

# **M. PHIL. CLINICAL PSYCHOLOGY**



Guidelines

&

Syllabus

Effective from Academic Session 2017-18  
Two Years Duration

**JSS UNIVERSITY**

(Established under section 3 of UGC Act, 1956)

**JSS Medical Institutions Campus,  
Sri Shivarathreeshwara Nagara,  
Mysore - 570 015, Karnataka, India**

## Preface

Since its inception, the Rehabilitation Council of India, consistent with the mandate given, is facilitating and providing needed support for the development of various categories of professionals notified in the area of disability and rehabilitation. One of the important professional categories is clinical psychologist in which responding to social and professional concerns, the Council has taken several new initiatives to streamline the professional practice at different levels; as well to develop human resource availability for implementing several societal welfare programs launched and adapted by the State and Central bodies, within NMHP framework.

Presently, more than 25 centers are recognized by the Council and over 300 professionals are being trained annually. Although training centers located at varied patient-care settings have been recognized, the council ensures recommendations made in the curriculum of M. Phil program are regarded as prescriptive norms at implementation level and clinical training is aligned with overall professional goal, and education is integrated with academic objectives at all training institutes.

The council assesses the effectiveness of various training components through multisource feedback and uses these results for improvement. The present revised regulations and curriculum illustrates such an effort. The revision committee that constituted subject experts from Public and Private sectors, and council's internal resources has deliberated discreetly on all aspects of the curriculum without 'bargaining for reality'. The Council is confident that this revised curriculum, thought to be consistent with current professional knowledge and universal praxis by scholars, professors and heads of department, and coordinators of the program, would be found valuable by all concerned in furthering professional objectives and enhancing the likelihood of desired outcomes.

For today, the council is of the opinion that initiating Quality Improvement Program is better left to the training centers. Therefore, the responsibility of developing and implementing an appropriate quality assessment process and outcome targets that the centers aspire to change, rests on those put in charge of the centers. Level of care provided and quality, provider performance and ways of improving, treatment protocol and outcome or efficiency are a few of the prioritized quality measures that centers are required to consider while designing a continuous evaluation mechanism that should be based on convenience, cost and stakeholders' acceptance.

The Council is pleased to forward this revised M. Phil Clinical Psychology 'Guidelines and Syllabus' to Registrars of Universities, Deans of concerned faculty, Heads of Departments and other stakeholders with request for an early action to implement the new syllabus w.e.f. academic year 2017.

The Council takes this opportunity to thank all those contributed directly or indirectly to human resource development in the area of rehabilitation, and look forward to their continued active participation.

## **M. Phil. in Clinical Psychology**

### **1.0 INTRODUCTION**

Clinical psychology as one of the core disciplines in the area of mental health/illness has grown significantly in the last two decades. Today, the clinical psychology training is being offered at more than ten recognized centers across the country with utmost efficiency. Consequently, the number of clinical psychologists available in service sectors has increased significantly. Though there is an upward trend, number of professionals currently available at various levels is no match to the number specified to face the ever growing demands in the field.

Mental health problems are continuously on the rise owing to change in life style, habits and mounting stress in personal/occupational/social domains across various sections of the society. Clinical Psychologists apply knowledge and methods from all substantive fields of biopsychosocial sciences for promotion and maintenance of mental health of individuals. Varieties of techniques and methods derived from several branches of psychology are used in promotion of mental health, and in prevention, diagnosis, treatment and rehabilitation of mental and physical disorders/ problems where psychological factors play a major role. Different methods and forms of psychological techniques are used to relieve an individual's emotional distress or any other forms of dysfunction or disability. Thus, Clinical Psychologists play an important role for optimizing health care delivery system and there is an urgent need to train more number of professional clinical psychologists.

The council is committed to give the needed impetus to human resource development in the field of clinical psychology and work towards establishing more centers for training in clinical psychology in the coming years. Also, efforts will be made to ameliorate unequal distribution and underutilization of human resource pool created, and to equip our professionals with the latest developments in the field through CRE programs, so that they deliver patient-centered services effectively and competently.

In the recent time a trend is observed for training in clinical psychology to be shifted from traditional mental hospital-based programs to programs operated by medical colleges and NGOs. Consequently, there has been a steady progress in reducing manpower shortages in addition to witnessing the practice and research in clinical psychology growing in several directions. Though, the feedback received from the participants of these training programs is encouraging, it is our endeavor to keep pace with changing times and make available most up to date information for trainees in various settings.

The council hopes that the following revised guidelines would help centers already conducting M. Phil. program to provide a cohesive and meaningful training so that the trainees develop to their fullest potential and shall be able to discharge their responsibilities competently as clinicians, teachers/trainers, researchers and administrators in the field of mental health. This document is also meant to serve as guidelines for institutions intending to start the training program in clinical psychology to strengthen their resource base in terms of infrastructure and personnel for providing an effective training in the field of clinical psychology.

The syllabus is specified in terms of “learn to” and “learn about” and is sequenced developmentally to form a continuum of learning. The teachers need to be aware of this feature and impart training in succession for progressive development of skills, knowledge and understanding in a range of techniques, theories, approaches and methods. This model will allow all trainees to develop a range of skills and knowledge essential to and underpinning all other learning in specialized areas.

Depending on the available resources and expertise at the center, the appropriate academic formats in content area of each paper can be worked out. Though a standardized structure is adopted across different papers, sufficient flexibility is maintained for centers to respond to needs, interests and abilities of the trainees, and the resources available. The practical and clinical work should be used as an organizer to integrate all learning across the subjects, while learning being used at varying stages to integrate and apply knowledge and skills developed.

The current syllabus will accommodate the incorporation of any new and emerging practices/trends into the content areas as practice change. Therefore, inclusion of additional study, emerging concepts/practices etc. into the training program so that the training reflects current practices and trends, is the sole responsibility of the centers. If such additional input requires the trainees to be posted at the suitable environment for example, school, community, institution etc. the centers can act at its discretion (refer 3.5), as long as it reflects national and international practices, and do not compromise the learning activities in core model.

Teachers require opportunities to build upon previously acquired knowledge and skills to ensure currency of delivery in the classroom and clinics. The centers should therefore make enough provisions for the teachers to upgrade their knowledge/skills as often as it required.

Dissertation projects could be flexible or specialized to suit the center needs and priorities. However, the topic of study should reflect contemporary developments and practices, and the trainees would have had an opportunity to use a range of techniques, tools and approaches to solve problem while executing the research project.

## **AIM & 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.

## **REQUIREMENTS TO START M. PHIL. IN CLINICAL PSYCHOLOGY COURSE**

There shall be an independent Department of Clinical Psychology, headed by a qualified Clinical Psychologist in the institute/ university.

There shall be minimum two permanent clinical psychology faculty members on fulltime basis at the department, as specified below:

- i) At the level of Associate Professor or above – one member
- ii) At the level of Assistant Professor/Lecturer or above – one member

### **Guidelines for faculty recruitment and promotion**

Assistant Professor: M. Phil Clinical Psychology.

Associate Professor: M. Phil + Ph.D. + 5 years of teaching experience either as Lecturer/ Assistant Professor + 3 publications in indexed journal as first/ corresponding author.

Additional Professor / Professor: M. Phil + Ph.D.+ 9 years of teaching experience, out of which 3 years as Associate Professor + 5 research publications in indexed journal as first/corresponding author.

NB: The term 'M. Phil' refers to M. Phil Clinical Psychology degree of 2-year duration (following MA/M. Sc in psychology) from a RCI recognized center. The term 'experience' refers to post-M. Phil. clinical teaching experience/ research experience in any institute or organization recognized by Statutory Bodies such as RCI/ MCI/ UGC, etc. It is mandatory as per the RCI Act of 1992 that core faculty members are registered professionals of RCI under the category of "Clinical Psychologist".

Sufficient clinical material/facilities shall be available at the department to meet the requirements outlined in the syllabus. A minimum turnover of 250 cases (old and new together) on an average per month shall be required for an annual intake of FOUR candidates, and thereon for every 50 case increase in the monthly clinical turnover, the intake shall be increased by ONE candidate, provided the faculty-candidate ratio as given in 4.1 is fulfilled. Tele-counseling, e-counseling etc. that do not involve face-to-face interaction shall not be considered for computing the monthly turnover. Of the total turnover at least 50% of the cases shall be undergoing psychological treatment(s) of some form viz. psychotherapy, behavior therapy, biofeedback, hypnosis, counseling, marital therapy, group therapy, sex therapy etc. Clinical work-ups or psychological assessments alone without therapy interventions are considered suboptimal for professional training in clinical psychology.

Acceptable infrastructure in terms of adequately furnished rooms for every faculty members and trainees to carry out professional activities like working up of cases, interviewing, counseling, therapies, testing etc. for indoor or outdoor cases basis shall be available at the department. Standard psychological tests, equipments/apparatus, questionnaires, scales, inventories, clinical rating scales related to all primary domains shall be available in sufficient quantity, and freely accessible to all concerned. Wherever possible the vernacular versions of the tests materials along with local norms shall be made available. The required minimum infrastructure (for an annual intake of Four candidates) include, but not necessarily limited to;

- i) Psychological tests - 4 copies/sets each of the core tests as given in section on 'Practical – Psychological Assessments'
- ii) Clinical rating scales - For common conditions of childhood, adolescence and adult such as anxiety, mood, speech, language and thought, adjustment, personality, developmental, behavior, cognitive, pain, conduct, sexual disorders, and in specialty areas
- iii) Behavior therapy apparatus - 2 numbers
- iv) Biofeedback - 1 each, at least for 2 parameters
- v) Classroom - 1 number with multimedia facilities for conducting in-house academic activities, on routine basis
- vi) Computers - 2 numbers with printer and internet facilities

+ statistical software packages

Active liaison with departments like Psychiatry, Medicine, Surgery, Neurology, Neurosurgery, Pediatrics, Social Work and such other allied specialties shall exist in addition to direct or self-referrals, so that exposure to a broad range of clinical problems shall be possible. Depending on the presence/absence of facilities at the parent institute, the trainees may be posted to other centers as deemed necessary for an exposure in specialty areas such as child guidance, family therapy, addiction, neuro/cognitive rehabilitation, palliative/hospice center, cancer and such other areas of expertise while training in core areas continues at the parent institute. In such events, the period of posting for extra-institutional learning shall not exceed three calendar months in an academic year and should happen under the appropriate supervision of an expert in the area.

Adequate and updated library facilities with textbooks, reference books, important national and international journals (hard or soft copy), educational audio/video CDs, and access to Internet shall be easily available and accessible to all trainees. In addition, certain reference books, therapy manuals, index books etc. those required by the trainees for a quick reference during the working hours shall be stocked at the departmental library and shall be made accessible easily.

The following is the Checklist on the prerequisites to start M. Phil program. Even if one of the items is “no”, the center cannot start the program, and therefore centers are advised to remedy the shortcomings, if any, before applying to the Council for approval.

\* = Action required at the time of applying

**Prerequisite – I:** Is there an Independent Department of Clinical Psychology at the Institute for rendering mental health services and for imparting academic training?

\* Attach documents in evidence of having created and/or established an independent department for professional services and training

**Prerequisite – II:** Is the Department of Clinical Psychology functioning with minimum Two permanent and fulltime qualified Clinical Psychology faculty members? Is one of them at Associate Professor or above ranking (see aforementioned criteria), and has been put in-charge of the Department?

\* Attach qualification and experience details of all faculty members functioning at the department along with a copy of appointment order and joining report

**Prerequisite – III:** Are the faculty members appointed have registered with the Council under Clinical Psychology category and have a valid CRR number?

\* Attach a copy of the registration certificate along with a recent passport photograph

**Prerequisite – IV:** Does the Department of Clinical Psychology has a minimum turnover of 250 cases (old and new together) with mental health issues/problems, on an average per month?

\* Attach extracts of previous 6 month outpatient/inpatient register and month wise break-up



of cases seen

**Prerequisite – V:** Has the Department been equipped with standard psychological tests, equipment/apparatus, and questionnaires/scales in primary domains relating to mental disorders?

\* Attach a list of all materials

**Prerequisite – VI:** Does the Department has adequate library support for the proposed training program which includes minimum number of books/journals in the field of mental health including clinical assessments, therapies and techniques?

\* Attach a list of books/journals/audio & video educational CDs/e-books & journals available in each of the specialty areas

**Prerequisite – VII:** Does the Department has adequate access and use of Information and Communication Technology?

\* Attach a list of facilities available in the department/campus

**Prerequisite – VIII:** Has institute obtained a No Objection Certificate (NOC) by the competent State Government Authority?

\* Attach a copy of the document

**Prerequisite – IX:** Has institute obtained an affiliation letter from the Registrar or a competent authority of the affiliating University with respect to the proposed training program?

\* Attach a copy of the document

**Prerequisite – X:** Is overall financial status of the institute healthy to absorb the additional cost, if any, on account of the proposed training program and to create an Endowment /Reserve Fund as per RCI Norms?

\* Attach a copy of the Statement of Accounts or Audited Report of the preceding financial year

## **REGULATIONS OF THE COURSE**

### **Number of Seats**

Since this is a fulltime clinical training course, the number of candidates being trained at the center will depend on number of qualified fulltime faculty members working in the department on permanent basis, the clinical facilities and infrastructure available (refer 3.3 & 3.4). In order to make the training effective therefore, the intake of candidates in an academic year shall not exceed the following ratio.

Associate Professor/Additional Professor/Professor - 1:4

## Assistant Professor - 1:2

Part-time /Contractual/ superannuated qualified professional members may render their input as deemed necessary to effective/ smooth conduct of the course as Guest Faculty member. However, these members are not considered as “Core Faculty” and annual intake of candidates shall not be linked to the presence of these faculty members at the center.

### **Entry requirement**

Minimum educational requirement for admission to this course will be 2 years M.A./M.Sc. degree in Psychology from a university recognized by the UGC with a minimum of 55% marks in aggregate. For SC/ST 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 and interview. List of candidates so selected/ admitted to the course must 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 a year including in all academic activities) 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.

## **Content of the Course (See section 5.0 for subject wise syllabus of Part - I and II)**

### **Part - I (I Year)**

#### **Group “A”**

Paper I : Psychosocial Foundation of Behavior and Psychopathology

Paper II : Statistics and Research Methodology

Paper III : Psychiatry

Practical : Psychological Assessments including Viva Voce

#### **Group “B”**

Submission : Five full-length Psychodiagnostic 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

### **Part - II (II Year)**

#### **Group “A”**

Paper I: Biological Foundations of Behavior

Paper II: Psychotherapy and Counseling

Paper III: Behavioral Medicine

Practical : Psychological Therapies including Viva Voce

#### **Group “B”**

Submission : 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, f) future plans

#### **Group “C”**

Dissertation: 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.

## Minimum prescribed clinical work during the two year of training.

|                                  | _____ Number of Cases _____<br>Part - I | By the end<br>of Part - II * |
|----------------------------------|---|------------------------------|
| 1) Detailed case histories       | 50                                      | 70                           |
| 2) Clinical Interviews           | 40                                      | 60                           |
| 3) Full length Psychodiagnostics | 40                                      | 50                           |
| 4) Neuropsychological Assessment | 5                                       | 10                           |
| 5) Therapeutics                  |   |                              |
| i) Psychological Therapies       | 200 hrs.                                |                              |
| ii) Behavior Therapies           | 200 hrs.                                |                              |

Therapies should be not less than 50 hr. of work in each of the following areas:

- a) Therapies with children
- b) Individual therapies with adults
- c) Family/marital/group/sex therapy
- d) Psychological and/or neuropsychological rehabilitation

A logbook of the clinical work carried out under the supervision during each year of training, with sufficient details such as particulars of the client, diagnosis, duration and nature of intervention(s), number of sessions held etc. should be maintained by all trainees and must be produced the same to the examiners at the time of Part - I and II practical examinations.

\* Includes the work done in Part - I

### Requirement/Submission

Two months prior to Part - I examination the candidates are required to submit five full-length Psychodiagnostic Reports as outlined above.

Two months prior to Part - II examination the candidates are required to submit five Psychotherapy Records as outlined above.

Three months prior to Part - II examination the candidates are required to submit, in triplicate, a research Dissertation under the guidance of a clinical psychology faculty member as specified above.

The application for appearing either Part - I or Part - II examination should be accompanied by a certificate issued by Head of Department that the candidate has carried out

the specified minimum clinical work, submission, dissertation (in case of Part - II only) and has attained the required competence in core-tests (refer section on “Practical - Psychological Assessments” for the list of core-tests and an addendum), as prescribed in the syllabus.

### **Internal Assessment**

In each paper 30% marks will be determined on the basis of written/clinical exams, viva-voce and supervised clinical work. These marks will be added to the marks allocated to the respective subjects in the yearly final examinations. The results of the final examinations will be declared on the basis of the total so obtained. The guidelines for allotting the internal marks may be prepared by the institution concerned.

### **Examination**

The examination will be held in two parts (Part - I and Part - II). Part -I is held at the end of first year and Part – II is held at the end of second year. A candidate will not be allowed to take the Part – II examination unless he/she has passed the Part – I examination.

A candidate who has not appeared or failed in Part – I of the regular examination may be allowed to continue the course for the II year and be allowed to take the supplementary Part – I examination.

A minimum period of three months additional training shall be necessary before appearing for the examination in case he/she fails to clear Part – I and/or Part – II examination.

A candidate has to complete the course successfully within a period of four years from the year of admission to the course.

### **Examination Fee**

The prescribed examination fee as laid down from time to time by the concerned university to appear for Part – I and Part – II of the examination should be paid as per the regulations.

## Scheme of Examination

### Part – I (I Year)

| Papers   | Title  | Duration | Marks                      |                               |       |
|--|--|----------|----------------------------|-------------------------------|-------|
|  |  |          | Final Assessment (Maximum) | Internal Assessment (Maximum) | Total |
| <b>Group “A”</b>   |  |          |                            |                               |       |
| Paper I  | Psychosocial Foundations of Behavior and Psychopathology | 3 hr.    | 70                         | 30                            | 100   |
| Paper II   | Statistics and Research Methodology                      | 3 hr.    | 70                         | 30                            | 100   |
| Paper III  | Psychiatry   | 3 hr.    | 70                         | 30                            | 100   |
| Practical: Psychological Assessments and Viva Voce               |  |          | 70                         | 30                            | 100   |
| <b>Group “B”</b>   |  |          |                            |                               |       |
| Submission of five cases of full-length Psychodiagnostics Report |  |          | None                       | 100                           | 100   |
| <b>Total</b>   |  |          |                            |                               | 500   |

### Part – II (II Year)

| Papers   | Title                              | Duration | Marks                      |                               |       |
|--|------------------------------------|----------|----------------------------|-------------------------------|-------|
|  |                                    |          | Final Assessment (Maximum) | Internal Assessment (Maximum) | Total |
| <b>Group “A”</b>   |                                    |          |                            |                               |       |
| Paper I  | Biological Foundations of Behavior | 3 hr.    | 70                         | 30                            | 100   |
| Paper II   | Psychotherapy and Counseling       | 3 hr.    | 70                         | 30                            | 100   |
| Paper II   | Behavioral Medicine                | 3 hr.    | 70                         | 30                            | 100   |
| Practical: Psychological Therapy and Viva Voce               |                                    |          | 140                        | 60                            | 200   |
| <b>Group “B”</b>   |                                    |          |                            |                               |       |
| Submission of five cases of full-length Psychotherapy Report |                                    |          | None                       | 100                           | 100   |
| <b>Group “C”</b>   |                                    |          |                            |                               |       |
| Dissertation   |                                    |          | 70                         | 30                            | 100   |
| <b>Total</b>   |                                    |          |                            |                               | 700   |

## **Board of Examination**

A board consisting of 4 examiners of which 2 shall be external and 2 shall be internal will conduct the examination. The Chairman of the board of examiners will be the Head of the Department of Clinical Psychology who will also be an internal examiner.

Two examiners, one internal and one external, shall evaluate each theory paper and dissertation. Two examiners, of whom one shall be external, will conduct the practical/clinical and vivo-voce examination.

## **Minimum for Pass**

A candidate shall be declared to have passed in either of the two parts of the M. Phil. examination if he/she obtains not less than 50% of the marks in:

- i) Each of the theory paper
- ii) Each of the practical and viva-voce examinations
- iii) Each of the submissions
- iv) The dissertation (in case of Part – II only)

A candidate who obtains 75% and above marks in the aggregate of both the parts shall be declared to have passed with distinction. A candidate who secures between 60% and below 75% of marks in the aggregate of both the parts shall be declared to have passed M.Phil degree in I Class. The other successful candidates as per the clause (a) of the above shall be declared to have passed M.Phil degree in II Class. If a candidate fails to pursue the course on a continuous basis, or fails or absent himself/ herself from appearing in any of the university theory and practical examinations of Part – I and II, the class shall not be awarded. The merit class (Distinction / First Class) is awarded to only those candidates who pass both Part – I and II examinations in first attempt.

No candidate shall be permitted to appear either of Part – I or II examination more than three times.

## **Appearance for each examination**

A candidate shall appear for all the Groups of Part – I and Part – II examination when appearing for the first time.

A candidate in Part – I and Part – II, failing in any of the “Group-A” subjects has to appear again in all the “Group-A” subjects.

A candidate in Part – I, failing in “Group-B” has to resubmit five full-length Psychodiagnostic Records.

A candidate in Part – II, failing in “Group-B” has to resubmit five fully worked-out Psychotherapeutic Records.



A candidate in Part – II, failing in “Group-C”, has to reappear/ resubmit the dissertation as asked for and/or outlined by the examiners.

## **5.0 SUBJECT WISE SYLLABUS OF PART – I AND PART – II**

The syllabus for each of the paper of Part-I and II is as appended below. It is desired that each units of theory papers be covered with at least 2-hr. of input in the form of didactic lectures, seminars, tutorials/topic discussion or review of journal articles as deemed fit depending on content nature of the units. Approximately 80-hr of theory teaching shall be required in each part of the course (in all 40 units have been worked out from three theory papers of Part-I and in Part-II), in addition to opportunities for learning through clinical case management and work-ups. For this purpose, various methods of input that are normally followed are accounted as follows:

Each didactic lecture on any of the topic of the syllabus is considered as one hour of theory input. Similarly, each seminar, tutorial/topic discussion or review of research article is considered as two hour of input in the relevant area. Attention shall be given, however, to see that each method of teaching shall not exceed 25% of the required teaching input.

## **Part – I (Year – I)**

### **PAPER – I: Psychosocial Foundations of Behavior and Psychopathology**

#### **Aim:**

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 unit 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:

1. Demonstrate a working knowledge of the theoretical application of the psychosocial model to various disorders.
2. Make distinctions between universal and culture-specific disorders paying attention to the different types of sociocultural causal factors.
3. Demonstrate an awareness of the range of mental health problems with which clients can present to services, as well as their psychosocial/contextual mediation.
4. 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.
5. 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.
6. 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.
7. Describe Mental Health Acts and Policies, currently prevailing in the country and their implications in professional activities of clinical psychologists.

#### **Academic Format of Units:**

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

**Syllabus:****Part – A (Psychosocial Foundations of Behavior)**

Unit - I: Introduction: Scope of clinical psychology; 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.

Unit - 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;

Unit - III: Epidemiology: Epidemiological studies in Indian context; socio-cultural correlates of mental illness, mental health, psychological well-being and quality of life.

Unit - 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.

Unit - 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.

Unit - 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.

Unit - 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.

Unit - 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.

Unit - IX: Policies and Acts: Rehabilitation Policies and Acts (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 1992, National Trust for

Mental Retardation, CP and Autistic Children 1999, Juvenile Justice Act of 1986; Mental Health Care Bill 2011; ethical and forensic issues in psychiatry practice); assistance, concessions, social benefits and support from government and voluntary organizations; contemporary challenges; rehabilitation ethics and professional code of conduct.

## **Part – B (Psychopathology)**

Unit - 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. Approach to clinical interviewing and diagnosis; case history; mental status examination; organization and presentation of psychiatric information; diagnostic formulation.

Unit - XI: 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 and adolescence, psychotic, mood disorders, and culture-specific disorders.

Unit - XII: 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.

### **Essential References:**

- Achenback, T.M. (1974). *Developmental Psychopathology*. New York: Ronald Press.
- Brislin, R. W. (1990). *Applied Cross cultural psychology*. New Delhi: Sage publications.
- Buss, A.H. (1966). *Psychopathology*. NY: John Wiley & Sons.
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- Kakar, S. (1981). *The Inner world: a psychoanalytic study of childhood and society in India*. New Delhi: Oxford University Press.
- Kapur, M. (1995). *Mental Health of Indian Children*. New Delhi: Sage publications.
- Klein, D.M. & White, J.M. (1996). *Family theories – An introduction*. New Delhi: Sage Publications.
- Krahe, B. (1992). *Personality and Social Psychology: Towards a synthesis*. New Delhi: Sage Publications.
- Kuppuswamy, B. (1965). *An Introduction to Social Psychology* (2nd ed.). New Delhi:

- Konark Publishers.
- Kuppuswamy, B. (1990). *Elements of ancient Indian Psychology* (1st ed.). New Delhi: Konark Publishers.
- Lindzey, G., & Aronson, E. (1975). *Handbook of Social Psychology* (Vols. 1 & 5). New Delhi: Amerind Publishing.
- Madan, G.R (2003). *Indian Social Problems* (Vols. 1-2). New Delhi: Allied Publishers Pvt. Ltd
- Mash, E.J & Wolfe, D.A. (1999). *Abnormal Child Psychology*. New York: Wadsworth Publishing
- Millon, T., Blaney, P.H. & Davis, R.D. (1999). *Oxford Textbook of Psychopathology*. New York: Oxford University.
- Pfeiffer, S.I. (1985). *Clinical Child Psychology*. New York: Grune & Stratton.
- Radley, A. (1994). *Making sense of illness: The social psychology of health and disease*. New Delhi: Sage Publications.
- Rao, H.S.R & Sinha D. (1997). *Asian perspectives in Psychology* (Vol. 19). New Delhi: Sage publications:
- Saraswathi, T.S (1999). *Culture, Socialization and human development*. New Delhi: Sage publications.
- Walker, C.E & Roberts, M.C. (2001). *Handbook of Clinical Child Psychology* (3rd ed.). Canada: John Wiley & Sons.

## **PAPER - II: Statistics and Research Methodology**

### **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:

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

### **Academic Format of Units:**

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

## **Syllabus:**

- Unit - 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.
- Unit - 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.
- Unit - III: Concept of probability: Probability distribution - normal, poisson, binomial; descriptive statistics - central tendency, dispersion, skewness and kurtosis.
- Unit - 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.
- Unit - 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.
- Unit - VI: Tests of significance - Non-parametric tests: Assumptions; One-sample tests (sign test, Mc Nemer test); two-sample test (Mann Whitney U test, Wilcoxon rank sum test); k-sample tests (Kruskal Wallies test, and Friedman test) and chi-square test.
- Unit - VII: Experimental design: Randomization, replication, completely randomized design, randomized block design, factorial design, crossover design, single subject design, non-experimental design.
- Unit - VIII: Epidemiological studies: Epidemiological studies: Rates- Prevalence and incidence; Types- Prospective and retrospective studies; Diagnostic Efficiency Statistics (sensitivity, specificity, predictive values); Risk Estimation- odds ratio and survival analysis.
- Unit - IX: Multivariate analysis: Introduction, Multiple regression, logistic regression, factor analysis, cluster analysis, discriminant function analysis, path analysis, MANOVA, Canonical correlation, and Multidimensional scaling.
- Unit - X: Sample size estimation: Sample size determination for estimation of mean, estimation of proportion, comparing two means and comparing two proportions.
- Unit - XI: Qualitative analysis of data: Content analysis, qualitative methods of psychosocial research.
- Unit - XII: Use of computers: Use of relevant statistical package in the field of behavioral

science and their limitations.

Essential References:

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



## **PAPER – III: Psychiatry**

### **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:

1. Demonstrate an understanding of a clinically significant behavioral and psychological syndrome, and differentiate between child and adult clinical features/presentation.
2. 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.
3. 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.
4. Summarizes the psychosocial, biological and sociocultural causal factors associated with mental health problems and neuropsychological disorders with an emphasis on biopsychosocial and other systemic models.
5. Carryout with full competence the psychological assessment, selecting and using a variety of instruments in both children and adults.
6. 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.
7. Discuss various pharmacological agents that are used to treat common mental disorders and their mode of action.
8. Demonstrate an understanding of caregiver, and family burden and their coping style.
9. Assess the disability/dysfunctions that are associated with mental health problems, using appropriate measures.
10. Discuss the medico-legal and ethical issues in patients requiring chronic care and institutionalization.

### **Academic Format of Units:**

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.

### **Syllabus:**

Unit - I: Signs and symptoms: Disorders of consciousness, attention, motor behavior, orientation, experience of self, speech, thought, perception, emotion, and memory.

Unit - II: Psychoses: Schizophrenia, affective disorders, delusional disorders and other forms of psychotic disorders – types, clinical features, etiology and management.

Unit - III: Neurotic, stress-related and somatoform disorders: types, clinical features, etiology and management.

Unit - 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.

Unit - V: Organic mental disorders: Dementia, delirium and other related conditions with neuralgic and systemic disorders – types, clinical features, etiology and management.

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

Unit - VII: Mental retardation: Classification, etiology and management.

Unit - VIII: Neurobiology of mental disorders: Neurobiological theories of psychosis, mood disorders, suicide, anxiety disorders, substance use disorders and other emotional and behavioral syndromes.

Unit - IX: Therapeutic approaches: Drugs, ECT, psychosurgery, psychotherapy, and behavior therapy, preventive and rehabilitative strategies – half-way home, sheltered workshop, daycare, and institutionalization.

Unit - X: Consultation-liaison psychiatry: Psychiatric consultation in general hospital; primary care setting.

Unit - XI: Special populations/Specialties: Geriatric, terminally ill, HIV/AIDS, suicidal,

abused, violent and noncooperative patients; psychiatric services in community, and following disaster/calamity.

**Essential References:**

Gelder, M., Gath, D., & Mayon, R. (1989). *Oxford Textbook of Psychiatry* (2nd ed.). New York: Oxford University Press.

Kaplan, B.J. & Sadock, V.A., (1995). *Comprehensive Textbook of Psychiatry* (6th ed.). London: William & Wilkins.

Rutter, M. & Herson, L. (1994). *Child and Adolescent Psychiatry: Modern approaches* (3rd ed.). London: Blackwell Scientific Publications.

Sims, A. & Bailliere, T. (1988). *Symptoms in mind: Introduction to descriptive psychopathology*. London: WB Saunders.

Vyas, J.N. & Ahuja, N. (1999). *Textbook of postgraduate psychiatry* (2nd ed., Vols. 1-2). New Delhi: Jaypee brothers.

**PRACTICAL – Psychological Assessments (Part – I)**

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:

1. Use relevant criteria to assess the quality and appropriateness of a psychological test and evaluate its strengths and weaknesses for clinical purposes.
2. 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.
3. Synthesize and integrate collateral information from multiple sources and discuss the rationale for psychological assessment as relevant to the areas being assessed.
4. Select and justify the use of psychological tests and carry out the assessment as per the specified procedures in investigating the relevant domains.

5. Interpret the findings in the backdrop of the clinical history and mental status findings and arrive at a diagnosis.
6. 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 Units:

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.

Syllabus:

Unit - 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.

Unit - 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.

Unit - 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.

Unit - IV: Tests for adjustment and personality assessment: A) Questionnaires and inventories – 16 personality factor questionnaire, NEO-5 personality inventory, temperament and character inventory, Eysenck'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 well-being questionnaires, QOL, B) projective tests – sentence completion test, picture frustration test, draw-a-person test; TAT – Murray's and Uma Chowdhary's.

Unit - 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.

Unit - 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.

Unit - 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.

Unit - VIII: Neuropsychological assessment: LNNB, Halstead-Reitan battery, PGI-BBD, NIMHANS and other batteries of neuropsychological tests in current use.

Core Tests:  
(additions proposed)

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.

**Essential References:**

Bellack, A.S. & Hersen, M. (1998). *Comprehensive Clinical Psychology: Assessment* (Vol. 4). London: Elsevier Science Ltd.

Choudhary, U. (1960). *An Indian modification of the Thematic Apperception Test*. Calcutta: Shree Saraswathi Press.

Exner, J.E. (2002). *The Rorschach – A Comprehensive System*, (4th ed., Vol.1). New York: John Wiley and Sons.

Freeman, F.S. (1965). *Theory and practice of psychological testing*. New Delhi: Oxford and IHBN.

Hersen, M., Segal, D.L., & Hilsenroth, M.J. (2004). *Comprehensive handbook of psychological assessment* (Vols. 1-2). New York: John Wiley & Sons.

Murray, H.A. (1971) *The Thematic Apperception Test manual*. London: Harvard University Press.

## **Part - II (Year - II)**

### **PAPER – I: Biological Foundations of Behavior**

#### **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:

1. Describe the nature and basic functions of the nervous system.
2. Explain what neurons are and how they process information.
3. Identify the brain's levels and structures, and summarize the functions of its structures.
4. Describe the biochemical aspects of brain and how genetics increase our understanding of behavior.
5. State what endocrine system is and how it regulates internal environment and affects behavior.
6. Discuss the principles of psychopharmacology and review the general role of neurotransmitters and neuromodulators in the brain.
7. Describe the monoaminergic and cholinergic pathway in the brain and the drugs that affect these neurons.
8. Describe the role of neurons that release amino acid neurotransmitters and the drugs that affect these neurons.
9. Describe what kinds of clinical symptoms are often associated with lesions of frontal, parietal, temporal and occipital lobes of the brain.
10. 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.

11. Describe what kinds of neuropsychological deficits are often associated with subcortical lesions of the brain.
12. List symptoms that are typical of focal and diffuse brain damage.
13. Enumerate the characteristics of clinical syndrome and the nature of neuropsychological deficits seen in various cortical and subcortical dementias.
14. Describe the neuropsychological profile of principal psychiatric syndromes.
15. Demonstrate an understanding of functional neuroimaging techniques and their application in psychological disorders and cognitive neuroscience.
16. Demonstrate an understanding of the principles involved in neuropsychological assessment, its strengths and weaknesses, and its indications.
17. 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 Units:

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.

#### Syllabus:

Part – A (Anatomy, Physiology and Biochemistry of CNS)

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

Unit – 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).

Unit – III: Biochemistry of the brain: Biochemical, metabolic and genetic aspect of Major mental disorders, mental retardation and behavioural disorders.

Unit – IV: Neurobiology of sensory-motor systems and internal environment: Organization of sensory-motor system in terms of receptors and thalamus-



cortical pathways; and motor responses. Role of limbic, autonomic and the neuroendocrine system in regulating the internal environment

Unit – VII: Neurotransmitters and behaviour: Role of neurotransmitters and neuromodulators (acetylcholine, monoamines, amino acids, peptides, lipids) in various aspects of behaviour

Part – B (Neuropsychology)

Unit - 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 neuropsychologists.

Unit- IX: Frontal lobe syndrome: Disturbances of regulatory functions; attentional processes; emotions; memory and intellectual activity; language and motor functions.

Unit-X: Temporal lobe syndrome: Special senses – hearing, vestibular functions and integrative functions; disturbances in learning and memory functions; language, emotions, time perception and consciousness.

Unit – 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.

Unit – XII: Neuropsychological profile of neuro-psychiatric conditions: Neuropsychological profile of cortical and subcortical dementia; major mental disorders and substance use disorders.

Unit – XIII: Functional human brain mapping: QEEG, EP & ERP, PET, SPECT, fMRI

Unit – XIV: Neuropsychological assessment: Introduction, principles, relevance, scope and indications for neuropsychological assessment and issues involved in neuropsychological assessment of children.

Unit – XV: Neuropsychological rehabilitation: Principles, objectives and methods of neuro-rehabilitation of traumatic brain injury, organic brain disorders, major psychiatric disorders and behavioural disorders; scope of computer-based retraining, neurofeedback, cognitive aids.

### **Essential References:**

Bellack A.S. & Hersen M. (1998). *Comprehensive clinical psychology- Assessment* (Vol. 4). London: Elsevier Science Ltd.

Carlson, N.R. (2005). *Foundations of physiological psychology* (6th ed.). New Delhi: Pearson Education Inc.

Gazaaniga, M. S. (1984). *Handbook of cognitive neuroscience*. New York: Plenum Press.

Golden, C.J. & Charles, C.T. (1981). *Diagnosis & Rehabilitation in clinical*

- neuropsychology*. New York: Spring Field.
- Grant, I. & Adams, K.M. (1996). *Neuropsychological assessment of neuropsychiatric disorders* (2nd ed.). New York: Oxford University Press.
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- Guyton, A.C. & Hall, J.E. (2006). *Textbook of medical physiology*. Philadelphia: Saunders Company.
- Jain, A.K. (2005). *Textbook of physiology* (Vol. 2). New Delhi: Avichal Publishing Company.
- Kandel, E. R, & Schwartz, J. H (1985). *Principles of neural science*. New York: Elsevier.
- Kirshner H.S, (1986). *Behavioral Neurology*. New York: Churchill Livingstone.
- Kolb, B. & Whishaw, I.Q. (2007). *Fundamentals of human neuropsychology* (6th ed). New York: Worth Publishers.
- Lezak, M.D. (1995). *Neuropsychological assessment*. New York: Oxford University Press.
- Prigatano, G.P. (1999). *Principles of Neuropsychological Rehabilitation*. New York: Oxford University Press.
- Rohrbaugh, J.W (1990). *Event Related brain potentials – Basic issues & applications*. New York: Oxford University Press.
- Snell, R.S. (1992). *Clinical Neuroanatomy for Medical Students*. Boston: Little Brown & Co.
- Stahl, S.M. (1998). *Essential psychopharmacology*. London: Cambridge University Press.
- Vinken, P.J, & Bruyn, G.W. (1969). *Handbook of clinical neurology* (Vols. 2, 4, 45 & 46). Amsterdam: North Holland Publishing Co.
- Vinken, P.J., & Bruyn, G.W., (1969). *Handbook of clinical neurology* (Vols. 2, 4 & 45). Amsterdam: North Holland Publishing Co.
- Vyas, J.N. & Ahuja, N (1999). *Textbook of postgraduate psychiatry* (2<sup>nd</sup> ed., Vols. 1- 2). New Delhi: Jaypee brothers.
- Walsh, K. (2003). *Neuropsychology- A clinical approach* (4th ed.). Edinburgh: Churchill Livingstone.

## **PAPER - II: Psychotherapy and Counseling**

### **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:

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

## Academic Format of Units:

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.

## Syllabus:

Unit - 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 post-assessment; practice of evidence-based therapies.

Unit - II: Therapeutic Relationship: Client and therapist characteristics; illness, technique and other factors influencing the relationship.

Unit - 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.

Unit - 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, pranic healing, reiki, tai chi etc.

Unit – 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.

Unit - 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.

Unit – 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.

Unit – 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.

Unit – IX: Counseling: Definition and goals, techniques, behavioral, cognitive and humanistic approaches, process, counseling theory and procedures to specific domains of counseling.

Unit - 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.

Unit - 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 psychophysiological and chronic physical illness; parent and family counseling; therapy with adolescents.

Unit – XII: Psychoeducation (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.

Unit – 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.

Unit - XIV: Indian approaches to Psychotherapy: Yoga, Meditation, Mindfulness –based intervention: methods , processes and outcome.

Unit - XV: Contemporary issues and research: Issues related evidence-based practice, managed care, and research related to process and outcome.

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## **PAPER - III: Behavioral Medicine**

### **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:

1. Appreciate the impact of psychological factors on developing and surviving a systemic illness.
2. Understand the psychosocial impact of an illness and psychological interventions used in this context.
3. Understand the psychosocial outcomes of disease, psychosocial interventions employed to alter the unfavorable outcomes.
4. Understand the rationale of psychological interventions and their relative efficacy in chronic disease, and carry out the indicated interventions.
5. Understand the importance of physician-patient relationships and communication in determining health outcomes.
6. Understand of how basic principles of health psychology are applied in specific context of various health problems, and apply them with competence.
7. Demonstrate the required sensitivity to issues of death and dying, breaking bad news, and end-of-life issues.
8. Carry out specialized interventions during period of crisis, grief and bereavement.
9. Understand, assimilate, apply and integrate newer evidence-based research findings in therapies, techniques and processes.
10. Critically evaluate current health psychology/behavioral medicine research articles, and



present improved design/methods of replicating such research.

11. Demonstrate the sense responsibility while working collaboratively with another specialist and foster a working alliance.

Academic Format of Units:

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.

Syllabus:

Unit – 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.

Unit – 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.

Unit – 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.

Unit – 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.

Unit – 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.

- Unit – 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.
- Unit – 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.
- Unit – 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.
- Unit – 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.
- Unit – 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 hypnotictherapies.
- Unit – 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.
- Unit – 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 post-surgery, 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.

Unit – 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.

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