

SRI PATANJALI MAHARSHI NATUROPATHY & YOGA MEDICAL COLLEGE

*(Affiliated to Dr. NTR University of Health Sciences, Vijayawada)
Recognised by Govt. of Andhra Pradesh*

PROSPECTUS 2015-16

**SRI PATANJALI MAHARSHI
NATUROPATHY & YOGA MEDICAL COLLEGE**



Thimmapur, Guntakal - 515 801, Anantapur District, Andhra Pradesh, India



SRI PATANJALI MAHARSHI NATUROPATHY & YOGA MEDICAL COLLEGE

(Affiliated to Dr. NTR University of Health Sciences, Vijayawada)

Recognised by the Govt. of Andhra Pradesh

Guntakal, Anantapur District, Andhra Pradesh, India.

Sri Patanjali Maharshi Naturopathy & Yoga Medical College under the auspicious management of Sri Adi Siva Sadguru Educational Society. Famous Educational Society known for Nursing Education and other paramedical courses for 15 years known as Sri Padmavathi Nursing Institutions at Guntakal with a great experience and tradition in conducting nursing and other paramedical courses successfully. Now, it has stepped into Naturopathy Medical course. The aim of the society is to mould full fledged medical personnels to meet National and Global requirements.

Naturopathic Medicine

Is a school of medical philosophy and practice that seeks to improve health and treat disease chiefly by assisting the body's innate capacity to recover from illness and injury. It believes in the inherent healing powers of nature and uses non-invasive methods of intervention to create a suitable environment to facilitate the healing of the body by itself. Naturopathic practice may include a broad array of different modalities, including manual therapy, hydrotherapy, herbalism, acupuncture, counseling, iridology, aromatherapy, nutritional counseling and so on. Naturopathic medicine is a comprehensive system of health care within the complementary and alternative medicine world that incorporates many treatment modalities.



Yoga

Is an ancient science which helps in overall personality development and is an effective tool in prevention of diseases and maintaining health. With its very basic concepts of equilibrium between body and mind, the global scientists in medicine have approved this system as a healing science. The integral approach of yoga therapy brings balance at the physical, mental, emotional and spiritual levels.



Bachelor of Naturopathy and Yogic Sciences (BNYS) degree

BNYS is a Five year Medical Degree in Naturopathy & Yoga which include four years of full time study and 1 year of rotatory internship program which is a full time clinical training in various institutions, clinics and Hospitals. The medium of instruction is English.

Affiliation

The course is affiliated to Dr. N.T.R. University of Health Sciences, Vijayawada which is the 1st Medical University in Asia with more than 500 Medical and paramedical colleges in Andhra Pradesh State of India.

Intake

The Intake capacity for the course is 100 students every year.

Eligibility

The eligibility conditions for entrance to BNYS course are that a candidate must have passed the two-year Pre-University or Plus Two or 12th examination or Intermediate or equivalent with Science subjects obtaining at least 45% aggregate marks in Physics, Chemistry and Biology.

The candidate must have completed 17 years of age as on 31st December of the current year.

The course content and subjects studied in this course

Basic Medical Subjects

Anatomy, Physiology, Biochemistry, Pathology, Microbiology, Community Medicine, Modern Diagnosis & First Aid, Obstetrics & Gynecology

Naturopathy & Yoga Subjects:

Philosophy of Nature Cure, Magneto therapy & Chromo therapy, Manipulative Therapies (Massage, Reflexology, Chiro-practice, Osteopathy), Acupuncture, Fasting



Therapy, Naturopathy Diagnostics, (facial and iris diagnosis), Dietetics, Nutrition & Herbs, Yoga & Physical Culture, Yoga Philosophy, Yogic Therapy, Hydrotherapy and Physiotherapy.

Facilities

Teaching Hospitals

The college has a clinical teaching facility at Sri Patanjali Maharshi Naturopathy & Yoga Medical College, Thimmapur Village, Ananthapur District, Andhra Pradesh with 300 beds and other infrastructure required as per stipulations of Dr. NTR University of Health Sciences, Vijayawada for a yearly intake of 100 students.

- A well established Out Patient treatment wing in the college premises imparts practical training to students in developing and managing low budget INVESTMENT options after BNYS Degree.
- Clinical training is also imparted at Sri Patanjali Maharshi Naturopathy & Yoga Medical College, Thimmapur, Ananthapur District, Andhra Pradesh.

Laboratories

Well equipped laboratories for basic sciences with a separate Anatomy dissection hall and museum offer a wide exposure to the subjects.





Hostels

The College Hostels consists of well designed separate blocks for men and women with vegetarian and non vegetarian mess facility attached. Teaching Staff The college is endowed with a team of highly qualified, dedicated and experienced teaching staff.

Library

The Central Library is located in the college building and aims at a comprehensive collection of information resources in print as well as electronic formats, Text books, Reference Tools, Printed Journals, Audio-visual materials, Lending In-House Reference, Internet and Photocopier facilities. Digital Library facility available.

Cultural and Extra curricular activities

Cultural Activity

Regular Cultural and Extra curricular activities are conducted and all round personality development is encouraged.

Sports and Gym

Department of Physical Education conducts the Games and Sports events regularly to promote over-all personality development of students. A well equipped Multispeciality gym is an added feature.

Campus

The college organizes regular extension activities to promote the field of Naturopathy as well as expose the students to develop organizing skills.



Scope for BNYS Graduates

1. Clinical Practice

- Private practice in clinics with minimum infrastructure.
- Specialty Clinics - Special Clinics targeting individual disorders like Obesity, Stress, Allergy, Lifestyle, De-addiction, Back Pain, Diet Counseling, Post Surgical Rehabilitation, Physical Therapy Rehabilitation etc.
- Consultants in Corporate Hospitals like Apollo, Care, Kamineni, Andhra Hospitals, Narayana Hridayala, Lotus etc.
- Consultants in numerous Naturopathy and Yoga Hospitals
- Health Consultants in Holistic Wellness Centers
- Stress Management Consultants in various Multispeciality Hospitals

2. Academics & Research Opportunities

- Various posts like Lecturers, Assistant Professors and Professors in Naturopathy & Yoga institutions, Yoga Colleges both in India and Abroad, Ayurvedic Colleges etc.
- Research Scholar, Therapists and Officers in various Government and Non Government Organizations.

3. Extensive areas of Practice

- As Spa Managers and Spa Therapists in various leading brands of the HOTEL Industry as well as resorts providing health and rejuvenation programs



Operation Theatre

- Deputation under Central Government as Cultural Ambassadors through Central Council for Indian Cultural Relations to propagate Yoga in many of its Cultural Offices spread throughout the world.
- Stress Management Consultants for IT companies as well as other corporate sector offices.
- Life Style Modification Consultancy packages to various industry employees.

Government bodies which recognize & authenticate this system of medicine

- Ministry of Ayush, Govt. of India
- CCRYN, Central Council for Research in Yoga & Naturopathy, New Delhi
- NIN, National Institute of Naturopathy, Pune
- MDNIY, Morarji Desai National Institute of Yoga, New Delhi

Admission Procedure

The candidate needs to fill up the college application form with required documents mentioned in the form. Application form and prospectus can be obtained from the office of the Principal on request accompanied by a crossed demand draft for Rs.300/- in favour of Principal Sri Patanjali Maharshi Naturopathy & Yoga Medical College, Anantapur.

The following documents are to be brought at the time of admission with one set of photocopy duly attested by a Gazetted Officer-



1. 12th Std/10+2/ PUC / Intermediate Marks Certificate
2. 10th Std/SSC / SSLC Marks card
3. Transfer Certificate (T.C)
4. Conduct Certificate
5. Date of Birth Certificate
6. Physical Fitness Certificate
7. Passport size colour photographs-12 No's

Guntakal is head quarter of railway division and trains are connected from all over India. It is well connected by AP State Road Transport Corporation (APSRTC) and Luxury Coaches from Bangalore and Hyderabad. This is close to Hyderabad-Bangalore National Highway. Located 100 km from Bangalore Airport and 70 km from Puttaparthi Airport.



B.N.Y.S. DEGREE COURSE

SYLLABUS & CURRICULUM



Dr. N.T.R. UNIVERSITY OF HEALTH SCIENCES, A.P.
VIJAYAWADA-520 008.

BNYS DEGREE COURSE

Sl.No.	CONTENTS	PAGE No.
1	Scheme of Instructions	12
2	Scheme of Examinations	15
3	First BNYS Degree Course	21
4	Second BNYS Degree Course	56
5	Third (Final) BNYS Degree Course	111

SCHEME OF INSTRUCTIONS FOR B.N.Y.S. DEGREE COURSE

MEDIUM OF INSTRUCTION:

Medium of Instruction is English

DURATION OF THE COURSE: 5 1/2 Years.

Regular Study 4 1/2 Years.

Compulsory internship 1 Year.

The Course is divided into 3 phases of 18 months duration viz: 1st BNYS, 2nd BNYS and 3rd (final) BNYS and each phase is divided into 3 semesters of 6 months duration each.

DETAILS OF THE COURSE:

First BNYS Degree course 1st year (18 months) Consists of 3 semesters of 6 months each.

Table No.1

Sl.No.	SUBJECTS	DURATION	EXAMINATIONS
1	Bio-Chemistry	1 Year	Dr. N.T.R. University of Health Sciences examination at the end of the 2 nd semester (i.e. after completion of 12 months).
2	Anatomy	1 1/2 Years	Dr. N.T.R. University of Health Sciences examination at the end of the 3 rd semester (i.e. after completion of 18 months).
3	Physiology	1 1/2 Years	
4	Philosophy of Nature Cure	1 1/2 Years	

Note: Four internal assessment examinations shall be conducted in all the subjects to assess the progress and performance of the students.

SECOND B.N.Y.S. DEGREE COURSE 1 ½ YEARS (18 MONTHS) CONSISTS OF 3 SEMESTERS OF 6 MONTHS EACH.

Table No.2

Sl. No.	SUBJECTS	DURATION	EXAMINATIONS
1	Forensic Medicine	1 Year	Dr. N.T.R.University of Health Sciences Examinations at the end of the 2 nd semester (i.e. after completion of 12 months)
2	Microbiology	1 Year	
3	Psychology & Basic Psychiatry	1 Year	
4	Social & Preventive Medicine	1 ½ Years	Dr. N.T.R.University of Health Sciences Examinations at the end of the 3 rd semester (i.e. after completion of 18 months).
5	Pathology	1 ½ Years	
6	Manipulative therapeutics	1 ½ Years	
7	Diagnostic methods	1 ½ Years	
8	Yoga	1 ½ Years	

Note: Four internal assessment examinations shall be conducted in all the subjects to assess the progress and performance of the students.

THIRD (FINAL) B.N.Y.S. DEGREE COURSE 1 ½ YEARS (18 MONTHS) CONSISTS OF 3 SEMESTERS OF 6 MONTHS EACH.

Table No.3

Sl. No.	SUBJECTS	DURATION	EXAMINATIONS
1	Chromo therapy	1 Year	Dr. N.T.R.University of Health Sciences Examinations at the end of the 2 nd semester (i.e. after completion of 12 months)
2	Fasting therapy	1 Year	
3	Magneto therapy	1 Year	
4	Pharmacology, Minor Surgery & Emergency Medicine	1 Year	
5	Hospital Management & Research Methodology	1 Year	
6	Physiotherapy	1 ½ Years	Dr. N.T.R.University of Health Sciences Examinations at the end of the 3 rd semester (i.e. after completion of 18 months).
7	Yoga therapy	1 ½ Years	
8	Nutrition, Dietetics & Herbology	1 ½ Years	
9	Hydrotherapy	1 ½ Years	
10	Obstetrics & Gynaecology	1 ½ Years	

- Note:**
1. First BNYS Degree Comprises pre-clinical subjects.
 2. Second BNYS Degree Course Comprises para-clinical subjects.
 3. Third (Final) BNYS Degree Course Comprises clinical subjects.
 4. The students shall attend hospital postings for clinical classes in the Second and third BNYS Degree Course.
 5. The Subjects of Diagnostic methods shall be taught in the Hospital during the Clinical Training.
 6. The one year Subjects Come Under Part-I and one and half year subjects come under Part - II of First, Second, Third (Final) B.N.Y.S. Degree course Examinations respectively.

SCHEME OF EXAMINATIONS

I. GENERAL RULES FOR B.N.Y.S. DEGREE COURSE EXAMINATIONS:

1. All examinations of the Dr.N.T.R. University of Health Sciences shall be held at such places and on such dates as may be notified by the said university from time to time.
2. All applications for permission to appear for an examination shall be made to the Registrar of the University in the prescribed form duly accompanied by the necessary certificates regarding attendance, residence, practical works etc., together with prescribed fee as fixed by the Dr. N.T.R. University of Health Sciences, A.P. from time to time on or before the date fixed for the purpose. Applications found incomplete shall be rejected.
3. When a candidate is found eligible to appear for an examination, the Registrar shall furnish him/her with Hall Ticket, which the candidate is required to produce before he/she is admitted to the examination hall and also to the practical clinical examination.
4. A candidate, who fails to appear for the examination for any reason other than shortage of attendance, shall not be entitled to claim refund of the whole or part of the examination fee or for reservation of the same for the subsequent examination or examinations.
5. A candidate after he/she has been declared successful in an examination shall be given a certificate stating the year of the examinations, the subjects in which he/she was examined and the division in which he/she was placed.
6. Whenever the syllabus of the course or the scheme of examinations is changed, two more examinations shall be conducted according to the old syllabus/ regulations and candidates who, fail to appear for these two additional examinations have to appear at the examinations held subsequently in accordance with the revised syllabus and regulations.
7. No student of this college is allowed to study simultaneously regular/ private courses or to appear for examinations of any such courses conducted by any university/statutory body/ council or any other recognized institutions of State or Central Governments and in case of violation of this Rule admission of B.N.Y.S degree course shall be cancelled.

8. Internal Assessment:

1. Internal Assessment Exams for subjects having single paper:- There shall be four internal assessment exams for each subject, for which 20 marks in theory are added in the final university examination marks, after taking the average marks of the total internal assessments conducted. The pass marks for internal assessment is 35% to be eligible to appear for the final university exams of that subject (7 marks for a total of 20 marks).

Internal Assessment Exams for subjects having two papers:- There shall be four internal assessment exams for each subject, for which 40 marks in theory are added in the final university examination marks, after taking the average marks of the total internal assessments conducted. The pass marks for internal assessment is 35% to be eligible to appear for the final university exams of that subject (14 marks for a total of 40 marks).

Inclusion of internal assessment marks to the final university exam marks:- The average of four internal assessment marks are added to the theory marks of that particular subject of the final university exams. If the candidate is absent for any of the exams, the marks in that exam shall be taken as zero.

There is no separate practical internal assessment marks added in the final UHS exams and the breakup of the practical marks are the same as previous.

The internal assessment marks shall be displayed in the notice board and shall be dispatched to the university soon after each internal assessment. The last internal assessment should be completed 3 months before the university examinations and the computed internal assessment marks should be sent to the University one and half months before.

While forwarding the examination application forms of the students, the Principals should check the attendance and internal assessment marks and should send the application forms of only eligible students. The internal assessment marks will be used by the University for calculating aggregate marks only.

The internal assessments for the referred / failed students may be conducted twice before he / she appears to the final university examination. Internal assessment marks of the students at the time of first appearance will be compared with the marks obtained as referred/present appearance and the higher of the two will be taken as his / her internal assessment marks.

There will be multiple choice questions up to 20% in the internal assessments.

9. A) FIRST B.N.Y.S. DEGREE COURSE EXAMINATIONS - ELIGIBILITY FOR PROMOTIONS:

In the First B.N.Y.S. Degree course all the pre-clinical subjects will be taught from the beginning: Refer **Table No.1** from the previous pages.

The 18 months duration of first B.N.Y.S Degree course is divided into 3 semesters of 6 months each. The candidate with one backlog subject of Part - I or Part - II of 1st BNYS will also be promoted to 2nd BNYS. However the candidate should pass the backlog subject before appearing for Part -I of 2nd BNYS.

At the end of second semester i.e., after completion of 12 months there shall be a University examination in the subject of Bio-Chemistry.

A student is eligible for third semester, If he/she possesses 75% attendance. In case a student fails in the subject of Bio-Chemistry of second semester, he or she shall be allowed to continue-in the third semester and permitted to re-appear in the failed subject, along with other subjects (Anatomy, Physiology & Philosophy of Nature Cure) of the third semester, for which examination shall be conducted by the Dr. N.T.R.University of Health Sciences, at the end of the first B.N.Y.S. Degree Course (i.e. at the end of 18 months).

B) SECOND B.N.Y.S. DEGREE COURSE EXAMINATIONS - ELIGIBILITY FOR PROMOTIONS:

In the Second B.N.Y.S. Degree course all the para-clinical subjects will be taught from the beginning: Refer to **Table No.2** from the previous pages.

The 18 months duration of second B.N.Y.S Degree course is divided into three semesters of six months each.

At the end of second semester (i.e. after completion of 12 months) there shall be a University examination in the subjects: Forensic Medicine, Microbiology & Psychology and Basic Psychiatry.

A student is eligible for promotion to the 3rd semester, if he/she possesses 75% of attendance. Even if a student, fails in all the subjects of the second semester he/she shall be allowed to continue the third semester and to reappear in the failed subject/ subjects along with the subjects (Social and Preventive Medicine, Pathology,

Manipulative therapeutics, Diagnostic Methods & Yoga) of third semester for which examinations shall be conducted by the N.T.R. University of Health Sciences at the end of the third semester of the second B.N.Y.S. Degree course (i.e. at the end of 18 months). Those students who possess 75% attendance shall be eligible for promotion to the final B.N.Y.S. Degree course, even if they fail in all the above said 8 subjects. But, he/she has to pass part-I and part-II examinations of the second B.N.Y.S. Degree course before appearing for part-I examination of final B.N.Y.S. Degree course.

C) THIRD (FINAL) B.N.Y.S. DEGREE COURSE EXAMINATIONS - ELIGIBILITY FOR PROMOTIONS:

In the Final B.N.Y.S. Degree course all the clinical subjects will be taught from the beginning: Refer to **Table No.3** from previous pages.

The 18 months duration of final B.N.Y.S Degree course is divided into three semesters of six months each.

At the end of the second'semester (i.e.after completion of 12 months) there will be a University examinations in the subjects: Chromotherapy, Fasting therapy, Magnetotherapy, Pharmacology, Minor Surgery and Emergency Medicine & Hospital Management and Research Methodology

A student is eligible for promotion from second semester to third semester of the final B.N.Y.S. Degree course, if he/she puts in 75% attendance in all the subjects. But, one has to clear Part I & II of the second B.N.Y.S. Degree Course examinations of N.T.R. University of Health Sciences in all subjects before one becomes eligible to appear for Final B.N.Y.S. Degree Course Examination (Part-II, in the subjects: Physiotherapy, Yogatherapy, Nutrition, Dietetics & Herbology, Hydrotherapy & Obstetrics and Gynaecology). And the candidate should pass the Part-I examinations of the third B.N.Y.S. Degree Course before appearing for Part-II examinations of the third B.N.Y.S. Degree course.

N.B:-A candidate may be promoted from second B.N.Y.S. Degree course to Third B.N.Y.S. Degree Course though he fails in any number of subjects in Second B.N.Y.S. Part-I & II exams. However, the candidate has to pass all the subjects of the second B.N.Y.S. Part-I & II examinations and Part-I examinations of the Final B.N.Y.S.

Degree Course before appearing for the third B.N.Y.S.Part-II examinations of Dr. N.T.R. University of Health Sciences.

Successful students of the third (final) B.N.Y.S. course undergo compulsory internship of one year duration at the Nature Cure Hospital or at any other Hospital recognized by Dr. N.T.R. University of Health Sciences for the purpose.

10. All the candidates are required to put in a minimum of 75% attendance in theory and practical classes separately in all the subjects to become eligible to appear for any B.N.Y.S. Degree examination. This is subject to any amendments that may be brought about by Dr.N.T.R. University of Health Sciences from time to time.
11. The Principal of the college is required to forward to the controller of examinations, Dr. N.T.R. University of Health Sciences, applications of all those candidates whose periodical performance, in theory, practicals and other related aspects on each subject, is found satisfactory by the Heads of Departments.
12. A Candidate who has been allowed to appear for the first, second and final B.N.Y.S. Degree course examinations but has not been able to appear for or has failed in the examination, shall be permitted to re-appear for the same examination again without putting in any further attendance.

13. AWARD OF PASS:

A candidate shall be declared successful provided he/she secures marks in all the subjects as detailed below:

- i) 40% in theory, 50% in practicals, 50% overall is required to be declared to have passed in all the subjects of B.N.Y.S. Degree course examinations of Dr.N.T.R.University of Health Sciences, Andhra Pradesh.
- ii) A candidate shall be declared to have passed in **Second Division** if he/she secures an aggregate of 50% to 64% of marks.

14. AWARD OF FIRST CLASS:

A candidate, who secures an aggregate of 65% to 74% of marks in one attempt shall be declared to have passed in **First Division**.

15. AWARD OF DISTINCTION:

- a. A candidate shall be declared to have secured **Distinction** in a subject in which he/ she secures 75% of marks and above in one attempt.
- b. A candidate, who gets more than 75% of marks or above in aggregate in one attempt, shall be declared to have secured **Overall Distinction**.

16. AWARD OF FIRST CLASS, DISTINCTION AND RANKING:

First class, distinction and ranking of the examination results in first B.N.Y.S. Part-I & II and Second B. N. Y. S. Degree course of Part-I and II and third B.N.Y.S. Degree course of Part-I and II and overall degree B. N. Y. S. Degree course shall be declared by the authorities of Dr. N.T.R. University of Health Sciences.

17. i) Discontinuation of studies continuously for more than one year by any student requires fresh permission from the N.T.R. University of Health Sciences to continue his / her studies a fresh.
 - ii) After completion of the required attendance in any subject of B. N. Y. S. Degree course and qualified for appearing University examination but who fails continuously to appear 3 successive examinations in any subject, requires fresh permission from the authorities of Dr. N.T.R. University of Health Sciences.
18. The attendance of 75% for clinical postings of the students in the Nature Cure Hospital shall be taken into consideration, before forwarding application to appear for the University examination.
19. A candidate who has been rusticated shall not be permitted to seek admission again to the first B. N. Y. S. Degree course.

20. AWARD OF B. N. Y. S. DEGREE:

A Degree in Bachelor of Naturopathy and Yogic Sciences shall be awarded to the candidate who has satisfied the following conditions:-

- a) He / she must have passed the examinations in all the subjects of B.N.Y.S. Degree course examinations of Dr. N.T.R. University of Health Sciences, A.P.
- b) He / She must have, after passing the above examination, has successfully completed the one year compulsory internship at Nature Cure Hospital, Begumpet, Hyderabad or any Nature Cure Hospital recognized by Dr. N.T.R. University of Health Sciences, A.P.
- c) The internship of one year will have to be completed at the maximum within a period of two years immediately after passing the final B.N.Y.S. Degree Course examination.

FIRST B.N.Y.S. DEGREE COURSE – NUMBER OF HOURS
ALLOTTED TO TEACH EACH SUBJECT

1. BIO-CHEMISTRY:-

Theory	- 100 hours.
Practicals	- 30 hours.
Tutorials Demonstrations and Seminars	- 20 hours.
<hr/>	
Total	- 150 hours.
<hr/>	

2. ANATOMY:-

Theory	- 300 hours.
Practical demonstrations	- 75 hours
Tutorials, Demonstrations and Seminars	- 25 hours.
<hr/>	
Total	- 400 hours.
<hr/>	

3. PHYSIOLOGY:-

Theory	- 300 hours
Practicals	- 125 hours
Tutorials, Demonstrations and Seminars	- 25 hours
<hr/>	
Total	- 450 hours.
<hr/>	

4. PHILOSOPHY OF NATURE CURE:-

Theory	- 300 hours
Practicals	- 200 hours
Tutorials, Demonstrations and Seminars	- 50 hours
Yoga Practice (Non-Exam)	- 250 hours
<hr/>	
Total	- 800 hours.
<hr/>	

SCHEME OF EXAMINATIONS.
FIRST B.N.Y.S. DEGREE COURSE

Page - 15 Table

Distribution of Marks Per Paper

1. For subjects having one question paper with Part-A and Part-B:-

Part A

1 Essay Question (1 x 10) = 10
5 Short Questions (5 x 5) = 25
5 Brief Questions (5 x 1) = 05

Total = 40

Part B

1 Essay Question (1 x 10) = 10
5 Short Questions (5 x 5) = 25
5 Brief Questions (5 x 1) = 05

Total = 40

2. For the subjects having two papers (without Part-A and Part-B):-

2 Essay questions (2 X 10 marks) = 20 marks
10 short questions (10 X 5 marks) = 50 marks
5 brief questions (5 X 2 marks) = 10 marks

Total = 80 marks

FIRST B.N.Y.S. DEGREE COURSE
SCHEME OF PRACTICAL EXAMINATIONS

1. BIO-CHEMISTRY

Break up of Practical marks	- 50 marks
Record	- 10 marks
Practical – I Qualitative	
Analysis – 1 hour	- 15 marks
Practical II Qualitative	
Estimation test – 1 hour	- 15 marks
Problems in Bio-Statistics	- 10 marks
Total	<u>-50 marks</u>

2. ANATOMY

Break up of practical marks	- 50 marks
Record	- 10 marks
Practical – I	- 20 marks
Practical – II	- 20 marks
Total	<u>-50 marks</u>

3. PHYSIOLOGY

Break up of Practical marks	- 50 marks
Record	- 10 marks
Human Physiology	
Practical–I	
(Major experiment)	- 25 marks
Practical–II	
(Short experiment)	- 15 marks
Total	<u>-50 marks</u>

4. PHILOSOPHY OF NATURE CURE

Break up of practical marks	- 50 marks
Record	- 10 marks
Practical –I	
(Asanas & Pranayama)	- 10 marks
Practical – II(Kriyas)	- 10 marks
Practical – III	
(Identification of Naturopathy equipment, Treatment and Natural diet)	- 20 marks
	<hr/>
Total	-50 marks
	<hr/>

BIO-CHEMISTRY

1. Chemistry of Carbohydrates and Carbohydrate Metabolism.
2. Chemistry of Fats and fat metabolism.
3. Chemistry of Proteins and protein metabolism.
4. Chemistry of Nucleic acid and Metabolism of Nucleic acids.
5. Energy Metabolism.
6. Enzymes.
7. Vitamins.
8. Water and Mineral Metabolism.
9. Acid base balance.
10. Principles of Nutrition
11. Normal constituents of Blood and Haemoglobin Metabolism.
12. Hormones -Insulin,Glucagon, Thyroid, Parathyroid, Calcitonin.
13. Functional tests.

PRACTICALS (BIO-CHEMISTRY):-

Qualitative:-

- a) Constituents of Normal Urine – Urea-Uric acid – Creatinine – Calcium and Phosphorous – Sulphate Ammonia - Chloride.
- b) Abnormal constituents – Protein, blood, bile pigments – bile salts, sugar, ketonebodies.
- c) Identification of glucose, fructose, lactose, maltose, sucrose.
- d) Identification of albumin,casein, gelatin.

Quantitative:-

- a) Blood glucose
- b) Blood urea

- c) Urinary creatinine
- d) Gastric juice
- e) Urine Chlorides

Bio-Statistics:-

- a) Mean, Mode, Median
- b) Bardigram
- c) Histogram
- d) Frequency distribution
- e) Standard Deviation
- f) Standard errors of means

TEXT BOOKS:-

- 1. Bio-Chemistry - by Rama Rao.
- 2. Text book of Bio- Chemistry - by Rama Krishna.

REFERENCE BOOKS:-

- 1. Review of Bio-Chemistry - by Harper.
- 2. Bio-Chemistry - by Orten & Neuhaus.
- 3. Bio-Chemistry - by Stryer
- 4. Bio-Chemistry - by Albert Lehningar
- 5. Bio-Chemistry - by White, Handler & Smith

BIO-CHEMISTRY

SCHEME OF EXAMINATION:-

Theory –(one paper)	- 80 marks.
Duration of examination	- 3 hours.
Viva Marks	- 50 marks.
Practical Marks	- 50 marks.
Internal assessment (Theory)	- 20 marks.

BREAK UP OF PRACTICAL MARKS:-

Record	- 10 marks.
Practical –I Qualitative Analysis – 1 hour	- 15 marks
Practical-II Qualitative Estimation test-1hour	- 15 marks
Problems in Bio-Statistics.	- 10 marks.

TOTAL: -50 marks

ANATOMY

PAPER-I

I. INTRODUCTION :

1. History.
2. Systems of the body.
3. Structures of the cells.
4. Terminology, anatomical position and planes & surfaces.

II. OSTEOLOGY – IN RELATION TO REGIONAL ANATOMY:

1. Types of bones.
2. Classification of bones.
3. Description of various bones of
 - a) a) Head & neck.
 - b) Upper limb
 - c) Thorax
 - d) Abdomen
 - e) Pelvis
 - f) Vertebral column
 - g) Lower limb

III. MYOLOGY – IN RELATION TO REGIONAL ANATOMY:

1. Types of muscles
2. Muscles of
 - a) a) Head & neck.
 - b) Upper limb
 - c) Thorax
 - d) Abdomen
 - e) Pelvis
 - f) Vertebral column
 - g) Lower limb

(Origin, insertion, blood supply, nerve supply, and action of these muscles)

IV. ARTHROLOGY – IN RELATION TO REGIONAL ANATOMY:

1. Classification of joints.
2. Constructions of joints.
3. Description of various joints of
 - a) Head & neck.
 - b) Upper limb
 - c) Thorax
 - d) Abdomen
 - e) Pelvis
 - f) Vertebral column
 - g) Lower limb

PRACTICALS:

Demonstration of dissected parts of

- a) Head & neck.
- b) Upper limb
- c) Thorax
- d) Abdomen
- e) Pelvis
- f) Vertebral column
- g) Lower limb

PAPER – II

I. RESPIRATORY SYSTEM:

1. Upper respiratory tract – nose, pharynx, larynx.
2. Trachea, bronchial tree.
3. Lungs
4. Pleura
5. Mediastinum

II. CARDIO VASCULAR SYSTEM:

1. Heart – position, surface anatomy and its description.
2. Great vessels – aorta, pulmonary trunk, superior vena cava, inferior vena cava and their branches etc.
3. Arteries and Veins – structure of arteries and veins, important arteries & veins of the body.

III. DIGESTIVE SYSTEM:

Oral cavity, Teeth, Hard palate, Soft palate, Esophagus, Stomach, Small Intestine (Duodenum, Jejunum & Ileum), Large intestine (Caecum, Appendix, Ascending colon, Transverse colon, Descending colon, Sigmoid colon, Rectum), Anal canal, Anus, Liver, Gall bladder, Bile duct, Pancreas, Spleen, Peritoneum, Mesentery and their position in the abdominal quadrants.

IV. UROGENITAL SYSTEM:

1. Kidneys: position, surfaces, internal structures.
2. Ureters.
3. Urinary Bladder.
4. Male Urethra.
5. Female Urethra.
6. Male Reproductive organs:
Scrotum, Penis, Glans, Testes, Vas deferens, Spermatic cord, Epidermis, Seminal vesicles, Ejaculatory duct, Prostate gland etc.
7. Female Reproductive system:
 - a) External genital organs:
Vulva, Clitoris, Vagina.
 - b) Internal genital organs:
Uterus, Cervix, Fallopian tubes, Ovaries, Ligaments of Uterus & Ovaries.
 - c) Mammary glands.

V. ENDOCRINE SYSTEM:

Description of:

Pituitary, Pineal, Thyroid, Parathyroid, Thymus, Spleen, Pancreas, Suprarenal, Ovaries & Testes.

VI. NERVOUS SYSTEM:

Division of nervous system, central nervous system, peripheral nervous system, cerebral hemispheres, mid brain, pons, medulla oblongata, cerebellum, spinal cord, autonomic nervous system.

- Meninges: Dura matter, Arachnoid matter
- C.S.F.
- Ventricular system
- Cranial nerves
- Spinal nerves
- Important plexus: Cervical, Brachial, Lumbar & Sacral and description of their nerves.

VII. LYMPHATIC SYSTEM:

Description of: Lymph, Lymph glands, Lymph ducts, Thoracic duct and Cysterna chili.

VIII. BASIC GENETICS & EMBRYOLOGY

IX. FUNCTIONAL & APPLIED ANATOMY:

To correlate the structure with the functions as a prerequisite for understanding the altered state in various nature cure and yoga therapies.

- a) Manipulative therapeutics
- b) Physiotherapy
- c) Yoga & Exercise therapy

X. SPECIAL SENSES: 1) Eye 2) Ear 3) Nose 4) Skin

PRACTICALS:

1. Demonstration of histological slides of:
 - a. Respiratory system.
 - b. Gastro Intestinal System.
 - c. Urinary system.
 - d. Reproductive system.
 - e. Endocrine system.
2. Demonstration of models, spotters and charts.

3. Demonstration classes of applied anatomy with regard to nature cure & yoga therapies.
4. Demo classes – surface anatomy – tracing all parts & internal organs.

TEXT BOOKS:

1. B.D.Chaurasia Human Anatomy (3 Volumes) – 4th Edition
2. Cunningham's Manual of practical Anatomy by C.J.Romanes. Vol-I, II & III – 15th Edition.
3. Gray's Anatomy – 37th Edition.
4. Anatomy of Hatha Yoga by H.David Coulter.

ANATOMY

SCHEME OF EXAMINATION FOR TWO PAPERS:-

Theory two papers of each	- 80 marks.
Duration of examination	- 3 hours.
Viva Marks	- 50 marks.
Practical Marks	- 50 marks.
Internal assessment (Theory)	- 40 marks.

BREAK UP OF PRACTICAL MARKS:-

Record	- 10 marks.
Practical –I	- 20 marks
Practical-II	- 20 marks
	<hr/>
Total:	- 50 marks
	<hr/>

PHYSIOLOGY

PAPER-I:

I. GENERAL PHYSIOLOGY

1. Cell Structure
2. Subcellular units
3. Cell membrane and its properties
4. Transport mechanisms
5. Bioelectrical potentials
6. Body fluids and homeostasis.

II. BLOOD – Physical properties, composition and functions of blood.

1. Plasma proteins
 - a) Normal values
 - b) Origin and methods of separation
 - c) Functions and variations in health and disease
2. Bone marrow
 - a) Formed elements
 - b) Composition and functions
3. Erythrocytes
 - a) Morphology and variations in health and disease
 - b) Development of erythrocytes
 - c) Site and stages in developments
 - d) Necessary factors
 - e) Regulation of development of erythrocytes
 - f) Life-Span and fate of erythrocytes
 - g) Erythrocytes sedimentation rate (ESR)
4. Hemoglobin
 - a) Structure, synthesis, function and metabolism
 - b) Types of hemoglobin
5. Anemia – Definition and classification

6. Jaundice – Definition and classification
 - a) Role and function of spleen
7. Leucocytes
 - a) Classification, morphology, development and functions
 - b) Variation in health and disease
8. Thrombocytes
 - a) Origin, morphology and functions
 - b) Variation in health and disease
9. Homeostasis
 - a) Mechanism of homeostasis, coagulation of blood
 - b) Fate of clot and disorders of clotting
10. Anticoagulants
 - a) Mechanism of action and clinical applications
11. Blood group
 - a) Classification
 - b) ABO and RH system
 - c) Blood transfusion, indication and hazards
12. Lymph and tissue fluids
 - a) Lymph and reticular system
 - b) Principles of immune system
 - c) Cellular and humoral immunity

III. CARDIOVASCULAR SYSTEM

Historical perspective, organization of cardiovascular system

1. Heart: -
 - a) Structure and properties of cardiac muscle
 - b) Cardio metabolism
 - c) Innervation of heart, junctional tissue of heart
 - d) Generation and spread of cardiac impulse

2. Electrocardiography:-
 - a) Enthovan's Law
 - b) Various ECG leads, normal ECG and its interpretation
 - c) Cardiac Arrhythmias and heart blocks
 - d) Cardiac Vector
3. Cardiac cycle
 - a) Pressure and volume changes (mechanical events)
 - b) Heart sounds and stethoscope
 - c) Principles of echo-cardiograph
 - d) Measurement and regulation of cardiac output
4. Heart sounds
 - a) Description, Causation and relation to other events in cardiac cycle.
 - b) Clinical significance of heart sounds
5. Blood Pressure
 - a) Definition, regulation and factors influencing B.P.
 - b) Measurement of blood pressure
 - c) Physiology of hemorrhage and shock
6. Circulation
 - a) Blood vessels
 - b) Physical principles of blood flow, regulation of blood flow
 - c) Jugular venous pulse tracing, radial pulse tracking
 - d) Coronary, cerebral, renal and pulmonary circulation
 - e) Splanchnic, cutaneous and capillary circulation
 - f) Cardiovascular changes in altitude and exercise.

IV. RESPIRATORY SYSTEM

Introduction, internal and external respiration, physiology anatomy of respiratory system

1. Mechanics of respiration
 - a) Inspiration and expiration

- b) Role of respiratory muscles and thoracic cage
 - c) Pressure and volume changes during respiration
 - d) Work of breathing, lung compliance and its significance in health and disease
2. Lung volumes and capacities
- a) Lung volumes and capacities and their measurements
 - b) Respiratory minute volume and maximum voluntary ventilation.
3. Alveolar Ventilation
- Composition of atmospheric, inspired, alveolar and expired air.
4. Pulmonary circulation
- a) Pulmonary circulation, ventilation – perfusion relationship
 - b) Diffusion of gasses across pulmonary membranes
 - c) Oxygen uptake, transport and delivery
 - d) Carbon dioxide uptake, transport and delivery
5. Organization of the respiratory centers
- a) Nervous and chemical regulation of respiration
 - b) Classification and characteristics of hypoxia, cyanosis asphyxia, hyper apnea, hypoapnoea, dyspnoea, apnoea and orthopnoea and periodic breathing.
 - c) Respiratory aspects of high altitude
 - d) Physiology of acclimatisation and hyperbarrism
 - e) Respiratory / pulmonary function tests.
 - f) Non – respiratory functions of lungs.
 - g) Artificial respiration.

V. DIGESTIVE SYSTEM

1. Introduction, organization and plan of digestive system
2. Saliva

- a) Composition, functions, regulation of secretion
- b) Methods of study of above aspects of saliva

3. Stomach

- a) Functions of stomach
- b) Composition and functions of gastric juice
- c) Regulation of secretion and mechanics of HCL secretion.
- d) Gastric emptying time and its regulation
- e) Methods of study of gastric function and its supplied aspect.

4. Pancreas

- a) Composition and functions of pancreatic juice
- b) Regulation of pancreatic secretion
- c) Methods of study of pancreatic secretion

5. Liver

- a) Function, formation, storage and emptying of bile
- b) Composition, function and regulation of release of bile
- c) Entero-hepatic circulation
- d) Tests for liver function

6. Small Intestine

- a) Succus entericus
- b) Composition, function and mechanism of secretions

7. Large Intestine

- a) Functions

8. Gastro – Intestinal hormones

- a) Release and functions

9. Gastro – Intestinal movements

- a) Mastication, deglutition and vomiting
- b) Movements of stomach and small intestines

- c) Movements of large intestine and defecation
- d) Regulation of movements and methods of study

10. Digestion and absorption of carbohydrates, fats, proteins and vitamins, minerals and water.

VI. EXCRETORY SYSTEM

1. General introduction, organs of excretion with special emphasis on evolution of excretory mechanisms
2. Renal system – Functional anatomy and renal circulation
3. Nephron –
 - a) Mechanism of urine formation, glomerular filtration, tubular function
 - b) Concentration and acidification of urine
 - c) Composition of normal urine, and abnormal constituents of urine
 - d) Renal function tests
4. Non – excretory functions of kidney
 - a) Physiology of micturition and its abnormalities
5. Skin – Structure and functions

PHYSIOLOGY

PAPER-II:

I. ENDOCRINES

1. Introduction – hormones, evolutionary back – ground and organization of endocrine control systems.
2. Methods of study
 - a) Classification of hormones and mechanism of hormone action
 - b) Regulation of hormone secretion and feed-back system
3. Hypothalmo – hypophyseal system
Releasing hormones
4. Active principles
 - a) Chemical nature, biosynthesis, role of action
 - b) Control of secretion, excretion and its applied aspect
 - c) Clinical study of their hypo – and hyper function
 - d) Laboratory diagnosis of pituitary (anterior and posterior) glands, thyroid, parathyroid, adrenal cortex and medulla and islets of langerhans

II. REPRODUCTIVE SYSTEM

1. Physiology of reproduction
 - a) Introduction to physiology of reproduction
 - b) Sex determination and sex differentiation and chromosomal study
2. Male reproductive system
 - a) Growth, development and structure of testes
 - b) Gonadotropins and gonadal hormones
 - c) Functions of testes and spermatogenesis
 - d) Composition of semen
3. Female reproductive system
 - a) Ovary, gonadotropins

- b) Structure of ovary, and corpus luteum
- c) Functions of ovary, ovarian hormones
- d) Physiology of menstruation cycle and physiology of pregnancy
- e) Physiology of placenta, gestation and parturition
- f) Physiological basis of tests for ovulation and pregnancy

4. Physiology of lactation

III. NERVE MUSCLE PHYSIOLOGY

1. Neurone

- a) Morphology and measures of excitability
- b) Classification and properties of nerve fibres

2. Muscle

- a) Types of muscle and their properties and morphology
- b) Neuro-muscular junction, excitation-contraction coupling
- c) Clinical study of their hypo – and hyperfunction
- d) Myasthenia gravis
- e) Starling's law its applications

IV. CENTRAL NERVOUS SYSTEM

1. Structural and functional organization of central nervous system

2. Neuron

Neuroglia, functional types of neurons

3. Cerebro – spinal fluid

- a) Formation, circulation, functions of CSF
- b) Methods of collection of clinical significance of CSF

4. Synapse

- a) Types of synapses and their structure
- b) Sympathetic transmission
- c) General properties of neuro-transmitters

5. Sensory Physiology

- a) Classification and general properties of receptors
- b) Sensory modalities and stereognosis

6. Reflexes

- a) Reflex and general properties of reflexes (with examples)

7. Ascending tracts

- a) Origin, course, termination and functions
- b) Specific reference to pain pathway and physiology of pain

8. Organisation of motor system

- a) Pyramidal and extra-pyramidal systems
- b) Upper and lower motor neurons and their lesions
- c) Brown sequard syndrome
- d) Syringomyelia

9. Cerebellum

- a) Functional anatomy, connections and functions
- b) Effects of lesions and tests for cerebellar function

10. Basal ganglion

- a) Functional anatomy, connections and functions
- b) Diseases of basal ganglion and its clinical evaluation

11. Vestibular apparatus

- a) Functional anatomy, connections and functions
- b) Effects of lesions and their assessment
- c) Physiology of maintenance and regulation of muscle tone, posture and equilibrium
- d) Decerebrated rigidity and righting reflexes

12. Thalamus

- a) Functional anatomy, connections and functions
- b) Effects of lesions of hypothalamus

13. Hypothalamus

- a) Functional anatomy, connections and functions
- b) Effects of lesions of hypothalamus

14. Body temperature regulation

- a) Normal body temperature, pyrexia and hypothermia

15. Cerebral cortex

- a) Functional anatomy
- b) Methods of study of cortical functions

16. Limbic system

- a) Functional anatomy, connections and functions

17. Reticular formation

- a) Physiology of reticular formation
- b) EEG, physiology of sleep and wakefulness

18. Higher functions

- a) Learning, speech, memory, behavior and emotions

V. AUTONOMIC NERVOUS SYSTEM

1. Sympathetic nervous system
2. Parasympathetic nervous system

VI. SPECIAL SENSES

1. Smell

- a) Physiology of olfaction and olfactory discrimination
- b) Olfactory pathway and defects of olfaction

2. Receptors, primary taste sensation and taste pathway

3. Vision

- a) Functional anatomy of eye, extra and inner-ocular muscles
- b) Errors of refraction and its correction, visual acuity
- c) Physiology of aqueous humor

- d) Cornea, lens, intraocular pressure, accommodation
- e) Retina, rhodospin cycle, dark and light adaptation
- f) Visual pathways and effects of lesions in visual pathway
- g) Field of vision, perimetry, binocular vision
- h) Iris and papillary reflexes
- i) Colour vision, colour blindness and tests for colour blindness
- j) Formation and circulation of tears, lacrimal glands

4. Hearing

- a) Functional anatomy of ear, function of external ear
- b) Physiological functions of middle ear
- c) Impedence matching and tympanic reflex
- d) Functional anatomy of internal ear, cochles, organ of cort
- e) Auditory pathways and auditory cortex
- f) Frequency analysis, sound localization, defects of hearing
- g) Audiometry, tests for conduction defects, Aphasia

Note: For the purpose of written theory examination, the syllabus is divided as follows:-

Theory paper-I: Consisting of chapters on general physiology, blood, cardiovascular system, respiratory system and digestive system and excretory system

Theory paper-II: Consisting of chapters on Endocrine system, reproductive system (male and female), nerve muscle physiology, central nervous system, autonomic nervous system and special senses

PRACTICAL PART – I

1. HEMATOLOGY EXPERIMENTS:-

1. Collection of blood, study of fresh drop of blood, effects of isotonic, hypertonic and hypotonic saline on RBC's
2. Enumeration of RBC's (RBC count)
3. Estimation of hemoglobin
4. Packed cell volume (PCV) and blood indices
5. Determination of Erythrocyte sedimentation rate (ESR)
6. Enumeration of WBC (Total count)
7. Differential WBC (Differential count)
8. Determination of blood groups (ABO system)
9. Determination of clotting time and bleeding time
10. Enumeration of platelets (Platelet count)

II. HUMAN PHYSIOLOGY EXPERIMENTS

1. Recording of blood pressure in human beings and study of effects of exercise on blood pressure
2. Electrocardiography (Demonstration)
3. Clinical examination of CVS and radial pulse
4. Determination of tidal volume, inspiratory reserve volume, expiratory reserve volume, inspiratory capacity, expiratory capacity, vital capacity and forced expiratory volume
(all experiments are to be arranged for demonstration)
5. Stethoscopy, normal body temperature and its physiological variation
6. Pulse, respiration and temperature chart with correlation
7. Clinical examination of respiratory system

8. Plethysmography
9. Clinical examination of CNS
 - a) Motor functions
 - b) Sensory functions
 - c) Cranial nerves
 - d) Reflexes – superficial and deep

10. Determination of vital capacity and maximum ventilatory volume with spirometry (Demonstration)

Note: - The above 10 human physiology experiments are to be conducted with demonstration as a joint venture by physiologists and the clinical faculty, if necessary.

PART – II
(Only demonstration to students)

I. AMPHIBIAN EXPERIMENTS (MUSCLE)

1. Staff of commonly used apparatus in experimental physiology for muscle experiments
2. Gastronemius – Solatio preparation of frog
3. Recording simple muscle twitch from G.S. preparation of frog
4. Effects of successive stimuli on G.S. preparation of frog

II. AMPHIBIAN EXPERIMENTS (HEART)

1. Recording a cardiogram
2. Effect of warmth and cold on sinus venosus of frog's heart
3. Effects of Ist and IInd stannous ligature on frog's heart
4. Effect of cat-ions Na, K and chloride

RECOMMENDED TEXT BOOKS FOR PHYSIOLOGY

1. Text book of medical physiology – by A.G.Guyton
2. Review of Medical Physiology – by W.F.Ganong
3. Concise text book of medical physiology – Choudhary
4. Text book of physiology – by C.S.Chatterjee

REFERENCE BOOKS

1. Best and Taylor's physiological basis of Medical practice
2. Practical physiology – by Ghaj
3. Practical physiology – by Ranade

PHYSIOLOGY

SCHEME OF EXAMINATION FOR TWO PAPERS:-

Theory two papers of each	- 80 marks.
Duration of examination	- 3 hours.
Viva Marks	- 50 marks.
Practical Marks	- 50 marks.
Internal assessment (Theory)	- 40 marks.

BREAK UP OF PRACTICAL MARKS:-

Record	- 10 marks.
Human Physiology Practical –I (major experiment)	- 25 marks
Practical-II (short experiment)	- 15 marks
Total:	<hr/> - 50 marks <hr/>

PHILOSOPHY OF NATURE CURE

PAPER-I:

1. The evolution of the human body.
2. Evolution of Medicine as a system.
3. Traditional healing systems in India.
4. Historical highlights of Naturopathy.
 - a. Western Naturopaths, their philosophy and contributions in the development of Naturopathy.

Western Naturopaths

- i. Aesculapius.
 - ii. Hippocrates.
 - iii. The school of Salerno.
 - iv. Leonardo Da Vinci.
 - v. Paracelsus.
 - vi. Vincent Priessnitz.
 - vii. Sebastian Kneipp.
 - viii. Arnold Rickli.
 - ix. Louis Kuhne.
 - x. Adolf Just.
 - xi. John H Tilden.
 - xii. Sigmund Freud.
 - xiii. Henry Lindhlar.
 - xiv. J.H.Kellogg.
 - xv. Bernard Macfadden.
 - xvi. Benedict Lust.
- b. Indian Naturopaths, their philosophy and contribution in the development of Naturopathy.
 - i. Vittaladas Modi.
 - ii. Dinsha Mehta.
 - iii. S.J.Singh.
 - iv. J.M.Jassuwala.
 - v. Vinobha Bhawe.
 - vi. Mahatma Gandhi.

- c. Life sketches of Andhra Pradesh Naturopaths in the propagation and development of Naturopathy.
 - i. Venkata Chalapathi Sharma.
 - ii. Vegiraju Krishnamraju.
 - iii. Dr.Lakshman Sharma.
 - iv.Gnyanamba.
 - v. Acharya Putcha Venkata Ramaiah.
 - vi. Hanumaiah.
 - vii. Dr.Venkatrao.
 - viii. Dr.Vijayalakshmi.

5. Indian approach towards Naturopathy.
 - a) Integration of Yoga in to the system of Naturopathy.
 - b) Pancha maha bhutas: Philosophy and its relation to health and disease.
 - c) Shareera Dharmas: Their relation to health and disease.
 - d) Swasta Vrita: Dinacharya; Ratri charya; Ritu charya; Vegadharanam; Philosophy of Panchakarma.

6. Catechism of Nature cure.
7. Basic requirements of health.
8. Importance of Physical, Mental and Spiritual health.
9. Concept of Foreign matter: Autointoxification, Disease cycle.
10. Life style and Health cycle.
11. The unity of disease.
 - a) Primary causes of Diseases (Lowered vitality, Abnormal composition of Blood and lymph, Accumulation of morbid matter and poisons).
 - b) Secondary causes of diseases.
12. The unity of treatment: Return to nature; Manipulation of vital force; Elimination.
13. Vaccination and inoculation – Naturopaths debate.
14. Free radicals and their contribution to disease.
15. Stress and its contribution to health and ill health.

PAPER-II:

1. Process of Detoxification (Rejuvenation). Importance of eliminative organs in keeping health.
 2. Bio-chemical individuality, Individual is a Universe unto himself.
 3. The diagnostic procedures in Naturopathy:
 - Facial diagnosis.
 - Iri diagnosis.
 - Spinal analysis.
 - Chromo diagnosis.
 - Yogic diagnosis.
 - Clinical diagnosis.
 4. Importance of Arogya Rakshaka Panchatantras in preventive health.
 5. Nature cure in treating Acute & Chronic diseases. Health problems in different age groups (children, adolescents, adults, middle age, old age).
 6. Natural remedies in the Integrated Naturopathy: Fasting therapy: definition, types, procedure & therapeutic effect.
 - Colon therapy: definition of Enema, types of enema, procedure & therapeutic effects.
 - Diet therapy: Food as medicine, eliminative-soothing-constructive diets, rajasik-tamsik-satvik diets.
 - Hydrotherapy: water as medicine, introduction to various treatment modalities in water cure.
 - Mud therapy: Mud as therapy, Introduction to mud therapy procedures.
 - Chromotherapy: Introduction to chromo therapy, therapeutic effects of primary and secondary colours.
 - Massage therapy: Effect of massage in health and disease.
 - Magneto therapy: Introduction to Magneto therapy, effects of North and South poles of magnets.
- Acupuncture & Acupressure: Philosophy, Introduction to different meridians.

Physiotherapy and Occupational therapy their concepts in health and disease.

Osteopathy: Introduction to Osteopathy.

Psychology: Definition, branches of Psychology, concepts of behavioral science in health and disease.

7. Yoga.

Yoga and Naturopathy.

Definition of Yoga.

Outlines of Astanga Yoga: yama, niyama, asana, pranayama, pratyahara, dharana, dhyna, Samadhi.

Introduction to Asanas:

- | | | |
|------------------------|----------------------|----------------------------|
| i. Sirsasana. | ii. Sarvangasana. | iii. Matsyasana. |
| iv. Halasana. | v. Bhujangasana. | vi. Salabhasana. |
| vii. Makrasana. | xi. Mayurasana. | xii. Ardha-Matsyendrasana. |
| xiii. Supta-Vajrasana. | xiv. Pachimothasana. | xv. Padmasana. |
| xvi. Badda-Padmasana. | xvii. Trikonasana. | xviii. Savasana. |

Introduction to Pranayama: Surya-chandrabhedana, Anulom vilom, Nadhisudhi, Seethali, Seethakari, Kapalabhati, Bhastrika, Ujjayi, Bhramari, Murcha, Plavini.

Introduction to Kriya Yoga: Dhouthi, Vasti, Nethi, Nauli, Trataka, Kapalabhati.

8. Prayer and health.

PRACTICALS:-

1. Students should be introduced to various treatment procedure used in Naturopathy.
2. Students should have knowledge of giving various treatments.
3. Demonstration of:
 - a) Natural diet (Raw diet)
 - b) Satvik diet
 - c) Way of serving various special diets.
4. Asanas, Pranayama.
5. Kriyas:
 - a) a) Dhouthi
 - b) Vasti
 - c) Nethi
 - d) Nauli
 - e) Trataka
 - f) Kapalabhati
6. Dharna – Prayer, Dhyana – Meditation.
7. Record – History of Naturopathy, Various treatments, Natural diet, Asanas, Pranayama, kriyas.

TEXT BOOKS:-

1. Philosophy of Nature Cure - by Henry Lindlahr
2. Practice of Nature Cure - by Henry Lindlahr
3. Human Culture and Cure - by Dr.E.D.Babbit
4. Practical Nature Cure - by Dr.K.Laxmanasarma
5. History and Philosophy of Nature Cure - by S.J.Singh
6. My Nature Cure, Key to health, prayer, Ramanama & Diet and Diet reforms - by M.K.Gandhi
7. Natural health care – A to Z - by Belinda Gran

REFERENCE BOOKS:-

1. My Nature Cure or Practical Naturopathy - by S.J.Singh
2. The Science of facial expression - by Louis Kuhne
3. The story of my experiment with truth - by M.K.Gandhi
4. Ayurvedic for health and Long life - by R.K.Garde
5. Everybody's guide to Nature Cure - by Harry Benjamin
6. Ancient Indian Medicine - by Dr.P.Kutumbaiah
7. Limits to Medicine, Medical Nemesis - by Ivan Illich
8. The Banyan tree-A text book for Holistic health practitioners VOL-I, II & III - by Carol Huss

PHILOSOPHY OF NATURE CURE

SCHEME OF EXAMINATION FOR TWO PAPERS:-

Theory two papers of each	- 80 marks.
Duration of examination	- 3 hours.
Viva Marks	- 50 marks.
Practical Marks	- 50 marks.
Internal assessment (Theory)	- 40 marks.

BREAK UP OF PRACTICAL MARKS:-

Record	- 10 marks.
Practical – I (Asanas & Pranayama)	- 10 marks
Practical –II (Kriyās)	- 10 marks
Practical – III(Identification of Naturopathy equipment, Treatment and Natural diet)	- 20 marks
Total:	<hr/> - 50 marks <hr/>

**SECOND B.N.Y.S. DEGREE COURSE – NUMBER OF HOURS
ALLOTTED TO TEACH EACH SUBJECT AS FOLLOWS**

1. FORENSIC MEDICINE

Theory	- 75 hours.
Practicals	- 20 hours.
Tutorials, Demonstrations	- 05 hours.
<hr/>	
Total	-100 hours.
<hr/>	

2. MICROBIOLOGY

Theory	- 100 hours.
Practicals	- 40 hours
Tutorials, Demonstrations and Seminars	- 10 hours.
<hr/>	
Total	- 150 hours.
<hr/>	

3. PSYCHOLOGY & BASIC PSYCHIATRY:-

Theory	- 150 hours.
Practicals	- 25 hours
Tutorials, Demonstrations and Seminars.-	25 hours.
<hr/>	
Total	- 200 hours.
<hr/>	

4.SOCIAL AND PREVENTIVE MEDICINE:-

Theory	- 175 hours.
Practicals	- 50 hours.
Tutorials Demonstrations and Seminars	- 25 hours.
	<hr/>
Total	- 250 hours.
	<hr/>

5. PATHOLOGY

Theory	- 200 hours.
Practicals	- 75 hours.
Tutorials Demonstrations and Seminars	- 25 hours.
	<hr/>
Total	- 300 hours.
	<hr/>

6.MANIPULATIVE THERAPEUTICS & ACUPUNCTURE

Theory	- 200 hours
Practicals	- 125 hours
Tutorials, Demonstrations and Seminars.	- 25 hours
	<hr/>
Total	- 350 hours.
	<hr/>

7.DIAGNOSTIC METHODS:-

Theory	- 200 hours
Practicals	- 80 hours
Tutorials, Demonstration and Seminars	- 20 hours
	<hr/>
Total	- 300 hours.
	<hr/>

8. YOGA:-

Theory - 300 hours.

Practicals - 150 hours.

Tutorials Demonstrations and Seminars -50 hours.

Total - **500 hours.**

SCHEME OF EXAMINATIONS
SECOND B.N.Y.S. DEGREE COURSE FOR EACH PAPER

Sl. No	Subject	Theory				Viva	Practical	Total
		Paper-1	Paper-2	Internal Assessment	Total			
1	Microbiology	80	-	20	100	50	50	200
2	Forensic Medicine	80	-	20	100	50	50	200
3	Psychology & Basic Psychiatry	80	-	20	100	50	50	200
4	Social & Preventive Medicine	80	-	20	100	50	50	200
5	Pathology	80	-	20	100	50	50	200
6	Manipulative therapeutics	80	80	40	200	50	50	300
7	Diagnostic methods	80	80	40	200	50	50	300
8	Yoga	80	80	40	200	50	50	300
	GRAND TOTAL							1900

Distribution of Marks Per Paper:

1. For subjects having one question paper with Part-A and Part-B:-

Part A

1 Essay Question (1 x 10) = 10

Essay Question (1 x 10) = 10

5 Short Questions (5 x 5) = 25

5 Brief Questions (5 x 1) = 05

Total = 40

Part B

1

5 Short Questions (5 x 5) = 25

5 Brief Questions (5 x 1) = 05

Total = 40

2. For the subjects having two papers:-

2 Essay questions (2 X 10 marks) = 20 marks

10 short questions (10 X 5 marks) = 50 marks

5 brief questions (5 X 2 marks) = 10 marks

Total = 80 marks

SECOND B.N.Y.S. DEGREE COURSE
SCHEME OF PRACTICAL EXAMINATION

1. FORENSIC MEDICINE:-

Break up of practical marks:-	50 marks.
Record Spotters	10 marks.
Age determination Autopsy	10 marks.
Net specimen	10 marks.
Total	50 marks

2. MICROBIOLOGY:-

Break up of practical marks:-	50 marks.
Record	10 marks.
Grams stain	10 marks.
Special stain	10 marks.
i) Alberts or Z-N stain	10 marks.
Spotters/ Stool examination	10 marks.
Total	50 marks

3. PSYCHOLOGY & BASIC PSYCHIATRY

Break up of practical works:-	50 marks
Record	10 marks
Practical – I	10 marks
Practical – II	10 marks
Practical – III	10 marks
Total	50 marks

4. SOCIAL & PREVENTIVE MEDICINE:-

Break up of practical marks	50 marks
Record	10 marks
Spotters	10 marks
Nutrition, epidemiology	10 marks
Stastics Problems (any 2)	10 marks
Clinico-social case study	10 marks
Total	50 marks

5. PATHOLOGY:-

Break up of practical marks	50 marks
Record	10 marks
Spotters	10 marks
Urine	10 marks
Differential count	10 marks
Hemoglobin/Total count.	10 marks
Total	50 marks

6. MANIPULATIVE THERAPEUTICS:-

Break up of practical marks	50 marks
Record	10 marks
Practical – I (Practical Massage)	10 marks
Practical – II (Acupuncture)	10 marks
Practical – III (Identification of various reflex and acupressure zones)	10 marks
Total	50 marks

7. **DIAGNOSTIC METHODS:-**

Break up of practical marks	50 marks
Record	10 marks
Practical – I (Case study – Diagnosis of the Disease by examining the Iris)	20 marks
Practical – II (Case study – Diagnosis of the encumbrance by examining the patient)	20 marks

Total 50 marks

8. **YOGA:-**

Break up of practical works:-	50 marks
Record	10 marks
Practical – I (Asana)	10 marks
Practical – II (Bandhas, Mudras, Dhruvstis, Pranayama)	10 marks
Practical – III	10 marks

Total 50 marks

FORENSIC MEDICINE

1. Definition: Forensic Medicine and its scope.
2. Procedure of giving medical evidence with reference to Indian evidence act.
3. Methods of identification of living and dead body, Race, age, sex etc.
4. Death – Medico legal aspects, certification of death, sudden death, cause, Medico legal importance, signs of death, changes due to death and calculating time of death.
5. Medico – legal autopsy.
6. Medico – legal aspects of insanity.
7. Rules of giving evidence, professional secrecy.
8. Rape and unnatural offences.
9. Abortion, pregnancy and delivery, miscarriage.
10. Law in relation to a medical man. Medical ethics, duties, professional privilege and responsibilities.
11. Legal responsibilities: Medical ethics.
12. Responsibilities and duties of the medical practitioners to the State, professional secrecy, and privileged communication.
13. Un-professional conduct, Malpractice.
14. The rights and privileges and duties of medical practitioners.
15. The functions of State-medical council and its relationship to Indian Medical Council.
16. Medical ethics approved by Indian Medical Council.

PRACTICALS:-

1. Age estimation
2. Examination of injured
3. Alcoholic
4. Psychiatric
5. Toxicology

TEXT BOOKS:-

1. Medical jurisprudence - By Modi
2. A text book of Forensic Medicine - By Narayana Reddy.
3. A text book of Forensic Medicine - By M.R.K.Krishna.

REFERENCE BOOKS:-

1. The essentials of Forensic Medicine - By Dr.C.J.Poison
D.J.Gee and B.Knight
2. Forensic Medicine - By Corden and
Shapiro
3. Principles and practice of Jurisprudence - By Taylor's

FORENSIC MEDICINE

SCHEME OF EXAMINATION:-

Theory one paper	- 80 marks
Duration of examination	- 03 hours
Viva Marks	- 50 marks
Practicals Marks	- 50 marks
Internal assessment	- 20 marks.

BREAK UP OF PRACTICAL MARKS:-

Record	- 10 marks
Toxicology	- 10 marks
Age determination	- 10 marks
Examination of Injured	- 10 marks
Net specimen	- 10 marks
	<hr/>
Total	- 50 marks
	<hr/>

MICROBIOLOGY

General Bacteriology:-

1. Historical introduction.
2. Morphology and Physiology of Bacteria.
3. Bacterial genetics.
4. Normal microbial flora & antimicrobial agents.

Immunology:-

1. Infection and immunity
2. Structure and function of immune system.
3. Immune response.
4. Antigens.
5. Antibodies – Immunoglobulins.
6. The complement system.
7. Antigen – Antibody reactions.
8. Hypersensitivity
9. Auto – immunity & Immunohaematology.

Systematic Bacteriology with emphasis on morphology, pathogenicity, pathogenesis, epidemiology, laboratory diagnosis and prophylaxis of pyogenic cocci Staphylococci,

Streptococci,

Pneumococci,

Gonococci,

Meningococci

Mycobacteria-Mycobacterium tuberculosis: Leprosy

Corynebacterium diphtheriae

Salmonellae : Enteric fever-food poisoning

Shigella : Bacillary dysentery

Escherichia and other enterobacteriaceae: Urinary tract infections, infantile diarrhoea and other diarrhoeal disorders.

Vibrio cholerae

Haemophilus : Respiratory tract infection: Conjunctivitis and Meningitis.
Bordetella : Whooping cough.
Brucellae : Brucellosis
Yersinia : Plague.
Bacillus : Anthrax
Clostridium : Tetanus
Bacteriodes : Anaerobic infections
Spirochaetes : Syphilis, leptospirosis, Vincents angina, Relapsing fever
Chlamydiae : Trachoma, inclusion conjunctivitis,
 Lympho – granuloma venereum.

10. General properties of viruses

11. Study of common viral infections prevalent in India: Pox, Herpes, Adeno, Measles, Mumps, Para Myxo, Picorna – Poliomyelitis, Rhabdo, Arbo, Viruses – Causing Hepatitis, AIDS.

12. General characteristics of fungi.

13. Laboratory diagnosis of common mycotic infections:

Candidiasis

Dermatophytosis

Opportunistic fungal infections

Cyptococcosis, Mycetoma,

14. Parasites and Parasitic diseases

Amoebiasis – E.histolytica

Leishmaniasis

Malaria – Plasmodium

Other intestinal protozoal infections: Toxoplasma

Nematodes – Intestinal and somatic

i. Ascaris

ii. Ankylostoma

iii. Wuchereria bancrofti

Cestodes – Taeniaspecies

15. Collection and transportation of specimens.
16. Laboratory diagnosis of common infective syndromes: P.U.O. Meningitis, urinary tract infections, wound infections etc.,
17. Epidemiology of Zoonotic diseases.
18. Bacteriology of water and food
19. Hospital acquired (nosocomial) infections.

TOPICS FOR SELECTIVE STUDY:-

1. Bacterial metabolism.
2. Genetics.
3. Actinomycosis.
4. Loefflerella.
5. Mycetomas.
6. Rickettsia.
7. Mycoplasma.
8. Slow viruses
9. Oncogenic viruses.
10. Sub-cutaneous mycosis
11. Systemic mycosis
12. Toxoplasmosis
13. Trematodes with special mention to schistosomes.
14. Bacteriophage.
15. Trypanosomiasis.

PRACTICALS:-

1. Microscopes & Microscopy.
2. Sterilization and disinfection.
3. Morphology of Bacteria.
4. Culture media.
5. Culture methods

6. Staining of Bacteria
 - a. Grams staining
 - b. Alberts staining
 - c. Z-N staining
7. Stool examination
8. Identification of Bacteria.
9. Demonstration of V.D.R.L. test.
10. Demonstration of Widal test.

TEXT BOOKS:-

1. Text book of Microbiology - by R.Anantha Narayana & C.K.Jayaram Paniker
2. Parasitology - by Jayaram Paniker.
3. Bacteriology - by Day.
4. Text book of Microbiology - by Chakravarthy

REFERENCE BOOKS:-

1. Parasitology - by Chatterjee.
2. Practical Microbiology - by R.Cruick Shank.
3. Clinical Microbiology - by Bailey & Scott.
4. Medical laboratory manual for tropical countries Vol.I, II - by Monica Cheesbrough.

MICROBIOLOGY

SCHEME OF EXAMINATION:-

Theory one paper	-	80 marks
Duration of examination	-	3 hours
Viva Marks	-	50 marks.
Practical Marks	-	50 marks.
Internal assessment	-	20 marks.

BREAKUP OF PRACTICAL MARKS:-

Record	-	10 marks.
Grams stain	-	10 marks
Special stain		
i) Alberts or Z-N stain	-	10 marks
Spotters	-	10 marks
Stool examination	-	10 marks
Total		- 50 marks

PSYCHOLOGY AND BASIC PSYCHIATRY

PRINCIPLES OF PSYCHOLOGY:

1. The Nature of Psychology:

Psychological conceptions of man; Application of different conceptions; Definitions of Psychology; Fields of specialization with in Psychology; Methods of Psychology.

2. Perception

Object perception and perceptual constancies; organization and perception; Movement perception; Depth perception; Visual coding and pattern recognition; The role of learning in perception; attention and perception; Extra sensory perception.

3. States of consciousness

Varieties of waking states; .Sleeping and dreaming; Hypnosis as an altered state of awareness; meditation and self induced alternations of consciousness; Psychoactive drugs and their effects.

4. Conditioning and learning

Classical conditioning; Operant conditioning; The principle of reinforcement; multiple response learning; Cognitive learning.

5. Memory and forgetting

Kinds of remembering; retrieval processes; The nature of forgetting; Are memories permanent; Two-process theories of memory; Improving memory.

6. Optimizing learning

Programmed learning and automated instruction; Transfer of learning; Imagery as an aid to learning; Reward and punishment in the control of learning; anxiety and learning.

7. Development during infancy, early childhood and later child hood and their characteristics.

8. Development during adolescence, adult hood, middle age and old age and their characteristics.

9. Intellectual or mental development; Some general characteristics mental development; Environmental factors of mental development.

10. Emotional Development

Meaning of emotion; Characteristics of childhood emotionality; Beginning and development emotional behavior; Factors influencing emotionality; Some important emotions.

11. Social development

Meaning of Social development; Stages of social development or process of Socialization; Factors influencing Social development; Agencies of socialization.

12. Development of Character

Meaning and definition of character; Theories of character; Traits of good character; Stages in character formation.

13. Instincts (Basic Drives)

Meaning and definition of instincts; Characteristics of instincts; Instincts and reflex action; Human and animal instincts; Theories of instincts; Classification of instincts; Importance of instincts in general and in education; Modification or transfer of instincts.

14. Ability testing and intelligence

Ability testing and intelligence; Testing aptitudes and achievements; Tests of general intelligence; Nature of human intelligence; Generic basis of intelligence; Extremes of intelligence.

15. Aptitudes

Meaning and definition of aptitude; Characteristics of aptitude; Difference between ability and aptitude; Difference between aptitude and achievement; Difference between intelligence and aptitude; Difference between aptitude and interest; Types of aptitudes; Aptitude tests.

16. Achievements

Meaning of achievement; Achievement tests.

17. Nature of personality; Types of personality; Development of personality;

Measurement of personality.

18. Conflict; Anxiety and defence

Frustration; Reactions of frustration; Anxiety; Defence mechanism; Defence mechanisms of adjustment.

19. Stress

What is stress; Physiology of stress; Stress and diseases.

20. Physiological basis of motivation

Development of motivational concepts; Hunger; Obesity; Thirst; Sex; Other drives with physiological Basis; Theories of motivation; Broad types of motivation.

21. Habits

Meaning of habits; Habits and instincts; habits and sentiments; Characteristics of habits; Kinds of habits; Improvement of habits; Cultivation of good habits; Bad habits.

22. Attention and interest

Definition and meaning of attention; Characteristics of attention; Types of attention; Conditions of attention; Difference between child and adult attention; Distraction; Interest.

23. Thinking and reasoning

Meaning and definition of thinking; Steps in thinking; Types of thinking; Tools or instruments of thinking; Favorable factors or elements in thinking; Language and thinking; Education and thinking; Reasoning; Steps in reasoning; Types of reasoning.

24. Problem solving and creativity

25. Sentiments

Definition of sentiments; Characteristics of sentiment; Sentiment and other dispositions; Types of sentiment; Formation and development of sentiment; Improvement of sentiments.

PSYCHIATRY:

1. Abnormal behavior

Concept of abnormality; difficulty in charactering abnormality; varieties of Psychopathology.

2. Causes of abnormal behavior

Biological, Psychological and Socio cultural factors

3. Transient situational disorders

4. Neurosis Basic nature of neurosis; Phobic neurosis; Obsessive - compulsive neurosis; Hysterical neurosis; Hypochondriacal neurosis; Neurasthenic neurosis; Depressive neurosis.

5. Psychosomatic Disorders

6. Schizophrenia and Paranoia

7. Major affective disorders

Manic - Depressive Psychosis; Involutional melancholia; Broader aspects of depression.

8. Psychopathic personality

Compulsive gambling; Delinquent behavior; Criminal behavior.

9. Alcoholism and Drug abuse

10. Organic brain Syndromes

Disorders associated with infection, Brain tumors, Head injury, Toxins and metabolic disturbances.

11. Psychoses of the aged

12. Behavior disorders of childhood

13. Sexual deviations

14. Suicide

HEALTH PSYCHOLOGY:

1. Contemporary approaches to therapy

Biological Therapy; Psychosocial approaches to therapy; Socio cultural approaches to therapy.

2. Perspective on prevention

3. Counseling Psychology

Meaning and definition of counseling; Characteristics of counseling; Basic principles of counseling; Qualifications of counselor; Duties and functions of counselor approaches to counseling; Counseling process; Special areas in counseling; Evaluation of counseling; Theories of counseling.

4. Coping with stress through Naturopathy, Yoga, Nutrition, and other non drug methods.

PRACTICALS:

I. Experimental Psychology (Visit to near by lab in Psychology Department for demo and introduction to following tests)

1. Span of attention (Visual)
2. Personality Adjustment
3. Group intelligency test
4. Image learning
5. Achievement test
6. Aptitude test
7. Experiments on transfer of training

II. Stress and Coping

Measuring stress levels in different angles such as Frustration, over load, deprivation caused by boredom or loneliness, self perception, type A personality and anxious reactive personality.

III. Counseling Psychology

Counseling procedures and techniques.

IV. Health Psychology

1. Case taking in Psychiatry, Diagnosis and treatment modalities (Visit to mental hospital)

2. Relaxation techniques

Progressive relaxation, Yoga nidra, Music therapy and role of Asana, Pranayama and Meditation in relaxation.

3. Stress management through drugless methods.

REFERENCEBOOKS:

1. Introduction to Psychology by Ernest R Hilgard, Richard C Atkinson and Rita L Atkinson.

2. Abnormal Psychology and modern life by James C Coleman and James N Butcher

3. Developmental psychology by B Hurlock Elizabeth

4. Modern psychotherapy by M.B. Ghorpade

5. Health Psychology by Kaplan and Saddoch

TEXT BOOKS:

1. General Psychology by Guilford

2. Brief introduction to psychology by Clifford T. Morgan

3. Introduction to psychology by Clifford T. Morgan and Richard A. King

4. Abnormal psychology by James D. Page

5. Positive Psychotherapy by Nossrat Pesseschkian

6. Psychology, Mental health and yoga by A.S. Dalai

7. Counseling and guidance by S. Narayana Rao

8. Synopsis of psychiatry counseling by Kalpan and Saddoch

9. Health psychology by Shelly Taylor

PSYCHOLOGY AND BASIC PSYCHIATRY

SCHEME OF EXAMINATION:-

Theory one paper	- 80 marks
Duration of examination	- 3 hours
Viva Marks	- 50 marks.
Practical Marks	- 50 marks.
Internal assessment	- 20 marks.

BREAKUP OF PRACTICAL MARKS:-

Record	- 10 marks.
Practical-I (Experimental Psychology)	- 10 marks
Practical-II (Stress & coping)	- 10 marks
Practical-III (Counseling Psychology)	- 10 marks
Practical-IV (Health Psychology)	- 10 marks
Total	<hr/> - 50 marks <hr/>

SOCIAL AND PREVENTIVE MEDICINE

1. Evolution of medicine – Ancient medicine, Scientific medicine, Modern Medicine, Medical Evolution.
2. Concepts in Community health- Concepts of health, Health & Development, Indicators of health. Concepts of Disease, Concepts of Prevention, disease control & eradication, Public Health, Social Medicine, Community medicine, Health Services, Planning & Management, Risk Approach, Evaluation of Health Services.
3. General Epidemiology – Introduction, Measurement of Mortality & Morbidity, epidemiologic methods – Descriptive studies, Analytical studies, Intervention studies, Association & Causation, uses of epidemiology, Infectious diseases epidemiology, Disease transmission, Immunity, Immunising agents, Disease prevention & control, Disinfection, Investigation of an epidemic.
4. Genetics.
5. Screening of diseases- Concepts, uses, criteria for screening, sensitivity & specificity.
6. Epidemiology of communicable diseases.
 - a) Respiratory infections – Small Pox, Varicella, Measles, Rubella, Mumps, Influenza, Diphtheria, Pertussis, Tuberculosis.
 - b) Intestinal infections – Polio, Viral hepatitis, Cholera, Acute diarrhoeal diseases, Typhoid, food poisoning, Amoebiasis, Ascariasis, Ancylostomiasis, Taeniasis.
 - c) Arthropod – borne infections — Yellow fever, Japanese Encephalitis, Malaria, Filariasis.
 - d) Surface infections – Rabies, Trachoma, Tetanus, Leprosy, STD, AIDS
7. Epidemiology of non-communicable diseases- Cancer, Cardio-Vascular diseases, Diabetes, Obesity, Blindness, Accidents, Hypertension, Stroke, Rheumatic Heart Disease.

8. **Demography & Family Planning**—Demographic cycle, Population trends, Fertility related statistics, Health aspects of Family planning, contraceptive Methods and Delivery system, National Family Welfare Programme.
9. **Preventive Medicine in Obstetrics, Paediatrics & Geriatrics** – Antenatal, Intranatal, Postnatal care, Low birth weight, Infant feeding, Growth & Development. Growth chart, underfives clinic, National Health Policy, Indicators of MCH care, School Health Services, Behavioral problems, Geriatrics.
10. **Environment & Health - & Occupational Health**
Purification of Water & Water quality standards, Air, Ventilation, lighting, Noise, ‘Radiation, Air temperature & humidity, Housing solid wastes disposal & control, Excreta disposal, water carriage system, Modern sewage treatment Entomology – Mosquito, Housefly, Lice, itchmite, cyclops, rat flea, Rodents, insecticides. Hazards, diseases, pre-placement examination Measures for General health, protection of workers, prevention of occupational diseases, legislation.
11. **Basic Medical statistics-**
Census, Vital events, legislation, SRs, notification of Diseases, Measures of dispersion & Centring, Sampling, Tests of significance, correlation & regression.
12. **Health Education and communication** — Objectives, Principles, Aids, Practice of Health Education , Planning and evaluation.
13. **Health Planning – Management – International Health Organisations Planning cycle, management methods & techniques, National Health policy, Health planning in India, Five Year Plans, Health system in India – at Centre, State and District levels, Panchayat Raj, Rural Development schemes.**
14. **Health Care of the Community – Health systems and National Health Programmes. Levels of Health Care, Health for all, Primary Health Care, health caredelivery, health problems, health care services and systems. Voluntary health agencies, National Health Programmes.**

PRACTICALS:-

1. Insecticides -10 models.
2. Universal immunization programme -10 models
3. Communicable diseases -10 models
4. Insect borne diseases -10 models
5. Microscopic slides -10 models
6. Environment and Sanitation -10 models
7. Statistical charts -10 models
8. Field visits.
 - a) Rural health centres
 - b) Sewage disposal plant.
 - c) Water filtration plant
 - d) Nature Cure Hospitals.
 - e) Yoga Institutes. Etc.,

TEXT BOOKS:-

1. Text book of preventive and social medicine -by J.E.Park & K.Park
2. Text book of preventive and social medicine -by B.K.Mahajan &M.C.Gupta.

REFERENCE BOOKS:-

1. Preventive medicine -by Dr.Gosh
2. Preventive medicine -by Dr.Yaspal, Bedi.

REFERENCE PAPERS:-

World health organization programmes papers.

National health programmes papers.

Voluntary health programmes papers.

Red Cross programmes papers.

UNICEF programmes papers.

SOCIAL AND PREVENTIE MEDICINE

SCHEME OF EXAMINATION:-

Theory one paper	- 80 marks
Duration of examination	- 3 hours
Viva Marks	- 50 marks
Practicals Marks	- 50 marks
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS:-

Record	- 10 marks
Spotters	- 10 marks
Nutrition, epidemiology Statistics problems (any 2)	- 10 marks
Clinico-Social case study	- 20 marks
Total	<hr/> - 50 marks <hr/>

PATHOLOGY

GENERAL PATHOLOGY:-

1. Study of the Normal Cell:-

Plasma membrane, Cytoplasm and its organelles, Nucleus.

2. Cellular Adaptation:-

Introduction of Endoplasmic reticulum, Sequestration of focal injury –
Autophagy, Hypertrophy, Atrophy, Hyperplasia, metaplasia,
Dysplasia, hypoplasia, Aplasia and Agenesis.

3. Cell Injury:-

Causes of reversible, irreversible cell injury

Pathogenesis of cell injury and death

(Degenerations).

Hydropic change (Vacuolar degeneration).

Fatty change.

Lipoid degeneration.

Myxomatous and Mucoïd degeneration

Fibrinoid degeneration.

Stromal infiltration or fatty in growth.

Glycogen infiltration.

Amyloid infiltration (Amyloidosis)

4. Inflammation:-

Definition, Cardinal signs, clinical manifestation – Haemodynamic changes.

Permeability changes, white cell events, chemical mediators of inflammatory response. Factors that modify inflammatory response. Morphological patterns of inflammation:-

Based on duration

Based on character of exudate

Based on causative agent

Based on location.

5. Repair

Parenchymal regeneration – labile cells,

Stable cells, permanent cells.

Repair by connective tissue – Primary union, secondary union.

Factors modifying inflammatory – reparative response.

6. Necrosis:-

7. Gangrene:-

Definition, types of gangrene, clinical signs and symptoms of each type.

8. Circulatory Disturbances: -

Arterial and capillary hyperaemia

Venous congestion

Ischaemia, Infarction.

Haemorrhage

Oedema

Shock

Embolism

Thrombosis

9. Neoplasia:-

Definition, Tumour-host interaction – effects of tumour on host and host on tumour.

Predisposition to Neoplasia, Carcinogens.

a. Simple – Tumours of mesenchymal origin

b. Mixed Tumours of epithelial origin

c. Compound

Differences between benign and malignant tumours

Spread of Malignant tumours.

Diagnosis and staging of cancer

Histological

Cytological

TNM Staging.

10. Vitamin deficiency diseases:-

Vitamin – A, D, E and K

Vitamin - B1, B2, B3, B6 and B12

Vitamin - C

Detailed knowledge desirable.

11. Infectious diseases.

12. Immunology

13. Environmental Pathology.

14. Diseases of Childhood and Infancy.

SYSTEMIC PATHOLOGY:-

Only important diseases in each system will be dealt with at the undergraduate level and stress is given more on clinical aspects.

i) **Cardiovascular system:-**

Congenital heart diseases, Rheumatic fever, valvular lesions of the heart, Bacterial Endocarditis, Hypertension, Ischaemic heart disease, congestive Cardiac failure, Atherosclerosis, Aneurysm, Varicose veins, peripheral vascular disease.

ii) **Renal System:-**

Congenital anomalies, acute glomerulonephritis, Nephrotic Syndrome, chronic nephritis/renal failure, pyelonephritis, Haematuria, Nephrolithiasis (Stones), prostatic diseases. Renal function tests.

iii) **Respiratory System:-**

Upper respiratory tract allergies & infections, Allergic bronchitis and Bronchial Asthma. Bronchiectasis, Pneumonias, Pleural effusion, lung abscess, Atelectasis, Emphysema, Bronchogenic Carcinoma. Respiratory function tests.

iv) **Genital system:-**

- a) Male genital system
- b) Female genital system
- c) Breast

v) **Gastro Intestinal Tract and Head and Neck :-**

Salivary Gland diseases (Tumors, inflammatory conditions), Aphthous ulcers, reflex oesophagitis, obstructive diseases of oesophagus. Gastritis, peptic ulcer, Carcinoma stomach, Acute and chronic pancreatitis, pseudopancreatic Cyst, Crohn's disease, tuberculosis of ileocaecal junction, Appendicitis, Bacillary and Amoebic dysentery, Haemorrhoids, Fissure-in-ano, Fistula, Carcinoma rectum, Ulcerative colitis. Acute cholecystitis, gall stones. Hepatitis, Cirrhosis of liver, Jaundice, Ascites, Haematemesis and malaena.

vi) **Blood-Anaemias, Leukaemia & Lymph nodes & Spleen:-**

vii) **Bones and Locomotor System:-**

Osteomyelitis, Osteoma, Osteogenic sarcoma Rheumatoid arthritis, Osteoarthritis, cervical and lumbar spondylosis, prolapsed intervertebral disc, ASpondylitis, Potts spine.

viii) **Endocrine System:-**

Thyroid – Hypothyroidism, Hyperthyroidism. Parathyroid, Pancreas – Diabetes Mellitus, Pituitary, Adrenal glands – Addisons' disease, Cushing's Syndrome.

ix) **Central Nervous System:-**

Cerebro-vascular accidents – Hemiplegia, paraplegia, Peripheral neuritis, demyelinating disorders, Dorsal column lesions subacute combined degeneration. Brain tumours (Intracranial space occupying lesions) Meningitis, Parkinsonism, Epilepsy.

x) **Special Senses:-**

Eye - Conjunctivitis, Dacryocystitis cataract, corneal ulcers, Iridocyclitis
Glaucoma, retinal detachments, optic nerve atrophy.

Ear - External otitis, Acute suppurative otitis media Chronic suppurative otitis media, Otosclerosis Nerve deafness, Hearing tests.

Practicals:-

1. Urine examination –Physical, chemical & Microscopic
2. Blood – Estimation of Hb Sahli's method — TC, DC —RBC Count
3. Demonstration of Pathological specimen.
4. Demonstration of Histo Pathological slides.
5. ESR, PCV Bleeding Time, Coagulation Time.
6. Blood groups.
7. Introduction to cytology.

TEXT BOOKS:-

1. Robbins Pathological basis of diseases - by Cotran, Kumar, Robbins.
2. Text book of pathology - by Harsh Mohan
3. Text book of pathology - by N.C.Oay.

REFERENCE BOOKS:-

1. Text book of pathology - by Anderson
2. Clinical diagnosis & Management - by Todi&Sunford
3. Systemic Pathology. - by Symmers
4. Oxford Text book of Pathology -

PATHOLOGY

SCHEME OF EXAMINATION:-

Theory One paper	: 80 Marks
Duration of examination	: 3 hours
Viva Marks	: 50 marks
Practicals Marks	: 50 marks
Internal Assessment (Theory)	: 20 marks

BREAKUP OF PRACTICAL MARKS:-

Record	: 10 marks
2 Specimens	: 10 (5 x2) marks
Spotters	: 5 (5x1) marks
Urine	: 10 marks.
Differential count	: 10 marks
Haemoglobin/Total count	: 5 marks

MANIPULATIVE THERAPEUTICS

PAPER-I

1. Introduction & History of massage.
2. Rules, Regulations & Characteristics of masseure
3. Structures especially concerned in massage and parts of the body to be specially studied for the purpose are as follows:-
 - a. Skin
 - b. Muscular System.
 - c. Heart and circulation
 - d. Nervous System.
 - e. Skeletal System including joints.
4. Effects of the pressure of hands and lubricants on the following system:-
 - a. Skin
 - b. Muscular system:
Nutrition or development,
Excitation of 'M' contraction of 'M'
Increase of muscular electro
Excitability, removal of the fatigue from the muscle.
 - c. On the ligaments and skeletal system
 - d. On the circulatory system
 - e. On the nervous system
 - f. On respiration – increase of respiratory activity, increase of tissue respiration.
 - g. On G.I.T. – Improvement in appetite improvement in secretion of digestive fluids Absorption – an improvement in Peristalsis
 - h. Excretory system.
5. Getting crisis through Massage (side effects and benefits).
6. Basic therapeutic massage techniques, indications and contra-indications of massage while applying to the patients.
7. Massage and its effects:-

- a. Nutrition
 - b. Haematogenesis
 - c. Phagocytosis
 - d. Increase in the number of blood corpuscles.
 - e. Absorption of increased inflammatory exudate, change in the weight of the person, obese or emaciated.
- Detailed description of all above methods and etc.,
Paschatkarma : Patyam, Samsarjanakarma.

8. i. Different Massage manipulations, classification and their detailed explanation, uses and contra-indications.

- i. Manipulative treatments in stress management.
- ii. Shiatsu in manipulative therapy.
- iii. Manipulations and life extension.

9. Movements of Joints :-

- i. Flexion.
- ii. Extension.
- iii. Abduction.
- iv. Adduction.
- v. Supination
- vi. Circumduction.
- vii. Deviations – Medial and lateral.
- viii. Opposition.

10. Massaging in local areas under special circumstances:

- a. Massage to Abdomen.
 - i. Massage to Liver.
 - ii. Massage to Stomach.
- b. Massage to heart.
- c. Massage to head.
- d. Massage to spine.
- e. Special types of massages in different diseases.

11. Massage to women.

12. Massage to infants and children.

13. Massage for prevention of diseases and maintenance of Natural beauty.

14. PANCHAKARMA VIGNANA :-

Trividha Karmas:-

- A. Poorva Karma.
- B. Pradhana Karma.
- C. Paschat Karma.

Poorvakarma : Importance of Poorvakarma,
Sneha, Swedhana and their types.

Pradhana Karma : 5 types of treatment –
Panchakarma, Vamana, Virechana
Anuvasabasti, Nasyakarma,
Rakta Mokshanavidhi
types and methods of Rakta
Mokshanam (Blood letting)
Dhumapanavidhi.

Detailed description of all above methods and etc.,

Paschatkarma : Patyam, Samsarjanakarma.

PAPER-II

ACUPUNCTURE

1. Definition, concepts of Acupuncture / Anatomy of Acupuncture.
2. Traditional and modern theories of Acupuncture.
3. Materials and methods of acupuncture.
4. Principles of acupuncture with modern views.
5. Rules for the selection of acupuncture points.
6. Contra-indications and complications of acupuncture.
7. Concepts of meridians.
 - a. Lung Meridian (LV)
 - b. Large intestine Meridian (L1)

- c. Spleen Meridian (SP)
 - d. Stomach Meridian (ST)
 - e. Heart Meridian (H)
 - f. Small intestine Meridian (SI)
 - g. Urinary bladder Meridian (UB)
 - h. Kidney Meridian (K)
 - i. Triple Warmer Meridian (TW)
 - j. Gall bladder Meridian (GB)
 - k. Liver Meridian (Liv)
 - l. Governing vessel Meridian (GV)
 - m. Conceptional vessel Meridian (CV)
 - n. Eight extra Meridians.
8. The extra ordinary points.
 9. Diagnostic methods (both acupuncture and modern)
 10. Auricular therapy and scalp acupuncture.
 11. Moxibustion
 12. Stimulation in acupuncture.
 13. Acupuncture therapeutics.
 14. Acupuncture anesthesia.
 15. Acupuncture/pressure in acute disorders and emergency.

Reflexology & Zone Therapy:-

What is reflexology, history& development.

How does reflexology work.

Body& its reflex zones.

Applications, indications & contra-indications.

Preventive effects of reflexology.

Acupressure:-

What is acupressure.

Its origin & Development

Physiological effects of acupressure.

Therapeutic uses of acupressure.

Chiropractice:-

Origin & aims of Chiropractice

X-ray technique & chiropractice

Importance of spine in chiropractice

Physiological effects of chiropractice.

Spinal manipulative therapy.

Chiropractice examination

Treatments in various diseases.

Osteopathy:-

Definition & the basic principles of Osteopathy.

Relation of Osteopathy to musculo-skeletal system.

Practicals:-

1. Demonstration of needling techniques and electro stimulation, moxi buston
2. Student should give treatment for at least 50 patients in manipulative therapeutics during the practicals.
3. 35 Demonstration classes in acupuncture
4. 10 demonstrations in Panchakarma
5. Each student should do at least 50 cases in reflexology, acupressure, osteopathy and chiropractice.

TEXT BOOKS:-

1. Massage Book - by George Downing.
2. Massage - by Constant Young
3. Massage therapy - by Dr.J.H.Kellogg.
4. The complete book of Massage - by Clare Maxwell Hudson.
5. Step by step massage - by Caroll Mc.Gilvery and Gini Reed.
6. The book of massage:The complete step-by-step Guide to eastern and western Techniques and Anthony Porta. - by Luinda Lidellwith Sarathomas, Carola BeresFord Cooke
7. Massage for common ailments - by Penny Rich.
8. Baby Massage:the magic of loving touch - by Auckett, Anelia. D.
9. Natural healing from head to toe Herman. - by Aihara, Cornellia &Aihara,
10. Manual of Osteopathic practice - by Alan Stoddard.
11. Hand book of Zone therapy (cures for common ailments) M.D. - by William H, Fitz Gerald, M.D.and Edwin F. Bowers,
12. Alternative chiropractice - by Susan Mocre.
13. Clinical practicals of acupuncture - by A.L. Agarwal.
14. Clinical acupuncture - by Dr.Anton Jayasurya.
15. Principles and practice of acupuncture - by Dr.J.K.Patel.
16. Health in your hands - by Devendra Vora.

REFERENCE BOOKS:-

1. The Panchakarma treatment of Ayurveda - by T.L. Devaraj
2. Chirotherapy : A Text on Joint Movements - by Hesse, P.De.
3. Acupressure Cure for common diseases - by Dr. Keith Kenyon, M.D.
4. Massage therapy: The Holistic way to physical and Mental Health - by Jackson, Richard.
5. Book of Massage and Aromatherapy Achieving complete relaxation and well-being with massage and essential oils - by Facroix, Nitya & Seager, Sharon.
6. Brain massage - by Revitalize mind body by Howell, Kelly

MANIPULATIVE THERAPEUTICS

SCHEME OF EXAMINATION:-

Theory two papers of each	- 80 marks
Duration of paper	-3 hours
Viva Marks	-50 marks
Practicals Marks	- 50 marks
Internal Assessment (Theory)	- 40 marks

BREAKUP OF PRACTICAL MARKS:-

Record	- 10 marks
Practical – I (Practical Massage)	- 15 marks
Practical – II (Acupuncture)	- 15 marks
Practical – III (Identification of various reflex and acupressure zones)	- 10 marks
Total	<hr/> - 50 marks <hr/>

DIAGNOSTIC METHODS

PAPER – I:-

CLINICAL DIAGNOSIS AND FIRST AID:-

1. Approach to a patient.
2. History taking and case sheet writing.
 - a. Personal details of the patient.
 - b. Complaints.
 - c. History of present illness.
 - d. History of past illness.
 - e. Family history.
 - f. Personal history.
 - g. Gynaecological and Obstetric history.
3. Examination of the patient:
 - a. VITAL DATA – Pulse, blood pressure, temperature and respiratory rate.
 - b. Importance of weight, height, abdominal girth in relevant case
 - c. General examination
 - d. Systemic examination of the patient.
 - i. Abdomen and genitalia.
 - ii. Cardiovascular system
 - iii. Respiratory system.
 - iv. Renal system.
 - v. Spine.
 - vi. Central Nervous system.
 - vii. Locomotor system.
 - viii. Gynaecological examination.
 - ix. Examination of ear, nose, and throat
4. Provisional Diagnosis.
5. Routine Laboratory investigations of the case.

1. Stool.
2. Urine
3. Blood – Complete blood picture.

E.S.R.

Blood Sugar.

S.Urea

S.Uric acid.

Creatinine.

Cholesterol and lipid profile

Plain – x- ray chest.

6. Special investigations:-

i (a) Plain x-ray : K.U.B. lumbar and cervical spine, paranasal sinuses, joints, skull

(b) Contrast

1. Barium swallow

Barium meal series

Barium enema.

2. Cholecystography

3. Pyelography.

4. Angiograms.

5. Bronchogram.

ii. Electrocardiogram (ECG) Echocardiography, coronary angiography.

iii. Electro encephalogram (EEG)

iv. Bio-Chemical:-

Liver function tests.

Creatinine clearance test.

VMA excretion in urine.

SGOT and SGPT

CPK

LDH

v. Diagnostic paracentesis.

vi. Diagnostic thoracentesis

vii. Ultrasonic and computerised Tomographic scan.

- viii. Lumbar puncture – CSF analysis
- ix. Radioactive iodine uptake T3, T4, estimations.
- x. Skin tests.
- xi. Endocystic procedures.
- xii. Clinical and Final Diagnosis.

FIRST AID:-

1. The General Principles of First Aid.
2. Wounds.
3. Shock. The classification and treatment of shock.
4. The control of hemorrhage
5. Snake bite and scorpion sting.
6. Dog bite.
7. Nose bleed.
8. Burns and scalds.
9. Heat exhaustion and heat stroke.
10. Frostbite.
11. Fractures.
12. Dislocations.
13. Sprains and strains.
14. Poisoning
15. Fainting.
16. Epileptic fits.
17. Convulsion in children.
18. Artificial respiration
19. Aspiration of a foreign body.
20. Unconsciousness – causes and general principles of treatment.
21. Bandages: different types of bandaging with practical.

PAPER – II:- SCIENCE OF FACIAL EXPRESSION

1. Introduction to the science of facial expression.
 - a. Historical highlights
 - b. Definition and scope of the science of facial expression.

2. Character of the Healthy body:-
 - a. Normal functions.
 - b. Normal figure.

3. Foreign matter theory:-
 - a. Definition of foreign matter.
 - b. The process of accumulation of foreign matter in the body.
 - c. Encumbrance.
 - d. Changes caused in the body due to the accumulation of foreign matter.
 - e. General pathology of foreign matter.

4. The nature: Origin and cure of diseases of children and their unity.

5. Bad habits support the accumulation of foreign matter in the body – tobacco, alcoholic drinks, coffee, tea, opium etc., Drug addictions. Pethidine, heroin, etc., suppression of diseases v/s elimination of morbid and diseased germs from the system.

6. Types of encumbrance – Front encumbrance, right-side encumbrance, front and right – side encumbrance, left side encumbrance and mixed or whole encumbrance, their description, general characters and possible diseases in the concerned encumbrance and their treatment.

7. Diseases of the internal organs and their treatment.

8. Process of elimination of foreign matter.
 - a. Importance of nature cure treatments.
 - b. The digestive process – natural dietetics.

9. Methods to be followed to increase the vitality of the body.

IRIDIAGNOSIS:-

1. Introduction of Iridology.
 - a. Definition of Iridology.
 - b. Historical high lights.
 - c. Comparison of other systems (Allopathy)

Homeopathy, Ayurveda, Unani (Etc.,)

Diagnostic Methods.

d. Anatomy of the Iris.

e. Theory in application.

f. The theory of healing crisis

g. A uniform division and classification of disease.

2. Instructions in methods of application:-

i) A. Technique in Iris reading

B. The normal and abnormal iris: Colour of the iris.

C. The vibratory theory.

ii) Study of density of the iris.

iii) Key to Iridology

a. Iris Charts brought up to date.

b. Zone areas.

c. Sectoral division.

3. Comparison of fermentation to inflammation.

4. Interpretations of Iris manifestations.

a. Types of inflammation.

b. Inherent Lesions and weaknesses.

c. Acidity and catarrh

d. Toxic settlements.

e. Nerve rings.

f. The lymphatic rosary.

g. Injuries and operations.

h. Itch or psora spots in the iris- the scurf rim.

i. The radi-isolaris.

j. Tumours.

k. The sodium ring.

l. Anaemia in the extremities and in the brain.

m. Drugs and chemicals appearance in the iris and their poisonous effects
in

the body-Arsenic, bismuth, Bromides, Coal Tar products, Ergot, Glycerin

Iodine, Iron, Lead, Mercury, Opium, Phosphorus, Quinine, Salicylic acid,
sodium, strychnine, Sulphur, Turpentine, Vaccines etc.,
n. The iris reveals the cause of disease.

5. Case histories according to iridology.

6. Advance research in iridology.

a. Reflex areas and remote symptoms.

b. Stomach and intestinal disorders- the principal causes, the principal disorders-remedial measures.

PRACTICALS:-

Clinical classes and demonstrations in the hospital throughout 2nd B.N.Y.S. Degree course. Case studies 25 with record. Demonstration of equipment.

TEXT BOOKS:-

1. Clinical methods - by Hutchinson.
2. Clinical methods - by Chamberlin.
3. First Aid - by Red Cross Society.
4. First Aid - by St.John Ambulance Association
5. Science of Facial expression - by Louis Kuhne.
6. The new science of healing - by Louis Kuhne
7. The Science & Practice of Iridology - by Bernard Jensen.
8. Iridiagnosis and other Diagnostic methods - by Henry Lindlahr.

REFERENCE BOOKS:-

1. Iridology: A guide to iris analysis and preventive health care - by Adam J.Jackson.
2. Iridology: How to discover your own pattern of health and well being through the eye - by Dorothy Hall.
3. Iridology: A complete guide to diagnosing through the Iris and all related forms of treatment - by Davidson, Farida
4. Iridology: Alternative health series - by Adam J.Jackson
5. Vision of health: Understanding Iridology - by Jensen, Bernard & Booden, Donald.
6. Eyes talk: Through Iridology better health - by Vriend, John.

DIAGNOSTIC METHODS

SCHEME OF EXAMINATION:-

Theory of two papers each of	- 80 marks
Duration of each paper	- 3 hours
Viva Marks	- 50 marks
Practical Marks	- 50 marks
Internal Assessment (Theory)	- 40 marks

BREAKUP OF PRACTICAL MARKS:-

Record	- 10 marks
Practical –I (Case study –Diagnosis of the Disease by examining the Iris)	- 20 marks.
Practical –II (Case study _ Diagnosis of the encumberance by examining the patient)	- 20 marks
Total	- 50 marks

YOGA

PAPER-I:-

1. Introduction to six systems (shad-dharsanas) of Indian Philosophy.
2. Historical high lights of Yoga.
3. Yoga & its definition, purpose and relation to Philosophy of Yoga in relation to Naturopathy.
4. Yoga and cultural synthesis (pre-classical period)
Definition of culture and basis for religion – relation between culture, religion and Yoga in Indian thought – Vedic period, Upanishadic period, Basic tenets of Buddhism and Jainism, Advaita, Visishta advaita, Saivism, Vaishnavism, Christianity, Islam and Sufism.
5. Introduction to Yoga texts (classical period)
 - a) Yogopanishads.
 - b) Patanjali Yoga sutras
 - c) Siva sutras.
 - d) Gheranda samhita.
 - e) Hata Yoga pradipika.
6. Different philosophies of post classical yoga period.
 - a) Indian Philosophers:
Adi Shankara charya, Ramanujam, Maharshi Dayanada Saraswathi, Ramana Maharshi, Vemana Yogi, Ramakrishna Paramahamsa, Swami Vivekananda, Sri Aurobindo, Paramahamsa Yogananda, Jiddu Krishna Murthy, Acharya Rajneesh, Swami Kuvalayananda, Swami Shivananda
 - b) Western Philosophers:
Socrates, Plato, Aristotle.
7. Yogic sciences in relation to psychology and sociology.
8. Streams of Yoga.
 - a. Karma Yoga.

- b. Gnana Yoga.
 - c. Raja Yoga.
 - d. Bhakti Yoga.
 - e. Kundalini Yoga.
 - f. Tantra Yoga.
 - g. Hatha Yoga
9. Philosophy of Astanga Yoga in the light of Patanjali Yoga sutras.
Introduction to Patanjali Yoga sutras – salient features of each Pada.
- a. Samadhi Pada.
 - b. Sadhana Pada.
 - c. Vibudhi Pada.
 - d. Kaivalya Pada.

PAPER-II

1. The applied science of Astanga Yoga:

Yama	Pratyahera
Niyama	Dharana
Asanas	Dhyana
Pranayama	Samadhi.

2. Rules and regulations to be followed for practicing asanas.

Study and practice of asanas – with emphasis on Method – application –
Effects – Benefits – Indication – Contraindication.

Postural physiology: Anatomico – Physiological aspects of the Asanas on –
muscles – joints – blood circulation – nerve supply – reflexes – oxygen debt

3. Cultural asanas:- Surya namaskaras (sun salutations)

- | | |
|-------------------|-------------------------|
| i. Shavasana | v. Matyasana |
| ii. Sirshasana | vi. Halasana |
| iii. Viparitarini | vii. Bhujangasana |
| iv. Sarvangasana | viii. Ardha-Salabhasana |

- | | |
|---------------------------|------------------------|
| ix. Salabhasana | xxii. Utakatsana |
| x. Dhanurasana | xxiii. Garudasana |
| xi. Ardha-Matsyendrasana | xxiv. Virasana |
| xii. Purna Matsyendrasana | xxv. Kukkutasana |
| xiii. Pachimothasana | xxvi. Badda Padmasana |
| xiv. Chakrasana | xxvii. Kurmasana |
| xv. Mayurasana | xxviii. Gomukhasana |
| xvi. Vajrasana | xxix. Vakrasana |
| xvii. Supta-Vajrasana | xxx. Pavana Mukthasana |
| xviii. Yoga-Mudra | xxxii. Tulangulasana |
| xix. Trikonasana | xxxiii. Makarasana |
| xx. Padahastasana | |
| xxi. Simhasana | |

4. Pranayama –

- a) Rules and regulations to be followed for practicing various methods of breathing exercises and Pranayama
- b) Preparatory breathing exercises.
- c) Appropriate asanas to practice Pranayama
- d) Study & practice of Pranayama. With emphasis on – Method – application – effects – benefits – indications – contra indications.

5. Types of Pranayama:-

- i) Surya nadi
- ii) Chandra nadi
- iii) Anulom vilom
- iv) Kapalabhati
- v) Bhastrika
- vi) Sitkari
- vii) Sitali
- viii) Bhramari
- ix) Murcha
- x) Plavini

6. Physiological effects of Pranayama
7. Spiritual values of Pranayama
8. Prathyahara – Restraint of the senses
9. Dharana – Concentration
10. Dhyana – Meditation.
 - a) Raja Yoga meditation.
 - b) Sudarshana kriya
 - c) Sahaja Yoga (Soham)
 - d) Vipasana.
 - e) Omkara Meditation
 - f) Cyclical Meditation
 - g) Transcendental Meditation (TM)
11. Samadhi – Super Consciousness
12. Shad kriyas – six types of internal cleansing methods.
 - a) Rules and regulations to be followed for practicing the shadkriya.
 - b) Study and practice of the shad-kriyas with emphasis on hygiene method-application-effects-benefits-indication and contra-indication
 - i) Trataka ii) Nauli iii) Kapalabhati vi) Nethi v) Dhouti vi) Basti
 - e) Physiological effects of the shad-kriyas.
 - d) Spiritual values of the shad-kriyas.
 - e) Shad-kriyas and its importance in the cleaning of the internal parts of the body and its approach towards health.
13. Bandhas
14. Mudras
15. Dhristies
 - a) Rules and regulations to be followed for practicing the bandhas, mudras, dhristies.
 - b) Study and practice of the bandhas, mudras, dhristies with emphasis on – methods – application – effects – benefits – indications – contra-indications.
 - c) Physiological effects of the bandhas, mudras, dhristies.
 - d) Spiritual values of the bandhas, mudras, dhristies
16. Yoga and Homeostasis.
17. Nutrition - Based on Yoga concept of Trigunas.

PRACTICALS:-

1. a) Asanas. b) Pranayama c) Bandhas d) Dhristies. e) Mudras f) Shad-kriyas.
2. The students should have practice of regular Yoga practicals during the second B.N.Y.S. Degree course. At the end of second B.N.Y.S. Degree course, students should be in a position to practice and demonstrate yoga practicals independently.

TEXT BOOKS:-

1. Anatomy of Hatha Yoga - by H.David Coulter
2. Structural Yoga therapy - by Mukunda Stiles
3. Light on the Yoga Sutras of Patanjali - by B K S Iyengar
4. Cultural leaders of India
(Founders of philosophy) - by Publication
Division, Government of
India
5. Conception of Man edited - by S.Radhakrishna
and P.T.Raju
6. Yoga and Indian philosophy - by Karnel Warner
7. Eastern definitions - by Edward Rice.
8. Asanas - by Swami Kuvalyananda
9. Pranayama - by Swami Kuvalyananda
10. Glimpses of divine light - by S.K.Das
11. Hatha Yoga Pradipika - by Svamarama
12. Gheranda Samhita - edited by Swami Digambarji
& Dr.M.L.Gharote.
13. Siva Sutras (The Yoga of Supreme Identity). - by Jaidev Singh
14. The Yoga Sutras of Patanjali on concentration -
by Fernando Tola –Carmen
of mind Dragonet
15. The Upanishad, The Bhagavadgita,
The Dhammapada - by Juan Hasc
16. Hatha Yoga(The Hidden Language) - by Swami Sivananda Radha
17. Yoga – Key to life - by James Mc.Cartney.
18. Vedic Conception of Yoga Meditation - by Devendra Kapoor

19. Jainism - by Herbert Warren
 20. Dhammapada - by S.Radhakrishnan.
 21. Kriya Yoga - by Swami Satyananda
 Saraswathi –Bihar School of Yoga
 22. Kundalini & meditation - by Arjundas Malik

REFERENCE BOOKS:-

1. The Gospel of Buddha - by Paul Carus.
 2. The Gospel of Sri Ramakrishana - by Mahendranath Gupta.
 3. Bhagavadgeetha – As it is – - by A.C.Bhakti Vedanta
 SwamiPrabhupada
 4. Complete works of Swami Vivekananda -
 by Swami Vivekananda
 5. Complete works of Sri Aurobindo - by Sri Aurobindo
 6. Asparasa Yoga - by Colin A.Cole
 7. The serpent power - by Sir John Woodroff
 8. The art of Tantra - by Philip Rawson
 9. Seminar on Yoga, Science and Man - by Central Council for Research
 inYoga & Naturopathy
 10. Philosophy of Goraknath with Goraksha -
 by Akshayer Kumar
 BanerjeeVyakarana Sangraha
 11. Asanas, Pranayama, Mudras, Bandhas- by Swami Satyananda Saraswathi-
 Bihar School of Yoga.
 12. Patanjali Yoga Sutras - by Bengali Baba.
 13. An autobiography of a Yogi - by Paramahansa Yogananda
 14. Verses of Vemana - by C.P.Brown
 15. Encyclopaedia of Indian Physical Culture-
 edited by D.C.Mujumdar.
 16. Encyclopaedia of Health & Physical
 Culture - edited by Bernard Macfedden.
 17. Sixty Upanishad of the veda
 (The Upanishads concerned only Yoga) -
 by V.M.Bedeka & G.M.Palsule.
 18. Hatha Yoga Pradipika - by O.Y.Doraswamayya.
 19. Vivekachudamani - by Adi Shankaracharya.

YOGA

SCHEME OF EXAMINATION:-

Theory two papers of each	- 80 Marks.
Duration of each paper	- 3 hours
VivaMarks	- 50 marks
Practical Marks	- 50 marks
Internal Assessment (Theory)	- 40 marks

BREAKUP OF PRACTICAL MARKS:-

Record	- 10 marks
Practical – I (Asanas)	- 10 marks
Practical – II (Bandhas, Mudras, Dhristies, Pranayama)	- 10 marks
Practical - III (Kriyas)	- 20 marks

Total: -----
50 marks

THIRD/FINAL B.N.Y.S. DEGREE COURSE
NUMBER OF HOURS ALLOTTED TO TEACH EACH SUBJECT

1. CHROMOTHERAPY

Theory	- 130 hours
Practicals	- 50 hours
Tutorials, Demonstrations & Seminars.	- 20 hours

	200 hours

2. FASTING THERAPY

Theory	- 110 hours
Practicals	- 40 hours
Tutorials, Demonstrations & Seminars.	- 10 hours

	160 hours

3. MAGNETOTHERAPY

Theory	- 100 hours
Practicals	- 40 hours
Tutorials, Demonstrations & Seminars	- 10 hours

	150 hours

4. PHARMACOLOGY, MINOR SURGERY & EMERGENCY MEDICINE

Theory	- 100 hours
Practicals	- 40 hours
Tutorials, Demonstrations & Seminars	- 10 hours

	150 hours

**5. HOSPITAL MANAGEMENT & RESEARCH
METHODOLOGY**

Theory	- 100 hours
Practicals	- 25 hours
Tutorials, Demonstrations & Seminars	- 25 hours

	150 hours

6. PHYSIOTHERAPY

Theory	- 150 hours
Practicals	- 75 hours
Tutorials, Demonstrations & Seminars	- 25 hours

	250 hours

7. YOGA THERAPY

Theory	- 150 hours
Practicals	- 75 hours
Tutorials, Demohstrations & Seminars	- 25 hours

	250 hours

8. NUTRITION, DIETETICS & HERBOLOGY

Theory	- 275 hours
Practicals	- 50 hours
Tutorials, Demonstrations & Seminars	- 25 hours

	350 hours

9. HYDROTHERAPY

Theory	- 200 hours
Practicals	- 75 hours
Tutorials, Demonstrations & Seminars	- 25 hours

	300 hours

10. OBSTETRICS & GYNAECOLOGY

Theory	- 200 hours
Practicals	- 25 hours
Tutorials, Demonstrations & Seminars	- 25 hour

	250 hours

SCHEME OF EXAMINATIONS
FINAL(THIRD) B.N.Y.S. DEGREE COURSE

Sl. No	Subject	Theory				Viva	Practical	Total
		Paper-1	Paper-2	Internal Assessment	Total			
1	Chromotherapy	80	-	20	100	50	50	200
2	Fasting therapy	80	-	20	100	50	50	200
3	Magnetotherapy	80	-	20	100	50	50	200
4	Pharmacology, Minor Surgery & Emergency Medicine	80	-	20	100	50	50	200
5	Hospital Management &Research Methodology	80	-	20	100	50	50	200
6	Physiotherapy	80	-	20	100	50	50	200
7	Yoga therapy	80	-	20	100	50	50	200
8	Nutrition, Dietetics &Herbology	80	80	40	200	50	50	300
9	Hydrotherapy	80	80	40	200	50	50	300
10	Obstetrics & Gynaecology	80	80	40	200	50	50	300
GRAND TOTAL								2300

Distribution of Marks Per Paper:

1. For subjects having one question paper with Part-A and Part-B:-

Part A

1 Essay Question (1 x 10) = 10
5 Short Questions (5 x 5) = 25
5 Brief Questions (5 x 1) = 05

Total = 40

Part B

1 Essay Question (1 x 10) = 10
5 Short Questions (5 x 5) = 25
5 Brief Questions (5 x 1) = 05

Total = 40

2. For the subjects having two papers:-

2 Essay questions (2 X 10 marks) = 20 marks
10 short questions (10 X 5 marks) = 50 marks
5 brief questions (5 X 2 marks) = 10 marks

Total = 80 marks

FINAL B.N.Y.S. DEGREE COURSE

SCHEME OF PRACTICAL EXAMINATIONS

1. CHROMOTHERAPY

Breakup of Practical marks:-	-50 marks
Record	-10 marks
Practical –I	-20 marks
(Case study – Chromo diagnosis of the patient and prescription of Chromotherapeutic treatments)	
Practical - II	-20 marks
(Identification, application benefits & therapeutic uses of various colours and equipment used in Chromotherapy)	

Total: **50 marks**

2. FASTING THERAPY

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical-I	-20 marks
(Case study – Diagnosis of the disease and prescription of the fasting)	
Practical-II	-20 marks
(By examining the fasting patient should asses (Diagnosis) the stage of fasting)	

Total: **-50 marks**

3. MAGNETOTHERAPY

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical-I	-20 marks
(Case study – Diagnosis of the disease and prescription of the Magnetotherapy treatment)	
Practical-II	-20 marks
(Identification and application of various magnets and magnetic equipment used in magnetotherapy)	
Total:	50 marks

4. PHARMACOLOGY, MINOR SURGERY & EMERGENCY MEDICINE

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical-I	-20 marks
Practical-II	-20 marks
Total:	50 marks

5. HOSPITAL MANAGEMENT & RESEARCH METHODOLOGY

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical-I (HM)	-20 marks
Practical-II (RM)	-20 marks
Total:	50 marks

6. PHYSIOTHERAPY

Breakup of practical marks:- -50 marks

Record -10 marks

Practical-I -20 marks

(Case study – Diagnosis of the disease and prescription of the Physiotherapy treatments)

Practical-II -20 marks

(Identification, application, benefits and therapeutic uses of various Physiotherapy equipment)

Total: -----
50 marks

7. YOGA THERAPY

Breakup of practical marks:- -50 marks

Record -10 marks

Practical-I -20 marks

(Case study – Yogic Diagnosis of the disease and prescription of the specific Yogic exercises)

Practical-II -20 marks

(Case study – Yogic Diagnosis of the Disease – prescription of the Yogic Kriyas)

Total: -----
50 marks

8. NUTRITION, DIETETICS & HERBOLOGY

Breakup of practical marks:- -50 marks

Record -10 marks

Practical – I -20 marks

(Case study – Diagnosis of the disease nutritional disorders and prescription of specific diet).

Practical – II -20 marks

(Identification of food ingredients its nutritive values and therapeutic uses)

Total: -----
50 marks

9. HYDROTHERAPY

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical – I (Case study – Diagnosis of the patients and prescription of the Hydro-therapeutic treatments)	-20 marks
Practical – II (Identification, application benefits and therapeutic uses of the various, hydrotherapy equipments and treatments)	-20 marks
Total:	50 marks

10. OBSTETRICS & GYNAECOLOGY

Breakup of practical marks:-	-50 marks
Record	-10 marks
Practical – I (Long case)	-20 marks
Practical – II (Short case)	-10 marks
Practical – III (Identification of instruments and equipment)	-10 marks
Total:	50 marks

CHROMOTHERAPY

1. Introduction:-
 - a. Historical highlights.
 - b. Harmonic laws of the Universe.
 - c. Solar family.
2. Theory of light and force.
3. Chromophilosophy - Refraction, Reflection, Absorption.
4. The source of light – the sun forming sources – the solar atmosphere – sun power – how the colour effects are produced – influence of sun light on skin, muscles, digestive organs, bones.
5. Chromo-Chemistry – Character of spectrum analysis materials discovered by the spectroscope – the spectrum – spectrum of grey and neutral colour elements – spectra of elements of positive colours – chromatic repulsion and attraction.
6. Chromo-diagnosis and Chromo-hygiene.
7. Chromo-therapeutics – the healing powers of colour. Healing power of red, yellow, orange, blue and green and violet – sun stroke – action of sun light on Micro-organisms.
8. Practical instruments for colour Healing – Blue, Green, Violet, Red, Pink and Yellow, Orange glasses – the solar thermolumen- the electro thermolumen – Chromodisc-the chromolens –chrome light, erradiator.
9. Directions to be followed during treatment with light.
10. Healing by means of substances charged with different coloured light – method of solarization of water, oils and food substances, etc.,
11. Chromotherapy prescriptions for different diseases.
12. Chromo-mentalism.

PRACTICALS:- Students should have 45 demonstration classes in various chromotherapeutic devices and their clinical applications.

- 1). Case studies (25) with record.
- 2). 10 cases with bio-chemical reports.
- 3). Demonstration of colour glasses, bottles.
- 4). Demonstration of instruments & equipment.

TEXT BOOKS:-

1. The Principles of light and colour -by Dr.E.D.Babbit.
2. Human Culture & Cure in five parts -by Dr. .E.D.Babbit
3. Parts Colour therapy -by R.B.Amber.
4. Healing through colour -by Theo-Gimbel

REFERENCE BOOKS:-

1. The power of the rays -by S.G.J.Ouseley
2. Colour meditations -by S.G.J.Ouseley
3. Colour & Healing -by Gladys Mayer.
4. Colour healing (Chromotherapy) -by Health Research Foundation (U.S.A.)
5. Practical colour Magic. -by Ray and Buckland.

CHROMOTHERAPY

SCHEME OF EXAMINATION:-

Theory one paper	- 80 marks
Duration of paper	- 3 hours
Viva marks	- 50 marks
Practicals Marks	- 50 marks
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS:-

Record	-10 marks
Practical –I (Case study –Chromo Diagnosis of the patient and Prescription of Chromotherapeutic treatments)	- 20marks.
Practical –II (Identification, application benefits & Therapeutic uses of various colours and Equipment’s used in Chromotherapy)	-20 marks
Total:	<hr/> - 50 marks <hr/>

FASTING THERAPY

I. Introduction.

1. Theory of fasting in animals.
2. History of fasting.
 - a. Fasting in Ancient India.
 - b. History of fasting in India.
 - c. History of fasting in foreign countries.
 - d. Historical high lights of fasting.
3. Science and fasting.

II. The philosophy of fasting.

1. The philosophy of sane fasting.
2. Philosophy of therapeutic fasting.
 - a. Life its existence in connection with health and disease.
 - b. Nature of disease.
 - c. Theory and Physiological facts of fasting.
 - d. Objections commonly raised in fasting therapy.
 - e. Pros and cons of fasting.

III. Physiology of fasting and starvation.

1. General Physiology.
2. Source and metabolism of carbohydrates, fats and proteins during fasting and starvation.
3. Difference between fasting and starvation.
4. Difference between hunger and appetite.

IV. Rules and regulations of sane fasting and therapeutic fasting.

V. Definition and classification of fasting.

1. Definition of fasting in different aspects.
2. General classification of fasting.
3. Methods and types of therapeutic fasting.

VI. Hygienic Auxilliaris of fasting.

1. Air and breathing.
2. Enema
3. Bathing
4. Clothing
5. Water drinking
6. Exercise
7. Mental influence.

VII. Study of patients during and after fasting.

1. Crises during fasting and their management
2. Physiological effects of fasting.
3. Psychological aspects.
4. Study of the tongue, the breath, the temperature and pulse etc.,
5. The loss and the gain of weight.
6. How and when to break the fast.
7. Diet after the fast.

VIII. Indications and contra-indications of fasting.

IX. Therapeutic aspects of the fasting.

1. Fasting in acute diseases.
2. Fasting in chronic diseases.
3. Role of fasting in various diseases.
4. Obesity and fasting.
 - a. Definition and assessment of obesity.
 - b. Epidemiology
 - c. Aetiology
 - d. Clinical features.
 - e. Treatment
5. Fasting for preservation of health and prevention of disease.

X. Results of fasting.

Practicals:- Study of 50 fasting cases.

Case study 25 with record

TEXT BOOKS:-

- | | |
|---------------------------------------|------------------------------|
| 1. Fasting for health and long life | -by Hereward Carrington |
| 2. The fasting cure and vital economy | -by K.Lakshmana Sharma. |
| 3. Fasting can save your life | -by Herbert M.Shelton. |
| 4. The effects of fasting | -by Donald Upton |
| 5. Fasting as a way of life | -by Allan Coll M.D. |
| 6. Fasting for renewal of life | -by Herbert M.Shelton |
| 7. Scientific Fasting | -by Hazzard, Linda Burfield. |

REFERENCE BOOKS:-

- | | |
|--|--------------------------------|
| 1. The Philosophy of fasting | -by Edward Eaul Purinton. |
| 2. Vitality, Fasting and Nutrition | -by Hereward Carrington. |
| 3. The fasting cure | -by Upton simelair. |
| 4. The fast way of health | -by Harold R.Brown. |
| 5. Fasting the master remedy | |
| 6. Fast for health | -by John Joseph Picker |
| 7. The biology of the human starvation | -by Keys, Ancel |
| 8. Fasting story No.1 | -by Health Research |
| 9. Fasting story No.2 | -by Health Research |
| 10. Rational Fasting | -by Ehret Arnold' |
| 11. Explaining fasting | -by Forster, Roger |
| 12. Hints on fasting well | -by Carrington, Hereward etc., |

FASTING THERAPY

SCHEME OF EXAMINATION:-

Theory one paper	-80 marks
Duration of paper	-3 hours
Viva marks	-50 marks
Practicals Marks	- 50 marks
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS:-

Record -10 marks

Practical –I -20marks.

(Case study - Diagnosis of the disease and Prescription of the fasting)

Practical –II -20marks

(By examining the fasting patient should assess (diagnosis) the stage of fasting)

Total :

- 50 marks

MAGNETOTHERAPY

1. Introduction:-
 - a. Definition of Magnetotherapy.
 - b. Historical highlights.
 - c. Use of magnets in Naturopathy.
2. Magnetism in the Universe:-

Earth a huge natural magnet.
Nature of Earth Magnetism.
Earth magnetic effects on the human beings.
3. Effects of Magnetism on living organisms:-
4. Bio-magnets – Biological experiments with magnets.
5. Medical influence of magnetic field.

Rheumatoid arthritis, hemiplegias, arthralgia, Neuralgias.
Stimulation of nervous system, endocrine glands, etc.,
Magnetotherapy symptomatic relief
Combined treatment i.e., Magnetotherapy, Hydrotherapy.
Massage, diet, Yoga and Results.
6. Magnets and their composition:-
 - a. Natural magnets – and artificial magnets.
 - b. Permanent magnets – classification of magnetic materials.
Power of magnets – various qualities of magnets – low, medium and high power magnets, and magnetic belts etc.,
 - c. Electro magnets – electro magnetic field on human behaviour
Electro magnets – for medical purpose – Electro magnetic treatment bed and hand magnetiser, foot magnetiser, vibrax electro massager and electro magnetic chair, etc., Non pulsating – Nachiketha clinical Electro Magnet.
7. Techniques of application of magnets – North and South pole local treatment and general treatment, technique of application of magnets in the treatment of various common diseases.

8. Magnetised water and magnetised oils – magnetised water in Nature – Influence of magnetic field on the properties of water, method of preparation of magnetised water, dosage and therapeutic effect of magnetised water – method of preparation of magnetised oils and their application and therapeutic effects.
9. Advantage of Magneto therapy:-Magneto therapy is a natural treatment – use of magnets as a preventive device.
10. Clinical reports from Indian and foreign Magneto therapists.
11. Magnetotherapy and Acupressure – Acupuncture points – certain clinical case reports – utilization of Acupuncture points in Magneto therapy.
12. Terminology – technical terms relating to magnets and magnetism.

PRACTICALS:-

Students should have 45 demonstration classes in various types of magnets, equipment and their clinical application.

1. Case studies (25) with record.
2. 10 cases with bio-chemical reports.

TEXT BOOKS:-

- | | |
|--------------------------------------|------------------------------|
| 1. Magnetotherapy | -by Dr.H.L.Bansal |
| 2. Magnetic cure for common diseases | -by Dr.R.S.Bansal H.L.Bansal |
| 3. The text book on Magnetotherapy | -by Dr.Nanubhai painter |
| 4. Magnetotherapy & Acupuncture | -by Dr. A.K.Mehata. |

REFERENCE BOOKS:-

- | | |
|---|---|
| 1. Electromagnetic treatment | -by Dr.H.L.Bansal. |
| 2. Magnetic and magnetic fields or healing by magnets | -by Dr. A.R.Davis of and Dr.A.K.Bhattacharya of Naihati, West Bengal. |

MAGNETOTHERAPY

SCHEME OF EXAMINATION: -

Theory one paper	-80 Marks.
Duration of paper	-3 hours.
Viva Marks	-50 Marks.
Practical Marks	-50 Marks.
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS: -

Record	-10 Marks
Practical – I (Case study – Diagnosis of the disease and prescription of the Magneto-therapy treatment)	-20 Marks
Practical – II (Identification and application of various magnets and magnetic equipment used in magnetotherapy)	-20 Marks
Total:	<hr/> - 50 Marks. <hr/>

PHARMACOLOGY, MINOR SURGERY & EMERGENCY MEDICINE

PHARMACOLOGY:

1. The Nature and Sources of drugs
2. Routes of drug administration
3. Absorption and bioavailability of a drug:
 - Factors affecting drug absorption & its bioavailability
4. Distribution of a drug in the body:
 - Plasma concentration
 - Drug storage
 - Placental transfer
5. Fate of the drug
6. Drug excretion
7. Drug receptors
8. Mechanism of action of a drug.
 - Types of drug action
9. Adverse reaction to drug
10. Drug Toxicity in Human beings:
 - Drug Intolerance
 - Haemopoietic toxicity
 - Hepatotoxicity
 - Nephrotoxicity
 - Abnormalities of taste & smell
 - Behavioral toxicity
 - Production of disease
 - Electrolyte disturbances
 - Endocrine disturbances
 - Skin toxicity
 - Carcinogenesis
 - Teratogenicity
 - Drug dependence

11. Treatment of acute drug poisoning
12. Factors modifying the effects of a drug
13. Role of Placebo
14. Drug Interactions

Brief description of the following drugs: their mode of action, dosage, adverse reaction, the method of tapering their dosage, including the adverse effects with the abrupt stoppage of their use:

15. Drugs acting on the C.N.S.: General sedatives, Hypnotics, Anticonvulsant drugs, Analgesics, Antipyretics & Non Steroidal Antiinflammatory drugs (NSAID).
16. Psychopharmacology: Anti-anxiety drugs-Meprobamate, Benzodiazepines, Chlormethiazole, Anti-depressant drugs-classification, actions, adverse reaction (Monoamine oxidase inhibitors, Tricyclic compounds, carbamazepine, Lithium), /drug induced psychiatric syndromes, Psychogenic drugs-LSD, Mescaline, cannabis.
17. Drugs action on ANS: Adrenergic drugs-Catecholamines, Isoprenalline, Noncatecholamines-Ephedrine, Amphetamines etc., Adrenergic Blocking Agents-Alpha receptor blocking agents, Beta blockers, Anti-Parkinsonian drugs-Levodopa, Amantadine.
18. Biogenic Amines & Polypeptides: Histamine & Antihistamine drugs, Angiotensin, Kinins, Leukotrienes, Cytokines & Prostaglandins.
19. Drugs used in Respiratory disorders: Expectorants, Central cough suppressants, Antitussives, mucolytic agents.
20. Cardiovascular drugs: Digitalis, Pharmacotherapy of cardiac arrhythmias – Sodium channel blockers, beta blockers, Potassium channel blockers, Calcium channel blockers, Pharmacotherapy of Hypertension - Clonidine, alphamethyldopa, Guanethidine, Reserpine, Phentolamine etc.
21. Drugs acting on Blood & blood forming organs, Drugs effective in iron deficiency anaemias.
22. Water, Electrolytes & drugs affecting renal functions:
 - Nutritional supplementation therapy.
 - Diuretic & Anti diuretic drugs.
23. Drugs used in GIT disorders:

- Appetizers, Digestants, Carminatives, Appetite suppressants & Agents lowering serum lipids.
 - Emetics, drug therapy of vomiting & diarrhoea.
 - Pharmacotherapy of Peptic ulcer.
24. Chemotherapy: Sulfonamides, Cotrimoxazole, Nitrofurans, Penicillins & Antibiotics effective against gram positive organisms, gram negative organisms Tetracyclines, Chloramphenicol & antifungal agents, Chemotherapy of UTI, STD Tuberculosis, Leprosy, Malaria, Amoebiasis, Viral infections, Helminthiasis. Malignancy, Antiseptics & Disinfectants.
25. Drugs used in Endocrine disorders:
Thyroid, Pancreas, Adrenal disorders, Gonadotrophins, Estrogens, Progestins, Antifertility agents & Ovulation inducing drugs.
26. Pharmacotherapy of Gout and Rheumatoid Arthritis
27. Therapeutic Gases – oxygen and Carbon Dioxide
28. Vitamins
29. Immunotherapy, Immno-suppressants & Immno-stimulants
30. Rationality of Drugs: What is Rational therapy? Combination Drugs, Hazardous Drugs, Causes of irrationality in drug prescription.
31. Essential Drug List (EDL-WHO): Why an Essential Medicines List? Generic/ Brand names & Evaluation of Drug profiles.

MINOR SURGERY:

1. Introduction to Surgery.
2. Basic Surgical Principles
 - a) Surgical process
 - b) Surgical History
 - c) Clinical Examination
 - d) Imaging
 - e) Diagnosis Process

3. Wounds, Tissue Repair & Scars

- a) Wounds
- b) Tissue Repair
- c) Classification
 - i. Acute wounds
 - ii. Chronic wounds
- d) Scars

4. Acute Resuscitation and Support

- a) Fluid, Electrolyte and Acid – Base Balance
 - Water Depletion
 - Sodium Balance & Depletion
 - Sodium Excretion shut-down Trauma
 - Potassium Balance
 - Hypokalaemia
 - Alkalosis-Metabolic, Respiratory Alkalosis
 - Acidosis-Metabolic, Respiratory Acidosis
- b) Parenteral Fluid Therapy
 - i. Hypovolaemia-Diagnosis & Treatment
 - ii. Hypovolaemia & Cardiogenic Shock
- c) Prevention of Organ Failure
 - i. Avoiding Tissue Hypoxia-Simple resuscitation with intravenous Fluids
Treating Tissue Hypoxia Avoiding Nosocomial infections
 - ii. Hemorrhage-Types of Haemorrhage, Treatment
- d) Blood Transfusion

5. Anesthesia & Pain Relief

- a) Choice of Anaesthesia - Topical, Local Infiltration,
Regional (without General sedation)
- b) Preparation for Anaesthesia - Investigation

Starvation before surgery

c) Pre-operative Drugs & Treatment

d) Pain relief in Surgery

6. Cardio Vascular System: Acute myocardial infarction, Cardiogenic Shock, Cardiac arrhythmias, Cardiac arrest.
7. Respiratory System: Hemoptysis, Status asthmaticus, Spontaneous pneumothorax, Acute respiratory failure.
8. Gastro Intestinal System: Acute Vomiting, Perforation of Peptic Ulcer, Hematemesis, Hepatic Precoma and coma.
9. General Nervous System: Unconscious patient, Cerebrovascular catastrophies, Convulsions, Status epilepticus.
10. Renal System: Acute renal failure, Renal colic, Haematuria.
11. Endocrine and Metabolism: Thyroid crisis, Adrenal crisis, Diabetic keto acidosis and coma, Hypoglycemia.
12. Miscellaneous Emergencies: Syncope, Acute Peripheral circulatory failure, Acute reaction, Hypothermia.
13. Obstetrics and Gynaecology.

PRACTICALS

This includes preparation of different dosage forms, formulations, prescription writing, clinical Pharmacy exercises, problem based clinical study of cases, drug interactions, adverse drug reactions, demonstrations of the museum specimens attached to the department, visit to a pharmaceutical company, bedside teaching. Demonstration tour of an ultra modern super-specialty hospital to see the latest techniques adopted in modern medicine.

TEXT BOOKS

1. Pharmacology & Pharmacotherapeutics - by R.S.Satoskar
S.D.Bhandarkar
S.S.Ainapure
2. Essentials of Medical Pharmacology - by K.D.Tripathi
3. A Lay Preson's Guide to Medicines - by LOCOST,
Vododara
4. Hutchinson's clinical methods -
5. Manual of Clinical Methods - by P.S. Shankar
6. Clinical diagnosis - by Chamberlin

REFERENCE BOOKS

1. Applied & clinical Pharmacology - by Rang Dale & Katzung
2. Pharmacological basis of Therapeutics - by Goodman & Gilman
3. Clinical Pharmacology - by Laurance
4. Illustrated book in Pharmacology - by Lippincott

PHARMACOLOGY, MINOR SURGERY & EMERGENCY MEDICINE

SCHEME OF EXAMINATION: -

Theory one paper	- 80 Marks.
Duration of paper	- 3 hours.
Viva Marks	- 50 Marks.
Practical Marks	- 50 Marks.
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS: -

Record	- 10 Marks
Practical – I (Acute condition& Emergency care)	- 20 Marks
Practical – II (Bed side case taking and drug tapering)	- 20 Marks

Total: _____
- 50 Marks. _____

HOSPITAL MANAGEMENT & RESEARCH METHODOLOGY

HOSPITAL MANAGEMENT

- 1. The Social Role of the Health Care Institutions;** Introduction; what is our Mission; support systems; Challenges for the Future.
- 2. The Emerging Role of the Trained Health Care Administrator;** Introduction; Physician as Administrator; The Emergence of Health Care Management.
- 3. Planning:** Introduction; Why Planning; Planning for What; Planning for How Long; Approaches to Planning and Issues.
- 4. Organizing:** Introduction; Organizing – Structure and Design; Organization Structure; Organisation as a Human Process.
- 5. Team Participation/ Building:** Team Concepts; Issues in Team Building; Conflict Resolution.
- 6. Communication and Co-Ordination:** Communication Networks; Achieving Two-Way Communication; Communication Horizontally.
- 7. Decision making and Problem Solving** Introduction; Process and Decision making; Decision making Techniques and Aids; Defining a Problem and Planning action / action Plan.
- 8. Health Care Administrator:** Role, Tasks and Functions; Many Roles of the Administrator; The Administrator and The Organization Climate; Administrator and the Management Process.
- 9. Human Resources Management:** Planning for Personnel; Matching Individual and Organizational Needs; Job Description; Training and Management.

10. **Material Management & Finances Management;** Financial Management, Economics of Hospital Management
11. **Clinical, Diagnostic, Therapeutic & Support Services:**
Clinical Services (OP, IP, Ward Management, Physical Medicine and Yoga),
Diagnostic Services (lab, Facial, Iris and Yogic Diagnosis), Dietary Services
Linen & Laundry Services, House keeping, Medical Records Management,
Safety & Risk Management
12. **Quality Management & Medical Audit;** Preview Systems and Evaluation Processes.
13. **In Pursuit of Wholeness:** The Future of Health Care; Introduction; Holistic
14. **Health; Wellness and Life Style.**

RESEARCH METHODOLOGY

- 1. Research Methodology: AN INTRODUCTION:** Meaning of Research; Objective of Research; Motivation in Research; Types of Research; Research Approaches; Significance of Research; Research Methods versus Methodology; Research and Scientific Method; Importance of Knowing How Research is Done; Research Process; Criteria of good Research; Problems Encountered by Researchers in India.
- 2. Research Design:** Meaning of Research Design; Need for Research Design; Features of a Good Design; Important Concepts Relating to Research Design; Different Research Design; Basic Principles of Experimental Designs; Conclusion.
- 3. Sampling Design:** Census and Sample Survey; Implications of a Sample Design; Steps in Sampling Design; Criteria for Selecting a Sampling Procedure; Characteristics of a Good Sample Design; Types of Sample Designs; How to Select a Random Sample ? Random Sample from an Indicate Universe; Complex Random Sampling Designs; Conclusion.
- 4. Clinical Research:** Clinical Research Design; Case & Cohort Studies in Epidemiological Research; Literary Research Methods.
- 5. Ethics & Ethical Issues in Clinical Research.**
- 6. Methods of Data Collection:** Collection of Primary Data; Collection of Data through Questionnaires; Collection of Data through Schedules; Difference between Questionnaires and Schedules; Some other methods of Data Collection; Collection of Secondary Data; Selection of Appropriate Method of Data Collection; Case study Method; (i): Guidelines for Constructing Questionnaire/Schedule; (ii) Guidelines for Successful Interviewing; (iii) Difference between Survey and Experiment.
- 7. Processing and Analysis of Data:** Processing Operations; Some Problems in Processing; Elements/Types of Analysis; Statistics in Research; Measures of Central

Tendency; Measures of Dispersion; Measures of Asymmetry(Skewness); Measures of Relationship; Simple Regression Analysis; Multiple Correlation and Regression Partial Correlation; Association in Case of Attributes; Other Measures; Summary Chart Concerning Analysis of Data.

8. **Interpretation and Report Writing:** Meaning of Interpretation; Why Interpretation? Technique of Interpretation: Precaution in Interpretation; Significance of Report Writing; Different Steps in Writing Report; Layout of the Research Report; Types of Reports; Oral Presentation; Mechanics of Writing a Research Report; Precautions for Writing Research Reports; Conclusions.

Practicals - Hospital Management 1. Organizing. 2. Communication & coordination. 3. Clinical, Diagnostic, therapeutic & support services. 4. Quality Management & Medical Audit.

Methodology 1.

Clinical Research 3.

Interpretation & Report writing

Practicals – Research

Research Design 2.

Methods of Data collection 4.

TEXT BOOKS:-

- | | | |
|--|---|-------------------------|
| 1. The Holistic Health Hand Book | - | by Edward Bauman |
| 2. Management process in health care | - | by S.Srinivasan |
| 3. Planning & Management of Hospital | - | by J.S.Sabarwal |
| 4. Managing modern Hospital | - | by Dr.A.V.Srinivasan |
| 5. Principles of Hospital Administrations | - | by R.John McGibbony |
| 6. Research Methodology, Methods & Techniques- | - | by C.R.Kothari |
| 7. Research Methods in Behavioural Sciences, | - | by S.M. Mohisin |
| 8. Research Methods in Social Sciences, | - | by D.Nachmias |
| 9. Science studies in Yoga | - | by Bihar School of Yoga |
| 10. New Horizons in Modern Medicine | - | by Vivekananda Kendra |
| 11. Research Publications 1 to 8 | - | by C.C.R.Y.N. |
| 12. Research Contributions 1 to 3 | - | by S.VYASA |

- 13. Research works - by V.Y.R.I.
- 14. What you don't get to learn at medical school - by Dr.B.M.Hegde

REFERENCE BOOKS:-

- 1. 5 s & Management - by K.S.Madhavan
- 2. Management – Tasks, Responsibilities and Practices - by Peter Drucker
- 3. Self Appraisal & Goals setting for Hospital departments - by Voluntary Health Association of India
- 4. An Accounting Guide for Hospital and Nursing Homes - by Voluntary Health Association of India
- 5. Science based complementary medicine - Royal College of Physicians-1992
- 6. Quantum healing - by Deepak Chopra
- 7. The Limits of Science - by Peter Medawar
- 8. The Turning Point, The Tao of physics - by Fritjof Capra
- 9. Health care-which way to go? - by Dr.Abay bhang & Aswin patel
- 10. The Structure of Scientific Revolutions - by Thomas S Kuhn
- 11. The Logic of Scientific Discovery - by Karl Popper
- 12. Against Method - by Verso – London

HOSPITAL MANAGEMENT & RESEARCH METHODOLOGY

SCHEME OF EXAMINATION: -

Theory one paper	- 80 Marks.
Duration of paper	- 3 hours.
Viva Marks	- 50 Marks.
Practical Marks	- 50 Marks.
Internal Assessment (Theory)	- 20 marks

BREAKUP OF PRACTICAL MARKS: -

Record	- 10 Marks
Practical – I (HM)	- 20 Marks
Practical – II (RM)	- 20 Marks

Total:	- 50 Marks
---------------	-------------------

PHYSIOTHERAPY

1. Introduction:- Physics and instruments used for Physiotherapy.

2. Massage : Manipulation and Movements:-

Theory of massage (Manipulation of soft tissues)

Effleurage, petrissage, friction, tapotement, percussion, shaking vibration, stroking.

Methods of obtaining relaxation.

Starting position – fundamental and derived movements with and without apparatus.

- a. Passive movement.
- b. Assisted and resisted movements.
- c. Principles and uses of apparatus for fixation suspension, assistance, resistance and traction group movements of the joints.

Analysis of movement.

3. Electrotherapy:-

Application : Technique of application of D.C. modified and unmodified Ionisation, Technique of application of alternating currents Sinusoidal – Faradic and allied currents therapeutic uses.

Conditions suitable for treatment and contra indications.

4. Reaction of Regenerated muscles:-

Normal reaction of incomplete and complete degeneration absence of reaction in absolute degeneration. (students will be required to understand the significance of muscles reaction in relation to treatment but no to interpret them to diagnostic axis).

Therapeutic uses and technique of application of high frequency currents.

Types of electrodes in common uses, including condenser and cable electrodes short wave therapy. Technique of application ultra violet and infra red irradiations conditions suitable

for treatment and contra indications, precautions against accidents and treatment to be given if these occur.

5. General Pathology:-

Hypertrophy, Atrophy, inflammation, reaction to injury, resolutions and repair, degeneration.

6. Injuries to bones, joint, muscles and tendons:-

Fractures, separation of Epiphysis, dislocation, strains and sprains, synovitis and tenosynovitis, rupture of muscles and tendons and treatment after suture, persistent oedema, prolapsed inter-vertebral disc.

7. Deformities:-

Kyphosis, Lordosis, flat back, scoliosis, coxa vera, valgum, C.D.H. pes cavus, talipes, hallux valgus, Torticollis, winged scapula, cervical rib, Disabilities resulting from bad posture. Conditions resulting from bad posture. Conditions resulting from metatarsalgia, flat foot.

8. Diseases of Bones and Joints:-

Acute and chronic infective arthritis, Rheumatoid arthritis, tubercular arthritis, osteoarthritis, spondylitis, Osteomyelitis, bone and joint Tuberculosis. Delayed union of fractures/ operative procedures like arthrodesis, arthroplasty, spinal fusion.

9. Diseases of circulatory system:-

Cardiac disorders – Myocardial, valvular and functional arterio sclerosis. Raynauds disease, Hypostatic and Lymphatic oedema Thrombo-phlebitis, Embolism, Varicose veins.

10. Diseases of Respiratory system:-

Sinusitis, Bronchitis, Bronchiectasis, tuberculosis, Emphysema, Asthma, Pleurisy, Lung Abscess, Empyema, pre and post operative treatment of disease. Pre and post operative exercise in abdominal conditions.

11. Diseases of the nervous system:-

Hemiplegia, Paraplegia, Infantile cerebral palsy, Disseminated sclerosis, Acute anterior Poliomyelitis, Neuritis, Neuralgia, Peripheral nerve injuries, Peripheral neuritis, Herpes zoster, Occupational neuroses, chorea.

12. Skin conditions:-

Infective conditions, pyogenic conditions (Boils, carbuncles, impetigo, tubercular conditions, Dermatitis, eczema (Acute and Chronic) psoriasis, Scars and Skin grafts.

13. Constitutional diseases:-

Vitamin deficiency diseases with special reference to rickets, fibrositis.

14. Special organs:-

Eye and Ear: commonly referred conditions.

PRACTICAL DEMONSTRATIONS – 35.-

Case studies 10 with record.

TEXT BOOKS:-

1. Physiotherapy - by Tidy.
2. Physiotherapy - by Cash.
3. Electrotherapy - by Clayton's.
4. Electrotherapy explained - by George.
5. The principles of exercise therapy - by Gardiner M.D.

REFERENCE BOOKS:-

1. Key issues in Cardio respiratoryPhysiotherapy - b y
Alison, Jennifer & Ellis, Elizabeth.
2. Keys issues in MusculoskeletalPhysiotherapy- by Crosbie, Jack & Mc Connell, Jenny.
3. Physiotherapy and people with learning Difficulties - Odunmbaku, Patricia.
4. Single case research designs”Physiotherapy theory and practice” - Riddoch, M. Jane & Lennon, Sheila.
5. Private practitioners internationalmeeting report : Physiotherapy staffingPractice. - by Bauer, Doreen.
6. Understanding physiotherapy Staffinglevels - by Stock.
7. Management in physiotherapy - by Jones, Robert J.

PHYSIOTHERAPY

SCHEME OF EXAMINATION: -

Theory one paper	- 80 Marks.
Duration of paper	- 3 hours.
Viva Marks	- 50 Marks.
Practicals Marks	- 50 Marks.
Internal Assessment (Theory)	- 20 Marks.

BREAKUP OF PRACTICAL MARKS: -

Record	- 10 Marks
Practical – I (Case study – Diagnosis of the disease and prescription of the Physiotherapy treatments)	- 20 Marks
Practical – II (Identification, application, benefits and therapeutic uses of various physiotherapy equipment)	- 20 Marks
Total	- 50 Marks.

YOGA THERAPY

1. Introduction to Yogic Therapy.
2. Role of Asanas in curing various diseases. Limitations, Vidhi & Nisheda (Right& Wrong) while practicing asanas.
3. Role of Pranayama in curing various diseases.
4. Role of Bandhas, Mudras, Dhristies , in curing various diseases.
5. Role of Shadkriyas in curing various diseases.
6. Role of general exercises. Viz: Swimming & Walking in curing diseases.
7. The effects of various Yogic practices on different systems Viz., Skeletal systems, Endocrine system, Nervous system, Digestive systems, Respiratory system, Excretory system, Cardio vascular system, Muscular system, reproductive system.
8. Yoga and Mental health – Total integration of personality, correct mental behavior and attitude, Satvik, Rajsik & Tamsik traits, the mind-body relationship, self content tranquilising effect, psychology of spiritual growth, toning, judgment, pure consciousness. Mode of living and disciplined life.
9. Yogic Diagnosis: The triguna based diagnosis, chakra based diagnosis and the panchakosa based diagnosis
10. Yogic Diet: Satvik, Rajsik & Tamsik.
11. Yogic therapy for :-Metabolic diseases, Digestive diseases, Respiratory diseases, Cardio- Vascular diseases, Psychic diseases, Skeletal, Neuro Muscular diseases, Endocrinal diseases, Ophthalmologic disorders, E.N.T. disorders, Obstetrics & Gynaec disorders.
12. Meditation and its applications on psychosomatic disorders.
13. Yoga & Relaxation techniques
 - a. QRT – Quick Relaxation Technique
 - b. IRT – Instant relaxation technique.
 - c. DRT – Deep relaxation technique.
 - d. Cyclic Meditation
 - e. Yoganidra
14. Teaching methods of Yoga to public, students and patients.
15. Workshop on Yogic therapy.

16. Dissertations.

17. Research methods in Yogic therapy.

PRACTICALS:-

1. Teaching methods of Yoga to public, students and patients.
2. Workshop on Yogic therapy.
3. Dissertations.
4. Demonstration & application of various therapeutic procedures and treatments in Yogic therapy during clinical classes at the Hospital. At the end of final B.N.Y.S. Degree course candidate should be in a position to give yogic prescription and treatments independently.
5. Examination of a Patient – Complaints, History, Study of Symptoms, Physical examination, Investigations, Diagnosis, Treatment, Follow up. History Taking: Communication with the Patient, Age and Address, Marital status, Social and occupational history, History of previous illness, Family history, Presenting complaint, history of present illness, treatment history, menstrual history and negative data.
6. 25 Case studies with record.
7. Model lesson planning.

TEXT BOOKS:-

1. Anatomy & Physiology of Yogic Practices - by Dr.M.M.Ghorote
2. Asana, Pranayama & Yogic therapy - by Dr. Vinekar & Kuvalayananda
3. Yoga for common diseases - by Bihar school of Yoga.
4. Yogic therapy or Yogic way to cure diseases - by Swami Sivandha Sarasawthi.
5. Yoga for digestive diseases - by Bihar school of Yoga.
6. Yoga for cardio vascular Management - by Bihar school of Yoga.
7. Yogic therapy for ophthalmic diseases - by Vivekananda Kendra.
8. Stress management and Yoga - by Dr.K.N. Udupu.
9. Yoga for perfect sight. - by Dr. R.S. Agarwall.
10. The basis and application of Yoga. - by Dr. Nagendra

REFERENCE BOOKS:-

1. All research papers - by Vivekananda Kendra, Bangalore.
2. Yoga in education - by Vivekananda Kendra, Bangalore.
3. New perspective in stress Management. - by Vivekananda Kendra, Bangalore.
4. New Horizons in modern medicine - by Vivekananda Kendra, Bangalore.
5. Yoga Meemamsa all volumes - by Kaivalyadnama.
6. Yoga Nidra - by Bihar School of yoga.
7. Collected papers on yoga - edited by Swami Digamberji.
8. Yoga & Your heart - by Dr.K.K.Datey.Dr. M.L. Gharote.
9. Yogic and tantric medicine - by O.P. JAGGI.
10. Yogic therapy published - by the Yoga Institute of Kaivalyadhama.

YOGA THERAPY

SCHEME OF EXAMINATIONS: -

Theory one paper	- 80 Marks.
Duration of paper	- 3 hours.
Viva Marks	- 50 Marks.
Practical Marks	- 50 Marks.
Internal Assessment (Theory)	- 20 Marks

BREAKUP OF PRACTICAL MARKS: -

Record	- 10 Marks
Practical – I(Case study – Diagnosis of the disease - prescription of the specific Yogic exercises.)	- 20 Marks
Practical – II:-(Case study – Diagnosis of the disease – Prescriptions of the Yogic Kriyas)	- 20 Marks
Total.	<hr/> - 50 Marks <hr/>

NUTRITION, DIETETICS & HERBOLOGY

PAPER-I: NUTRITION

I. Introduction.

1. History of Nutrition.
2. Understanding the relationship between - Food, Nutrition and Health.
Functions of food, the role of various nutrients and the effects of their deficiency and excess.
3. Life in connection with food.
Factors in relation to social, economic and environmental implications of foods.
Quality of the foods - of commercial and organic farming. Quality of genetically modified and biotech food products, with regard to their nutritional values vis-à-vis Indian populations.
4. Functions of food – physiological, psychological and social aspects.

II. Different aspects of Nutrition.

1. Nutritive values of Indian foods.
2. Nutrients – Macro and Micro: classification, digestion, absorption, functions, RDA (Recommended Dose of Absorption) & dietary sources. Clinical manifestations of deficiencies and excess in brief about carbohydrates (mono saccharides, di-saccharides, poly saccharides), dietary fibre (soluble & insoluble), lipids & proteins (high biological & low biological value)
3. Water & Electrolytes
4. Energy – balance & regulation of body weight
5. Vitamins: Fat soluble – Vit A, D, E & K Water soluble – Vit-Thiamin, Riboflavin, Niacin, Folate, B₁₂ & Vit C.
6. Minerals: Calcium, Sodium, Potassium, Phosphorus, Iron, Iodine, Fluorine, Zinc, & Phytochemicals etc.
7. Importance of Beta-carotenes, Bio-flavonoides.
8. Enzymes & Their therapeutic uses

III. Food Groups: Their Nutritive & Medicinal values and culinary uses.

1. Millets (Finger millet, Fox tail millet, Little millet, Pearl millet, Proso millet, Kodo millet, Barnyard millet, Indian Oats, Jowar, Bajra, Maize and Corn).
2. Cereals (Rice & Wheat)
3. Pulses (Peas, Red gram, Double beans, Green gram, Bengal gram, Black gram, Horse gram, Rajma, Soya beans etc)
4. Fruits (pulpy & juicy): Amla, apple, apricot, banana, cashew fruit, custard apple, grapes (black & green), guava, jamun, jack fruit, lime, mulberry, mango, orange, palmyra, pine-apple, pears, pomegranate, plums, papaya, muskmelon, sapota, sweet lime, sugar cane, tender coconut, watermelon, wood apple, zizyphus etc.,
5. Vegetables (raw & cooked): Ash guard, brinjal, beans, cauliflower, cluster beans, colocasia, bitter gourd, bottle gourd, beetroot, carrot, cabbage, cucumber, capsicum, drumsticks, ladies fingers, parwar, potato, radish, ridge gourd, snake gourd, sweet potato, tapioca, tomato, baby corn etc.,
6. Green leaf vegetables: Agati, amaranthus, broccoli, coriander, curry leaves, drumstick leaves, garden-cress, mint, mustard leaves, spinach, fenugreek leaves, hibiscus leaves (gongura) etc.,
7. Milk & Milk products: curd, butter milk, cream, cheese, butter, whey water, paneer, khova, ice-creams & ghee etc.
8. Honey, jaggery, molasses and sugars.
9. Nuts: dry fruits, almonds, dates, raisins, figs, wall nuts, cashew nuts etc.
10. Oil seeds: Sesame, peanuts, coconut, flax seed, sunflower. Oils & Fats (Edible oils, saturated, mono, poly and medium chain fatty acids), vanaspathy/dalda - hydrogenated oils.
11. Meat, fish, poultry and eggs.
12. Tea, coffee, cocoa and other beverages, importance of Green tea, black tea & Herbal Tea.

13. **Condiments & Spices:** Turmeric, coriander, clove, fenugreek, mustard seeds, cummin seeds, pepper, black pepper, asafetida, tamarind, garlic, onion, ginger (dry& raw), chillies (dry & green).

14. **Antioxidants.**

IV. Principles of Food preparations

1. **Food preservation-methods-advantages-disadvantages.**
2. **Enhancing nutritional quality of foods: germination, fermentation and fortification.**
3. **Cooking of foods: Transfer of heat by conduction, convection and radiation-principles involved in different methods of cooking. Reasons of cooking: frying, dry, moist, pressure cooking, microwave cooking and solar cooking.**

V. **Food & Toxins:** Infective agents and toxins in food, adulteration of foods, food additives, food colouring agents, excess salt eating, Food preservatives (mono sodium glutamate-MSG – etc.), Junk foods, chemicalised, carbonated drinks, chemical and pesticide residues in the food.

VI. **Concept of wholesome diet & Balanced diets.**

VII. **Physiology of exercise, sports and athletics-in relation to food.**

VIII. **Principles of diet according to Yoga.**

IX. **Public health and nutrition: Nutritive education, National Nutritional programmes, Nutritional survey methods, Nutrition in relation to disaster management and epidemic out breaks.**

X. **Study about adverse effects of addictions: tobacco chewing, smoking & alcohol.**

XI. **Nutrition and Immunity, Nutritional deficiency diseases – Preventive & curative approach.**

PAPER – II DIETETICS

DIETETICS

1. Dietetic principles in Naturopathy.
2. Natural qualities/properties/characters of foods in Naturopathy/Ayurveda/ Modern nutrition.
3. Seasonal changes in the dietary pattern in Ayurveda/ Naturopathy and modern nutrition.
4. Naturopathic approach towards vegetarian and Non-Vegetarian food.
5. Prescriptive diets for all age groups and occupations:
 - a) Nutrition & food requirements during infancy (breast feeding, artificial feeding&weaning diet).
 - b) Nutrition & food requirements of children& adolescents.
 - c) Nutrition & food requirements of adults.
 - d) Nutrition & food requirements during middle age.
 - e) Nutrition & food requirements of pregnant woman, dietary modifications for normal and healthy growth of the fetus and safe delivery for mother.
 - f) Nutrition & food requirements of lactating woman.
 - g) Nutrition & food requirements during old age and geriatric problems.
6. Natural foods and health
 - a) Composition of different raw juices and their effects and uses. Wheat grass, vegetable juices and fruit juices. (such as beet root, cabbage, carrot, cucumber, lettuce, garlic, onion, lemon, orange, papaya, pineapple, mango, pumpkin, tomato, turnip, pomegranate etc)
 - b) Food values in raw state germinated form and cooked form.
 - c) Medicinal values of food additives commonly used in India.
7. Food combinations and health.
8. Dietary fiber and its therapeutic effects (E.g. Constipation, Anorectal disorders, G.I.T. Disorders. D.M. etc.).

9. Diseases management with diet.

Diabetes, Obesity, CVD, GIT, Renal diseases, Anemia, PEM, Peptic ulcer, Flatulence, constipation, malabsorption syndrome, Liver diseases, Jaundice, Fatty Liver, Low Blood pressure, High Blood pressure, Gall bladder disease, underweight, gout, Atherosclerosis, Impotence, Insomnia, Skin diseases, Bronchitis, etc.

10. Dietary management for infectious diseases.

11. Food allergy and dietary management (Mucolytic & Non-mucolytic foods).

12. Food for kidney & urinary tract problems (leeching of food).

13. Recommended diet for pediatric, orthopedic ailments.

14. Recommended diet for endocrinal disorders.

15. Recommended diet for neurological disorders.

16. Energy & protein modified diets for acute debilitating & wasting syndromes (HIV AIDS & Cancers) and Geriatric problems.

17. Food to improve immunity, food for neuro-immune-disorders & auto immune disorders.

18. Food as stress buster.

19. Latest trends in food fads: Aitkin's food, high protein diets, high carb diets, GM diet programme etc.

20. Importance of screening of medications & nutritional status before prescribing diets.

21. Food poisoning & auto intoxication.

22. Drugs interaction with foods.

23. Diet and exercise, sports games, athletics.

24. Methods of cooking and nutrient losses and preservation.

HERBOLOGY

I. Introduction to Herbology

II. The following herbs are to be studied with respect to their: Identification, Habitat, Method of preparation of herbal medicine, Medicinal values, Composition and Therapeutic action, Root of administration

1. *Abrus precatorius*
2. *Abutilon indicum*
3. *Acalypha indica*
4. *Acacia concinna*
5. *Achyranthes aspera*
6. *Adiantum digitatum*
7. *Acorus calamus*
8. *Aerva lanata*
9. *Aegle marmelos*
10. *Ageratum conyzoides*
11. *Agave grandiflora*
12. *Allium cepa*
13. *Allium sativum*
14. *Aloe vera*
15. *Annona squamosa*
16. *Argemone mexicana*
17. *Azadirachta indica*
18. *Bambusa arundinacea*
19. *Barleria pruriens*
20. *Bacopa monnina*
21. *Begonia koenigii*
22. *Berberis aristata*
23. *Boerhavia diffusa*
24. *Bombax ceiba*
25. *Brassica nigra*
26. *Brassica oleracea*
27. *Calotropis gigantea*
28. *Cassia auriculata*
29. *Cassia fistula*
30. *Cassia occidentalis*
31. *Cassia tora*
32. *Cissampelos quadrangularis*
33. *Citrullus colocynthis*
34. *Coccinia grandis*
35. *Coriandrum sativum*
36. *Cynodon dactylon*
37. *Cyperus rotundus*
38. *Datura metel*
39. *Datura innoxia*
40. *Eclipta alba*
41. *Emblica officinalis*
42. *Eucalyptus globulus*
43. *Eugenia jambolana*
44. *Euphorbia hirta*
45. *Ficus benghalensis*
46. *Ficus religiosa*
47. *Zingiber officinale*
48. *Gloriosa superba*
49. *Hibiscus rosasinensis*

- | | |
|--------------------------|------------------------------------|
| 50. Hydrocotyli asiatica | 65. Punica granatum |
| 51. Leucas aspea | 66. Sapindus trifoliatus
sapius |
| 52. Mimosa pudica | 67. Santalum album |
| 53. Michelia champaca | 68. Solanum indicum |
| 54. Momordica charanta | 69. Surentina rauwolfia |
| 55. Syzygium comini | 70. Tamarindus indica |
| 56. Moringa oleifera | 71. Tribulus terrestris |
| 57. Moringa oleleifera | 72. Trigonella foenum
graecum |
| 58. Nelumbium speciosom | 73. Trinosporea cadfulia |
| 59. Ocimum santum | 74. Vetiveria zizanioides |
| 60. Phyllantus emblica | 75. Vitis vinifera |
| 61. Phyllantus niruri | 76. Vitex negundo |
| 62. Piper longum | 77. Withania somnifer |
| 63. Piper betle | |
| 64. Pongama pinnata | |

PRACTICALS: -

1. Visits to the dietetic departments of different hospitals (Allopath/Naturopath).
2. Field visits to food analysis departments, nutrition surveys and diet surveys.
3. Formulation of the cost-effective balanced diets for different population.
4. Menu planning using natural foods and raw foods for general public and patients.
5. Canteen duties at Nature Cure Hospital: to work in canteen and learn the following by involving in preparation of sprouts, raw salads, bland diet, soups, juices, fruit salads etc., with economical use of food, equipment, fuel and labour.
6. Identification of Medicinal Herb.
7. Preparation of Herbarium sheets.
8. Method of preparation and administration of Herbal Medicine

TEXT BOOKS: -

1. Davidson and Pass more Human Nutrition and dietetics
- by Pass more, Eastwood.
2. Clinical Dietetics & Nutrition - by F.P. Antia.
3. Normal and therapeutic nutrition - by Corinne H.Robinson.
Marilyn R.Lawler.
4. Essentials of food and nutrition - by Swaminathan.
5. Foundations of Normal andtherapeutic nutrition -
by Randall T.etal
6. Nutrition and dietetics - by Subhangiri Joshi.
7. Sprouts - by J.D.Vaish, Yoga
Samsthan
8. Food – your miracle medicine (how food can
prevent & treat over 100 symptoms & problems) -
by Jean Carper
9. Home Remedies with materia medica - by F R Feranands
Melookunner S J
10. Herbal Glory - by Dr. Koppula Hemadri

REFERENCE BOOKS:-

1. Food and Nutrition - by Gupta.
2. Modern Nutrition in Health and disease - by skills.
3. Human Nutrition - by Maxine E.Mc, Divitt
andSumati Rajagopal.
4. Superior Nutrition - by Herbert M.Shelton.
5. All publications on Nutrition - by National Institute of
Nutrition.
6. Periodicals of Indian Journal of Medical Research.- by National Institute of
Nutrition.
7. Indian Journal of Nutrition & Dietetics. - by National Institute of
Nutrition.
8. Nutrition Society of India. - by National Institute of
Nutrition.
9. A complete guide to vitamins
Staff. - Edited by J.I. Rodale and
10. Nutrition Chaney and Ross. -
11. Indian Medicinal Plants - by Dr. Ravindra Sharma

NUTRITION, DIETETICS & HERBOLOGY

SCHEME OF EXAMINATION: -

Theory two papers of each	- 80 Marks.
Duration of each paper	-3 hours.
Viva. Marks	-50 Marks.
Practicals Marks	-50 Marks.
Internal Assessment (Theory)	- 40 Marks.

BREAKUP OF PRACTICAL MARKS: -

Record	-10 Marks.
Herbarium sheets	- 10 Marks.
Practical – I (Case study – Diagnosis of the disease nutritional disorders and prescription of specific diet.)	- 15 Marks.
Practical – II (Identification of food ingredients its nutritive values and therapeutic uses, Identification of Herbal plants)	-15 Marks
Total	<hr/> - 50 Marks <hr/>

HYDROTHERAPY

PAPER – I: -

1. Introduction and history.
2. Physical properties and chemical composition of water.
3. Physiological basis of Hydrotherapy. The skin and its anatomical construction, functions of the skin, temperature sense.
4. Production of heat and its distribution in the body, regulation of the body temperature, conditions that increase and decrease heat production in the body, body heat and body temperature.
5. Importance of water to human body.
6. Physiological effects of water on different systems of the body.
 - i) General and physiological effects of heat upon:-
 - a. Skin
 - b. Respiration
 - c. Circulation
 - d. Nervous system
 - e. Heat: its production, dissipation etc.,
 - f. Tactile and temperature sense.
 - ii) General and physiological effects of cold upon skin, respiration, circulation, nervous system and G.I.T Body temperature and its maintenance, nervous system , digestive system.
7. Reflex areas of the body. Results of the application of hot and cold over reflex areas.
8. Action and reaction, incomplete reaction, conditions that encourage and discourage reaction, internal reaction, thermic reaction, modified thermic reaction.
9. Place of water in prevention.
10. Place of water in Acute diseases.
11. Place of water in chronic diseases.

PAPER – II: -

1. General Principles of Hydrotherapy.
 - a) General rules for Hydrotherapeutic applications.
 - b) Therapeutic significance of reaction to Hydrotherapeutic applications.
 - c) Adaptation of individual cases.
 - d) Exaggeration of symptoms, the adverse effects and how to avoid them during Hydrotherapeutic treatment.
 - e) General indications and contra-indications.
2. Therapeutic actions and use of Hydrotherapy:
 - a. Classification of Hydriatic effects, general principles excitation and depression.
 - b. Primary excitment effects when to apply and when not to apply.
 1. Local haemostatic effects – Hydriatic heart tonics.
 2. Uterine excitations, emmenagogic effects.
 3. Vesicle excitations.
 4. Intestinal excitation, peristaltic effects.
 - c. Secondary excitant effects : -
 1. Restorative effects.
 2. Tonic effects – cold water, physiological effects – cold water, cold water Vs. Medicinal tonics, applications in the following.
 3. Anemia, Neurasthenia, Hypochondria, cerebral congestion, Rheumatism, diabetes mellitus, valvular heart disease.
 4. Calorific effects.
 5. Diaphoretic effects.

Importance of attention to the skin in chronic disease – Alternative or spolitative effect – Hot baths in brights disease.
Sweating baths in dropsy and obesity.
 6. Expectorant effects.
 7. Diuretic effects – Brights disease, Uraemia, eclampsia.
 8. Atonic Dyspepsia, hyperacidity
 9. Revulsive and derivative effects, flexing Revulsive methods for combating superficial anemia and for relief of deep congestion

method adopted to anemia of deep seated organs, revulsion on analgesic measure.

10. Resolvent effects.

Sedative effects – general sedatives – local sedatives.

- i. Sedatives of the circulatory system –
Antiphlogistic effects, inflammation, pneumonia, pleurisy and other acute disorders.
- ii. Nerve sedatives, Hypnotic, calmative, analgesic, anesthetic, Antispasmodic, insomnia, chorea, spastic paralysis, exophthalmic goiter, mania, epilepsy and various painful conditions.
- iii. Anti-thermic and antipyretic effects, relation of heat production and heat elimination to antipyretic methods, principles that govern the application of hydropathic measures for the reduction of temperature in fevers – methods that may be efficiently employed in various morbid conditions accompanied by rise in temperature – suggestions and cautions respecting the use of water for antipyretic effects indications and contraindications.
- iv. Secretory and sedative effects, prophylactic uses cold bathing in infancy and early childhood, adults, women, old age – precautions.

3. The techniques of Hydrotherapy:-

Plain water bath,
Cold hip bath,
Shallow bath,
Graduate bath,
Neutral bath,
Non revulsive bath,
Immersion bath,
Cold plunge bath,
Kuhne's sitz bath for males, females,
hand and arm bath,
footbath hot and cold,
alternate leg bath,
Rapid bath, Brand bath,

Fever bath,
River bathing,
Sea bathing.

4. Various types of hot air baths: hot air bath, super hot air bath, cold air bath, Indoor and Outdoor baths.
5. Mud therapy:-
Natural mud baths, Full and partial mud packs, Mud plaster, Thermal bath, Dry pack sand bath.
6. Fomentations and studies:-
The hot water bag, the siphon hot water bag, the thermo pore, the mustard fomentation, clay and glycerin poultice, charcoal poultice, cotton poultice.
7. Compresses and Packs:-
The wet sheet pack, cooling pack, cold shower pack, Sweating pack, Dry pack, Half pack, Hot blanket pack, evaporating pack, very cold compress, cooling compress, proximal compress, Neutral compress, Alternate compress, Revulsive compress, compress of ten days for injuries and eruptions. Alternative applications to the head and spine, local packs, wet girdle pack, Dry abdominal bandage.
Abdominal heating compress, Head, Pack, Spinal pack
Hot and cold heat compress, lung compress, renal compress, gastro hepatic compress, intestinal compress, pelvic compress, abdominal pack, spinal pack, pancreatic pack.
8. SPECIAL FORMS OF COMPRESSES: -
Cephalic compress, chest pack, Triangular, Chest pack, Half chest compress, Joint compress, Pelvic pack, Food pack, cold spinal compress, Towel chest pack, Peri cardial or cardiac compress, Hot pack, leg pack, perineal compress, prone packs,
Lumbar compress.

9. Internal use of water : -
Irrigations and enema (colonflushing)
Cold water drinking, Hot water drinking, Water emetic, Irrigation of ear, Nasal, Vaginal, Intra uterine & Rectal organs
10. Enema: - Hot, Warm, Cold graduated enema, Coloclyster, Retentive enema, tonic enema, Hydriatic prescription making: - Procedures for increasing vital resistance, which excite the central ganglia, which increase oxidation, which increase general blood movement and local blood supply. Measures that encourage general and local metabolic activity, which increase heat production, which increase the elimination of heat, which increase combat bacterial growth in blood, Hydriatic incompatibility, Adoption of hydriatic prescription to individual disease.
11. DOUCHES: Douche apparatus, Physiological effects and therapeutic applications.
Under water exercises, under water delivery.

PRACTICALS:-

1. Demonstration of various therapeutic Procedures and treatments in Hydrotherapy During clinical classes at the hospital.
2. 25 Case studies with record.

TEXT BOOKS :-

1. Baths -by S.J. Singh.
2. My water cure -by Sebastian Kneipp.
3. Rational Hydrotherapy -by Dr. J.H. Kellogg.
4. Scientific Hydrotherapy - by Kulkarni

RERERENCE BOOKS :-

1. Hand book of Hydrotherapy -by Shew, Joel.
2. Hydrotherapy in practice -by Davis,B.C&Harrison,R.A
3. Medical Hydrology -by Sidney licht.

HYDROTHERAPY

SCHEME OF EXAMINATION: -

Theory two papers of each	-80 Marks
Duration of each paper	-3 hours
Viva Marks	-50 Marks
Practicals Marks	-50 Marks
Internal Assessment (Theory)	- 40 Marks

BREAKUP OF PRACTICAL MARKS: -

Record	-10 Marks
Practical – I (Case study – Diagnosis of the patients and prescription of the hydro-therapeutic treatments.)	-20 Marks
Practical – II (Identification, application benefits and therapeutic uses of the various Hydrotherapy equipments and Treatments)	-20 Marks

Total	- 50 Marks
--------------	-------------------

OBSTETRICS AND GYNAECOLOGY

I. BASIC ANATOMY & PHYSIOLOGY

- a) Anatomy and Physiology of female generative organs and pelvis
- b) Maturation and fertilization of ovum
- c) Development of placenta
- d) Embryology of uterus

II. PHYSIOLOGY OF PREGNANCY

- a) Maternal changes due to pregnancy
- b) Diagnosis of pregnancy
- c) Differential diagnosis of pregnancy
- d) The foetus in normal pregnancy
- e) Ante-natal care

III. PHYSIOLOGY OF LABOUR

- a) Causation and stages of labour
- b) The mechanism of labour & conduct of normal labour
- c) Physiology of puerperium
- d) Care of Puerperium
- e) Care of new – born child

IV. PATHOLOGY OF PREGNANCY

- a) Hyperemesis gravidarum
- b) Toxaemias of pregnancy
- c) Tuberculosis in pregnancy
- d) Diabetes in pregnancy
- e) Venereal diseases in pregnancy
- f) Anaemias in pregnancy
- g) Hydatidiform mole
- h) Hydramnios & Oligo Hydramnios
- i) Anomalies and Diseases of the placenta

- j) Abortion
- k) Antepartum Haemorrhage
- l) Ectopic pregnancy
- m) Placenta previa
- n) Abruptio Placenta
- o) Pre-eclamptic toxemia

V. PATHOLOGY OF LABOUR

- a) Occipito – posterior position
- b) Breech presentation Mechanism and Management
- c) Prolapse of the cord, compound presentation
- d) Multiple pregnancy Diagnosis and Management
- e) Contracted pelvis
- f) Diagnosis cephalo – pelvic disproportions
- g) Management of labour in contracted pelvis
- h) Diagnosis of abnormal presentations
- i) Complications of third stage of labour

VI. AFFECTIONS OF NEW – BORN

- a) Asphyxia Neonatrum
- b) Prematurity and low-birth weight
- c) Congenital malformations, Anencephalus, Hydrocephalus

VII. OBSTETRIC OPERATIONS

- a) Indications of Forceps Delivery and vaccum extraction
- b) Induction of Caesarean section
- c) Introduction of abortion and labour, indications

VIII. PATHOLOGY OF PUERPERIUM

- a) Puerperal infection
- b) Post maturity etiology & Clinical features and Diagnosis
- c) Contraception : Family planning procedures-tubectomy and vasectomy

IX. MISCELLANEOUS

- a) Perinatal mortality and maternal mortality
- b) Post-dated pregnancy
- c) Placenta insufficiency
- d) Control of contraception
- e) Medical Termination of Pregnancy
- f) Pre-term labour
- g) Ultra sonogram in Obstetrics

X. GYNAECOLOGY

- a) Vaginal Infections, Leucorrhoea
- b) T.B. of the Genital tract
- c) Diseases of Urinary system: incontinence, urge incontinence
- d) Impotency and sterility
- e) Chorion epithelioma, carcinoma
- f) Disorders of Menstruation:-
 - a. Amenorrhoea
 - b. Dysmenorrhoea
 - c. Premenstrual tension
 - d. Dysfunctional Uterine Bleedings
- g) Prolapse
- h) Retroversion
- i) Carcinoma Cervix
- j) Fibroids
- k) Carcinoma of endometrium
- l) Diseases of the ovaries
 - i. Ovarian cysts
 - ii. Inflammations of the uterine appendages
 - iii. Pelvic inflammatory diseases
- m) Naturopathic treatment and Yogic practices in obstetrics and Gynaecology
 - i. Role of Naturopathy & Yoga for healthy parenthood

- ii. Antenatal and postnatal care through yogic methods
- iii. Antenatal and postnatal care through Naturopathic treatments
- iv. Antenatal and postnatal care through general exercises
- v. Antenatal and postnatal care through Hydrotherapy
- vi. Natural diet during pregnancy and lactation
- vii. Naturopathy & Yoga in Obstetrics & Gynaecological disorders
- viii. Water treatments for Gynaecological disorders

PRACTICALS

1. Demonstration of various instruments related to Obstetrics and Gynaecology.
2. Demonstration of physical examination and obstetrical examinations of Antenatal care and Natural remedies for gestational diabetes, hypertension, anaemia etc.
3. Demonstration of Management of normal delivery and assisted deliveries.
4. Demonstration of Gynaecological Diagnosis and Minor operations – Papsmear, D&C.
5. Demonstration of conducting Natural deliveries with Hydrotherapy etc.
6. Demonstration of Natural remedies for Gynaecological disorders – Leucorrhoea, PCOD, Malignancies, DUB, PMS, Vaginitis, Cervicitis, Pre and Post Menopausal syndrome.

TEXT BOOKS

1. Text book of Obstetrics - by C.S. Down.
2. Text book of Gynaecology - by Shaw's.
3. Text book of Gynaecology - by C.S. Down.
4. Clinical Obstetrics - by A.I. Mudaliar.
5. Text book of Obstetrics - by Dr. Dutta.
6. Text book of Gynaecology - by Jaffcoate.
7. Text book of Obstetrics - by Williams.
8. Text book of Gynaecology - by Dr.Dutta.
9. Easy pregnancy with yoga - by Stella weller.
10. Yoga for pregnancy & Birth - by Nina and Michael Shandler.
11. Postnatal exercises - by Barbara whiteford & Margie polden.
12. Water & Sexuality - by Michael odent.

REFERENCE BOOKS

1. Hand book of Obstetrics for examination - by Dr. Dawn.
2. Illustrated book of Obstetrics & Gynaecology - Dr. Gevan.

OBSTETRICS & GYNAECOLOGY

SCHEME OF EXAMINATIONS: -

Theory two papers of each	-80 Marks
Duration of each paper	-3 hours
Viva Marks	-50 Marks
Practical Marks	-50 Marks
Internal Assessment (Theory)	- 40 Marks

BREAKUP OF PRACTICAL MARKS: -

Record	-10 Marks
Practical – I (Long Case)	-20 Marks
Practical – II (Short Case)	-10 Marks
Practical – III (Identification of instruments and equipment)	-10 Marks
Total	<hr/> - 50 Marks <hr/>

GUIDELINES FOR UNDERTAKING COMPULSORY INTERNSHIP (BNYS DEGREE COURSE)

I. GENERAL:

1. Every student after passing the final BNYS Degree Examination has to undergo the compulsory rotational internship training programme to the satisfaction of the Principal, SPNMC/ Superintendent, Nature Cure Hospital. The period of internship for BNYS Degree students will be for a period of 12 months. This internship certificate is a pre-requisite for the award of Degree & permanent Medical Registration.

The 12 month internship of BNYS Degree Course should be completed within a period of two years after passing the final examination.

2. The Internship shall be undertaken at the hospital attached/affiliated to the college as a teaching hospital and in case such Hospital cannot accommodate all the students for internship, they shall undergo their internship in a Hospital approved by the N.T.R University of Health Sciences. A.P
3. The Board of Indian Medicine A.P. will grant provisional registration to a candidate on production of BNYS pass certificate. The provisional registration to a successful candidate of BNYS degree course will be valid for a period of one year.
In the event of shortage or unsatisfactory work the period of Compulsory Internship and the provisional registration may be suitably extended by the competent authority.
4. After successful completion of compulsory rotational internship and after award of the BNYS degree by the Dr. N.T.R University of Health Sciences, permanent registration will be given to the candidate by the Board of Indian Medicine, A.P.

II. GUIDELINES FOR TRAINING:

1. Training of the Internees during the internship will be regulated by the Head of the approved Hospital to which the internee is allotted/ the Superintendent of Nature Cure Hospital or Principal SPNMC.
2. The Internee will be entrusted with clinical responsibilities and this work will be supervised by the concerned Head of the Department /Chief Medical Officer / Superintendent/competent authority.
3. He/she should be exposed to various community based health activities, health programmes, their implementation and organizational set up. He /she should also be involved in motivational programmes, Health Education, Nutrition, Family Welfare and other activities.
4. The internship training includes training in case-taking, evaluation of symptoms, and management of common ailments through Nature Cure & Yoga treatments.
5. The Internee shall maintain a record of work which is to be periodically verified by the Medical Officer/Head of the Department under whom the internee is posted. The scrutiny of the record of work may be objectively viewed in regard to the knowledge, skills and attitude shown towards the patient by the internee.
6. The internees of BNYS Degree course should get a certification of satisfactory completion from the authorities of attached hospitals, which will be counter signed by college authorities i.e. Principal and photo of the student, logo of the institution may be included in the internship certificate.

Medico-legal:

During the internship the internee gets acquainted with issues of various medical certificates like leave certificate on the ground of sickness; fitness certificate, death certificate, birth certificate, medical examination, court procedures in police cases like

unnatural deaths, accidents etc., various drug Acts, Consumer Protection Act(CPA), Right To Information Act (RTI)etc.,

III. MAINTENANCE OF RECORDS:

1. Each internee shall maintain detailed records of at least 25 acute cases and 25 chronic cases treated during his/her training in the Medical Department. This should be submitted to the Superintendent/Ward Medical Officer, on the 2nd and 16th of every month. Failure to submit the above for 2 consecutive fortnights will be treated as dereliction of duty.
2. During this period the internee shall carry out any assignment on any subject given to him/her by the physician in-charge.

IV. RULES AND REGULATIONS FOR INTERNSHIP (BNYS DEGREE COURSE)

1. Internship will commence only after a formal communication is sent to the applicant, by the Principal of the College, after consultation with the Superintendent.
2. After receipt of formal communication from the Principal, Sri Patanjali Maharshi Naturopathy & Yoga Medical College the internees have to report to the Competent Authority/Superintendent of the Hospital.
3. As per the existing rules of N.T.R.U.H.S each internee is directed to complete internship with in 2 years duration from the time of declaration of final year results.
4. They shall be under the administrative control of the Competent Authority/ Superintendent/CMO of the Hospital. Internees attendance and performance sheet may be maintained and submitted by concerned MO/Ward/Department to the competent authority.
5. Internees have to satisfactorily complete the work in various departments of the Hospital by rotation to be eligible to get the certificate of internship.

6. They shall work for 6 ½ hours continuously between 8.00 a.m. to 8.00 p.m., or till the completion of work entrusted depending on the allotment as per the administrative direction, and on full duty day from 8.00 a.m. to next day 9.00 a.m.

Every internee should wear Apron and have the following equipments:

i) Stethoscope, ii) Torch light, iii) Knee hammer etc.,

7. Internees will be assigned duties of various Departments, hours of work, rotation/ night duty etc., by the CMO/ Superintendent of the Hospital and they will be working under the Head of the concerned department. Internees on night duty will be provided with accommodation during duty hours, to work under the supervision of the duty Medical Officer. The peripheral posting to BNYS Internees, as per the G.O.Ms.No.361, dt.01.02.2010, to be implemented to the students who have completed final BNYS in the year 2010 onwards, as per the administrative convenience.

8. Minimum attendance for each internee shall be not less than 80%. All internees will be on duty on all days including public Holidays during their 12 months of training. However, they will be entitled for 30 days leave during this period with the prior approval of the Superintendent of the Hospital.

9. Internees are expected to work with service motto and in a disciplined manner. If the internee is not punctual or not attending to his/her duties properly with service motto, she/he will be suspended from duties, pending enquiry, with immediate effect by the Superintendent.

10. In the event of shortage of satisfactory work by the internee the period of compulsory internship and the provisional registration may be suitably extended by the competent authority.

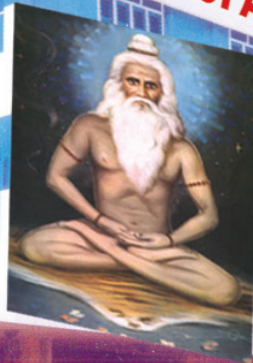
11. The period of absence due to illness or any other reason will result in extension of the internship.

12. The internees seeking transfer for doing the internship outside the state or in another institution within the state shall submit NOC from the University to which the transfer is sought, along with the NOC's from their respective College and Hospital and submit the same to the Secretary, A.P.Yogadhyayana Parishad, who in turn shall forward the same to the Government for issuance of necessary orders. No stipend is payable during the period of internship to such transferred internees, on their request.
13. No Internee shall indulge in taking tea, coffee, alcohol, smoking and non-vegetarian food within the Hospital premises, under any circumstances.
14. All grievances should be brought to the notice of the Competent authority/ Superintendent/CMO of the Hospital in writing.
15. Internees who are involved in Police cases and kept in police control for more than 48 hours will be suspended forth with pending enquiry by the competent authority.
16. Internees shall abide by the Rules and Regulations prescribed for them from time to time.



SRI PATANJALI MAHARSHI

NATUROPATHY & YOGA HOSPITAL



**SRI PATANJALI MAHARSHI
NATUROPATHY & YOGA HOSPITAL**

Thimmapur, Guntakal - 515 801, Anantapuram, Andhra Pradesh, India

Cell : 9441145356, 9849281540, 9440663157

08552-223999, 08552-226999