefully what is worth investigating and its feasibility.
- Drawing up initial dissertation outlines considering the aims and objectives of the dissertation. Workout various stages of dissertation
- Devising a timetable to ensure that all stages of dissertation are completed in time. The timetable should include writing of the dissertation and regular meetings with your dissertation guide.

The Dissertation plan or outline

It is recommended that you should have a dissertation plan to guide you right from the outset. Essentially, the dissertation plan is an outline of what you intend to do, chapter wise and therefore should reflect the aims and objectives of your dissertation.

There are several reasons for having a dissertation plan

- It provides a focus to your thoughts.

- It provides your faculty-guide with an opportunity, at an early stage of your work, to make constructive comments and help guide the direction of your research.
- The writing of a plan is the first formal stage of the writing process, and therefore helps build up your confidence.
- In many ways, the plan encourages you to come to terms with the reading, thinking and writing in a systematic and integrated way, with plenty of time left for changes.
- Finally, the dissertation plan generally provides a revision point in the development of your dissertation report in order to allow appropriate changes in the scope and even direction of your work as it progresses.

Keeping records

This includes the following:

- Making a note of everything you read; including those discarded.
- Ensuring that when recording sources, author's name and initials, date of publication, title, place of publication and publisher are included. (You may consider starting a card index or database from the outset). Making an accurate note of all quotations at the time you read them.
- Make clear what is a direct a direct quotation and what is your paraphrase.

Dissertation format All students must follow the following rules in submitting their dissertation.

- Front page should provide title, author, Name of degree/diploma and the date of submission.
- Second page should be the table of contents giving page references for each chapter and section.
- The next page should be the table of appendices, graphs and tables giving titles and page references.
- Next to follow should be a synopsis or abstract of the dissertation (approximately 500 words) titled: **Executive Summary**.
- Next is the 'acknowledgements'.
- Chapter I should be a general introduction, giving the background to the dissertation, the objectives of the dissertation, the rationale for the dissertation, the plan, methodological issues and problems. The limitations of the dissertation should also be hinted in this chapter.
- Other chapters will constitute the body of the dissertation. The number of chapters and their sequence will usually vary depending on, among others, on a critical review of the previous relevant work relating to your major findings, a discussion of their implications, and conclusions, possibly with a suggestion of the direction of future research on the area.
- After this concluding chapter, you should give a list of all the references you have used. These should be cross - references with your text. For articles from journals, the following details are required e.g.

Draper P and Pandyal K. 1991, The Investment Trust Discount Revisited, Journal of Business Finance and Accounting, Vol18, No6, Nov, pp 791-832.

For books, the following details are required: Levi, M. 1996, International Financial Management, Prentice Hall, New York, 3rd Ed, 1996

- Finally, you should give any appendices. These should only include relevant statistical data or material that cannot be fitted into the above categories.

The Layout Guidelines for the Dissertation:

- A4 size Paper
- Font: Arial (10 points) or Times New Roman (12 points)
- Line spacing: 1.5Top and bottom margins: 1 inch/ 2.5 cm; left and right margins: 1.25 inches/ 3 cm

Guidelines for the Assessment of the Dissertation

While evaluating the dissertation, faculty guide will consider the following aspects:

Has the student made a clear statement of the objective or objective(s).

If there is more than one objective, do these constitute parts of a whole?

Has the student developed an appropriate analytical framework for addressing the problem at hand.

Is this based on up-to-date developments in the topic area?

Has the student collected information/data suitable to the frameworks?
Are the techniques employed by the student to analyse the data / information appropriate and relevant?
Has the student succeeded in drawing conclusion form the analysis?
Do the conclusions relate well to the objectives of the project?
Has the student been regular in his work?
Layout of the written report

Assessment Scheme:

Continuous Evaluation: 30%
(Based on Abstract, Regularity,
Adherence to initial plan, Records etc.)

Final Evaluation: Based on, 70%
Contents & Layout of the Report, 25
Conceptual Framework, 15
Objectives & Methodology and 15
Implications & Conclusions 15