

DR. SAMPURNANAND MEDICAL COLLEGE JODHPUR



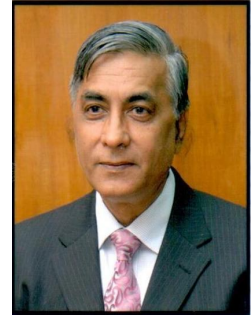
Dr. S. N. Medical College Jodhpur



STUDENT BROCHURE -2013

www.medicaleducation.rajasthan.gov.in

E-mail:- medicalcollegejodhpur@yahoo.com, prmedclg-jod-rj@nic.in



Welcome Note from Principal

I extend you the warmest welcome to Dr. Sampurnanand Medical College, Jodhpur. I believe that you will have an exciting and stimulating time with us here and one that will equip you with the skills necessary for being the doctor.

A career in Medicine is much more than a degree course – it is the entry qualification for one of the greatest professions. To be allowed to practice medicine, to come close to patients at a time when they are maximally vulnerable, to have complete responsibility for those who cannot defend themselves and to cure or prevent disease; these are the greatest privileges any human can have. These central and abiding truths of the medical profession will only be realized by you along your journey in medical training. That training starts today, I am confident that you will have as much support, help and guidance as you will need to start you on what is your lifetime's journey in medicine.

It is now your responsibility to be able to not only become a good doctor but also a good human being. I think I can make this easy for you – you can always calibrate your actions and behavior at any time, by asking yourself whether you would be proud of what you are doing , how you are doing it, whether your parents would be proud of it and whether your action is helping the poor and the sick. When with a patient, always behave as if you were treating a close relative and you won't go far wrong.

This gives me an opportunity for a word of warning, please behave well to your teachers, patients and each other.

Work hard, read and learn widely and behave well.

Remember, "A journey of thousand miles begins with a first step". That first step is today. I give you my very best wishes for what is going to be a fantastic life.

Be proud to be "SNMCONIAN"

Professor Arvind Mathur
Principal and Controller
Dr. S.N. Medical College and
Associated Hospitals, Jodhpur

Welcome Note from Additional Principal



Dear students,

May the hand of God be placed upon you forever. I give you many fold thanks and greetings from our striving team to let us do our worthwhile in assisting you to carve the future of your lives with chisels of grace and vivacity within our college, to become good, faithful doctors and bear fruits of kindness and development to the world and its multifarious sufferings.

Within our college, we welcome you and hope that you become perfectionists, the doctors that the humanity of modern days truly demands, and become able to cater in a disciplined and even gracious manner to the needs of the masses.

Discipline, in all essence, along with other qualities like empathy and swift-mindedness, is what we anticipate to help in inculcating in your brilliant minds, so that the flame of life never dims through the burdens of the world. You must also realize that we have some expectations from you. We feel that you ought to make yourself disciplined and must train well your brains and mindsets as well as your hearts so as to take up the jobs of your predecessors as dexterously as they bided by their duties in their times of flowerings.

Be assiduous, not because we demand you to be so, but so as not to let down your own soul in the long run. Be the leaders that we provide you the energy to be. And live on long, so you can listen serenely to all life in good grace. And last but not the least, be the good doctors that we know you will be – true to be ‘God’ as the people say.

Dr.Rita Meena
Additional Principal &
Head of Dept.-Community Medicine

Induction and Orientation Programme of MBBS Batch 2013

Venue : College Auditorium

1 August 2013

9 to 10 am	Registration and distribution of teaching timetable brochure
10:00 to 10:15 am	“Initiation speech with virtual tour of Dr. S.N. Medical College” Dr. Manish Parakh, Professor Paediatrics
10:15 to 10:30 am	“Welcome note” : Dr. Arvind Mathur, Principal Dr. S.N. Medical College.
10:30 to 11:30 am	Introduction to subjects by the Head of the Departments :
10:30 to 10:45 am	Community Medicine : Dr. Rita Meena
10:45 to 11:00 am	Biochemistry: Dr. Ranjana Mathur
11:00 to 11:15 am	Physiology : Dr. N.D. Soni
11:15 to 11:30 am	Anatomy : Dr. Sushma Kataria
11:30 to 11:45 am	“Metamorphosis” : Dr. Dinesh Kothari, Professor & Head - General Medicine.
11:45 to 12:00 am	“ Discipline among students” : Dr. Kamal Kant, Professor and Head Surgery.
12:00 to 12:15 pm	“Door step to Med curriculum” : Dr. G.D.Koolwal, Professor and Head Psychiatry
12:15 to 12:30 pm	“Problems faced & their solutions” : Dr. Ranjana Desai,Professor Obstetrics and Gynaecology.
12:30 pm	Thanks giving by Dr. Afzal Hakim, Associate Professor Community Medicine and Academic Incharge (UG).

**OFFICE OF THE PRINCIPAL, DR. S.N. MEDICAL COLLEGE AND CONTROLLER OF
ASSOCIATED GROUP OF HOSPITALS, JODHPUR**

No. F.1()Acad/MC/JU/2013/14662

Dated:- 10/07/2013

**OFFICE ORDER
TIME TABLE FOR 1ST MBBS STUDENTS
BATCH-2013**

Day & Time	7:00 to 8:00 am Lecture	8:00 to 9:00 am Lecture	9:00 to 10:45 am	10:45 to 11:15 am	11:15 to 12:15 pm Lecture	12:15 to 2:00 pm
Monday	PHYSIOLOGY	BIOCHEMISTRY	PHYSIO/BIOCHEM / COMMUNITY MED PRACTICAL	B R E A K	ANATOMY	DISSECTION/HISTOLOGY
Tuesday	ANATOMY	PHYSIOLOGY	PHYSIOLOGY/BIOCHEM/ COMMUNITY MED PRACTICAL		ANATOMY	DISSECTION/HISTOLOGY
Wednesday	PHYSIOLOGY	COMMUNITY MEDICINE	PHYSIOLOGY/BIOCHEM/ COMMUNITY MED PRACTICAL		ANATOMY	DISSECTION/HISTOLOGY
Thursday	BIOCHEMISTRY	PHYSIOLOGY	PHYSIOLOGY/BIOCHEM/ COMMUNITY MED PRACTICAL		ANATOMY	DISSECTION/HISTOLOGY
Friday	ANATOMY	PHYSIOLOGY	PHYSIOLOGY/BIOCHEMISTRY DEMONSTRATION		ANATOMY	DISSECTION/HISTOLOGY
Saturday	BIOCHEMISTRY	PHYSIOLOGY	PHYSIOLOGY/BIOCHEMISTRY DEMONSTRATION		ANATOMY	DISSECTION/HISTOLOGY

ALL THEORY CLASS WILL BE HELD IN Lecture Theatre – 4

- This time table shall effective 1/08/2013 to 30/09/2013
- First Semester Assessment will be tentatively held in the first half of the month of January 2014.
- Diwali Vacation will be from **1-10th** Nov 2013
- Winter Vacation will be from **25-31st** Dec 2013

No. F.1()Acad/MC/JU/2013/

Dated:-

Copy forwarded to following for information & necessary action:-

1. Prof. & Head, Anatomy/Physiology/Biochemistry/PSM Department of this college.
2. All Notice Board. (College/Hostel).

Sd/-
Principal & Controller

**OFFICE OF THE PRINCIPAL , DR.S.N.MEDICAL COLLEGE AND CONTROLLER
OF ASSOCIATED GROUP OF HOSPITALS,JODHPUR.**

NO.F. 1() Acad/MC/JU/2013/

Dated:-

OFFICE ORDER

In order to stop Teasing/ Misbehaving and ragging activities with newly admitted students, as per the direction of the Hon'ble supreme court of India and guidelines framed by MCI & RUHS an anti-ragging committee of following doctors/officials/others is constituted.

S.No.	Name & Designation	Mobile No.
1.	Dr.(Mrs.) Rita Meena, Addl. Principal & HOD P.S.M.	9414019156
2.	Dr Suman Bhansali,M.O.I/C,Academic Cell(P.G.)	9414412645
3.	Dr.Afzal Hakim, M.O.I/C.,AcademicCell(U.G.)	9928366737
4.	Dr.Omi Chouhan,PHOD,Pharmacology	9828396136
5.	Dr.K.Kant,PHOD, Surgery	9414129122
6.	Dr.Ranjana Mathur,PHOD,Biochemistry	9828121724
7.	Dr.Aruna Solanki,PHOD,Microbiology	9414135599
8.	Dr.Kusum Vaishnav,PHOD,Pathology Deptt.	9414029308
9.	Dr.S.K.Bhaskar,PHOD,Orthopaedics	9530053381
10.	Dr.Dilip Kachawa, Professor Skin & VD	9414130036
11.	Dr.C.S.Vyas,PHOD,Ophthalmology	9414084327
12.	Dr. N.D. Soni PHOD. of Physiology	9461269595
13.	Dr.Sushma Kataria,PHOD,Anatomy Deptt.	9414134813
14.	Dr.Arvind Chouhan,Warden & Asso.Prof. Ophth.	9414075663
15.	Dr.Mota Ram ,Warden & sr.Demo. of Bioc	9414112580
16.	Chanchal Mishra, Asst. Police Commisnor	9461477928
17.	Mr. Manoj Varma , Dainik Bhaskar	9672980310
18.	Mr. Ashish Joshi, Rajasthan Patrika	9829766635
19.	Mr. C.M. Kalla, Dainik Navjyoti	9929598523

The above mentioned committee will monitor from time to time the progress of anti ragging measures taken and will also suggest the actions to be taken if any complaint is received regarding ragging .They will also help the newly admitted students in the event of any call from them received on their mobile phones.

Sd/-

Principal & Controller

DR. S.N. MEDICAL COLLEGE,
JODHPUR

DEPARTMENT OF ANATOMY

Teaching Faculty

Professor & Head	Dr. Sushma Kushal Kataria
Professor	Dr. Leena Raichandani
Assistant Professor	Dr. Pushpa Potaliya Dr. Ritu Agarwal
Senior Demonstrator	Dr. Anupama Garg Mrs. Hem Kanwar Joya Dr. Kalpana Goil Mrs. Samta Gaur

**DR. SAMPURNANAND MEDICAL COLLEGE, JODHPUR
DEPARTMENT OF ANATOMY**

**INFORMATION BROCHURE
BATCH 2013**

The broad goal of the teaching of undergraduate students in anatomy aims at providing comprehensive knowledge of the gross and microscopic structure and development of human body to provide a basis for understanding the clinical correlation of organs and structures involved and the anatomical basis for the disease prevention.

OBJECTIVE

(A) KNOWLEDGE

At the end of the course the students shall be able to:

- (a) Comprehend the normal disposition, clinically relevant interrelationship, functional and cross sectional anatomy of the various disease processes.
- (b) Identify the microscopic structure and correlate elementary ultra structure of various organs and tissues and correlate the structure with the functions as a prerequisite for understanding the altered state in various disease processes.
- (c) Comprehend the basic structure and connections of the central nervous system to analyze the integrative and regulative functions of the organs and system.
- (d) Demonstrate knowledge of the basic principles and sequential development of organs and system; recognize the critical sup or development and effects or common dermatogens, genetic mutations and environmental hazards. He/she should be able to explain the developmental basis of the major variations and abnormalities.

(B) SKILLS

At the end of the course the students shall be able to:

- (a) Demonstrate knowledge of the basic principles and sequential development of Identify and locate all the structures of the body and mark the topography of the living anatomy.
- (b) Identify the organs and tissues under the microscope
- (c) Understanding the principles of karyotyping and identify gross congenital anomalies.
- (d) Understand the principles of newer imaging techniques and interpretation of Computerized Tomography (CT) scan, sonogram, etc.
- (e) Understand clinical basis of some common clinical procedure i.e. Intramuscular and intravenous injection, lumbar puncture and kidney biopsy etc.

To Summarise the teaching will be done under the following heads:

1. General anatomy
2. Gross anatomy (study and dissection or various regions of body La upper extremity, thorax, abdomen, pelvis, brain, head and neck)
3. Microanatomy (Histology)
4. Embryology (General and Systemic including Genetics)

TEACHING

The time allotted for first phase of MBBS course is 12 calendar months. This period includes teaching and training, internal assessment, university examination and results.

1. GROSS ANATOMY

The time allotted for various regions for the purpose of teaching, dissection and assessment shall be as under. In case you abstain for the course on prescribed dates it will be presumed as completed and assessment shall take place as scheduled.

Upper extremity	05 weeks
Lower extremity	04 weeks
Thorax	04 weeks
Abdomen and Pelvis	08 weeks
Brain	04 weeks
Head and Neck	10 weeks

2. EMBRYOLOGY

(General, Systemic and Genetics) 35 – 40 lectures

3. GENERAL ANATOMY 07- 08 lectures

4. MICROANATOMY (HISTOLOGY) 25 lectures & (50 hours of microscopic study).

ASSESSMENT / EXAMINATIONS

There shall be a four tier system of assessment / examination during first phase of MBBS course under two broad heads i.e. internal assessment and university examination.

1. SUBSTANCES (internal assessment):

Assessment of performance on a small number of topics (generally oral examination).

2. STAGES OR PART COMPLETION TESTS (internal assessment):

Shall be held on completion of courses on a particular region. The assessment may be in form of an oral examination (viva voce), short answer type written examination, multiple choice questions (MCQs) or spotting.

3. SEMESTER EXAMINATIONS:

First semester examination shall be held towards the completion of first semester. Second semester (pre university) examination shall be held on the completion of all the courses and prior to university examination.

FORMAT

- Theory paper on university pattern.
- Oral examination on dissected parts and bones.
- Histology (assessment of tissue under microscope and viva voce).
- Surface anatomy.
- Radiology.

4. UNIVERSITY EXAMINATION:

Eligibility for appearing in the university examination:

(a) **ATTENDANCE:** 75% of attendance in the subject for appearing in an examination is compulsory inclusive of attendance in non lecture teaching i.e. practical, demonstrations, seminars, group discussions, tutorials.

(b) INTERNAL ASSESSMENT:

Student must secure at least 35% marks of the total marks fixed for internal assessment in a particular subject in order to be eligible to appear in final university examination of that subject.

Teaching and Assessment Schedule

THEORY	11.15 AM to 12.15 PM (Monday to Saturday)
	7.00 AM to 8.00 AM (Every Tuesday & Friday)
PRACTICALS	DISSECTION 12.15 PM to 2.00 PM (Monday to Saturday)
	HISTOLOGY Batch wise, depending on available during dissection hours

Batch-2013

TIME TABLE TENTATIVE TEACHING SCHEDULE

Upper Limb	From 1 st Aug. 13 to 9 th Sept. 13
Lower Limb	From 10 th Sept 13 to 30 th Oct. 13
Thorax	From 31 st Oct. 13 to 2 nd Dec. 13
Abdomen and Pelvis	From 3 rd Dec. 13 to 30 th Jan 14
Brain	From 1 st Feb. 2014 to 5 th March. 2014
Head and Neck	From 7 th March 2014 to 3 rd May 2014

TENTATIVE DATES OF ASSESSMENT

1. Part completion tests – 9th Sept. 13, 30th Oct. 13, 2nd Dec. 13, 31st Jan. 2014, 6th March 2014.
2. First Semester examination – 1st Week of Jan. 2014
3. Second Semester examination- End of May, 2014
4. University Examination (Please refer to University notification only) - Expected dates June- July 2014.

TIME

First professional examination (1st MBBS examination) shall be held during second semester of phase-I of training of MBBS course.

DISTRIBUTION OF MARKS

1. Theory

Two papers of 50 marks each (one applied question of 10 marks in each paper) 100 marks

2. Oral (viva voce)

20 marks

3. Practical

40 marks

4. Internal Assessment -includes

40 marks (Theory-

20 marks, practical -20 marks)

A. Continuous Assessment

10 marks

B. 1st semester

15 marks

C. 2nd semester

15 marks

Total

200 marks

THEORY				ORAL	INTERNAL ASSESSMENT	TOTAL	PRACTICAL		TOTAL	G. TOTAL
Paper I Paper II				20	20	140	University Internal Assessment		60	200
A	B	A	B				40			
26	24	26	24				20			

Pass marks 50% separately in theory and practical

Requirement for Practical Classes:

1. Laboratory Coat (Apron)
(White, long sleeved and knee length)
2. Instruments- Scissors (2)-Long and short, Forceps(2)-Long and blunt and short and pointed tooth forcep, Bard parker knife and Scalpel(1).
3. Cunningham's manual of practical anatomy Vol. I, II & III (Mandatory to bring during dissection classes).
4. Gloves (optional)
5. Histology practical note book.
6. Pencils (HB, lilac and violet), eraser, compass etc.
7. Practical note book for Gross Anatomy .Drawing sheets and lined sheets.
8. Gross work book by Gandotra.

Recommended Books

Compulsory:

For General Anatomy

1. General Anatomy by B.D.Chaurasia Or
2. By Rawlani

For Gross Anatomy-

1. Human Anatomy by B.D.Chourasia, vol.I, II & III. Or
Textbook of Anatomy by Inderbir singh, vol. I, II & III.
2. Gross workbook by Gandotra.
3. Gray's Anatomy for Students.

For Neuroanatomy-

1. Neuroanatomy by Inderbir Singh. Or
2. By Bhagat and poddar Or
3. By Vishram Singh

For Embryology-

1. Langman's Medical Embryology Or
2. Human Embryology by Inderbir Singh

For Histology-

1. Histology Practical Notebook by Prasad.

Reference books:

1. Gray's Anatomy.
2. Text book of Histology ,A practical guide by JP Gunasegadan (ELSEVIER)
3. Atlas of Human histology by Mariano S H Difiore.
4. Atlas of Human Anatomy(with CD ROM)- Singh
5. Clinical anatomy for students- Neeta V.Kulkarni
6. Surgical anatomy by mcGregor's..
7. Text book of Anatomy with colour Atlas- Inderbir Singh
8. Osteology by Inderbir Singh
9. Osteology by Sahana and by Frazer
10. A functional approach to Neuroanatomy by House and Pensky
11. Clinical Neuroanatomy by Snell.

TEACHING SCHEDULE OF UPPER LIMB & GENERAL ANATOMY

EFFECTIVE FROM 1st August 2013

Lectures

S.No	Date	Topic
1.	7.8.13	Introduction
2.	10.8.13	Mammary Gland
3.	12.8.13	Brachial plexus
4.	14.8.13	Axilla
5.	22.8.13	Shoulder Joint
6.	24.8.13	Hand
7.	4.9.13	Nerves of Upper Limb
8.	5.9.13	Nerve lesions
9.	9.9.13	PART COMPLETION TEST

S.No	Date	Topic
1.	2 & 3.8.13	Introduction
2.	5.8.13	Terminology I
3.	6.8.13	Terminology II
4.	13.8.13	Locomotor System I (Bones)
5.	23.8.13	Locomotor System III (Muscles)
6.	29.8.13	Nervous System
7.	3.9.13	Cardio Vascular System
8.	6.9.13	Connective Tissue

Demonstrations

S.No	Date	Topic
1.	6.8.13	General terminology III
2.	13.8.13	Introduction to Genetics
3.	16.8.13	Locomotor System II (Joints)
4.	23.8.13	Genetics I
5.	27.8.13	Genetics II
6.	30.8.13	Tutorial
7.	3.9.13	Genetics III
8.	6.9.13	Tutorial

S.No	Date	Topic
1.	8.8.13	Morphology of human skeleton,types of bones-overview with Clavicle
2.	9.8.13	Pectoral region
3.	16.8.13	Back
4.	17.8.13	Scapula with Scapular region
5.	19.8.13	Humerus
6.	21.8.13	Arm
7.	24.8.13	Radius and Ulna
8.	26.8.13	Forearm (Anterior compartment)
9.	27.8.13	Forearm (Posterior compartment)
10.	30.8.13	Skeleton of hand I
11.	31.8.13	Palm
12.	6.9.13	Upper limb-Radiology

Dissection

S.No.	Date	Topic
1.	2.8.13	Introduction
2.	3.8.13	Tissues of the body
3.	5.8.13	Pectoral region
4.	6.8.13	Pectoral region and mammary gland I
5.	7.8.13	Pectoral region and mammary gland II
6.	8.8.13	Pectoral region
7.	10.8.13	Axilla and its contents I
8.	12.8.13	Axilla and its contents II
9.	13.8.13	Axilla and Brachial plexus I
10.	14.8.13	Axilla and Brachial plexus II
11.	16.8.13	Back I
12.	17.8.13	Back II
13.	19.8.13	Scapular Region
14.	21.8.13	Detachment of Limb and sternoclavicular joint
15.	22.8.13	Shoulder Joint
16.	23.8.13	Front of Arm I
17.	24.8.13	Front of Arm II
18.	26.8.13	Back of Arm
19.	27.8.13	Front of Forearm I
20.	29.8.13	Front of Forearm II
21.	30.8.13	Front of Forearm III
22.	31.8.13	Palm I
23.	2.9.13	Palm II
24.	3.9.13	Palm III
25.	4.9.13	Back of forearm and dorsum of Hand I
26.	5.9.13	Back of forearm and dorsum of Hand II
27.	6.9.13	Elbow, Wrist and joint of Hand

NOTE:

1. Dissection will be conducted and helped by Senior demonstrator & P.G Students. It will be supervised by senior faculty.
2. Days when there is no Lecture & Demonstrations scheduled, dissections will be held from 11AM to 2PM.

TEACHING SCHEDULE OF LOWER LIMB
EFFECTIVE FROM 10th September 2013

Lectures

Every Tuesday- Embryology & Friday- Histology

S.No.	Date	Topic
1.	11.9.13	Femoral I (Deep fascia, cutaneous nerves, femoral triangle boundaries and muscles)
2.	12.9.13	Femoral II (Contents of femoral triangle and femoral sheath)
3.	19.9.13	Hip Joint
4.	25.9.13	Knee Joint
5.	24.10.13	Nerve Injuries & Joints of foot
6.	29.10.13	Revision
7.	30.10.13	PART COMPLETION TEST

Demonstrations

S.No.	Date	Topic
1.	13.9.13	Genetics IV
2.	17.9.13	Hip bone(R)
3.	20.9.13	Tutorial
4.	24.9.13	Femur(R)
5.	27.9.13	Tutorial
6.	1.10.13	Patella (R)
7.	4.10.13	Tutorial
8.	8.10.13	Genetics V
9.	11.10.13	Fibula (R)
10.	15.10.13	Tutorial
11.	18.10.13	Tutorial
12.	22.10.13	Skeleton of foot
13.	25.10.13	Fibula (R)
14.	29.10.13	Revision of Osteology

S.No.	Date	Topic
1.	16.9.13	Medial compartment of thigh and Adductor canal
2.	18.9.13	Gluteal Region Muscles
3.	21.9.13	Gluteal Region Muscles- Structures undercover of Gluteus Maximus
4.	23.9.13	Popliteal Fossa and hamstring muscles
5.	26.9.13	Anterior compartment of leg and dorsum of foot
6.	28.9.13	Muscles of posterior and lateral compartment of leg
7.	30.9.13	Nerves and Vessels of Back of leg
8.	3.10.13	Anastomosis around knee joint and sole of foot upto deep fascia
9.	7.10.13	Muscles of sole of foot
10.	9.10.13	Nerves and Vessels of sole
11.	10.10.13	Ankle joint veins and lymphatics of lower extremity
12.	14.10.13	Arches of foot
13.	17.10.13	Venous drainage of lower limb
14.	19.10.13	Tibia
15.	21.10.13	Fibula
16.	23.10.13	Cross sectional anatomy
17.	26.10.13 (From 11AM to 2PM)	Radiology
18.	28.10.13 (From 11AM to 2PM)	Surface marking of Lower limb

Ostology (During dissection hours)

S.No.	Date	Topic
1.	12.9.13	Hip bone - I
2.	13.9.13	Hip bone - II
3.	19.9.13	Femur-I
4.	20.9.13	Femur-II and Patella
5.	23.10.13	Skeleton of foot -II

NOTE:

1. All the demonstrations will be taken by senior demonstrators and PG students.

Dissection

S.No.	Date	Topic
1.	10.9.13	Deep fascia , cutaneous nerves, femoral triangle : boundaries & muscles
2.	11 & 12.9.13	Contents of femoral triangle and femoral sheath
3.	13 & 16.9.13	Medial compartment of thigh and Adductor canal
4.	17 & 18.9.13	Gluteal Region Muscles
5.	19.9.13	Gluteal Region Muscles- Structures undercover of Gluteus Maximus
6.	20 & 21.9.13	Popliteal Fossa and hamstring muscles
7.	23 & 24.9.13	Hip Joint
8.	25 & 26.9.13	Anterior compartment of leg and dorsum of foot
9.	27,28 & 30.9.13	Muscles of posterior and lateral compartment of leg
10.	1 & 3.10.13	Nerves and Vessels of sole
11.	4 & 7.10.13	Anastomosis around knee joint and sole of foot upto deep fascia
12.	14 & 15.10.13	Muscles of sole of foot
13.	17.10.13	Nerves and Vessels of sole
14.	18.10.13	Knee Joint
15.	19 & 21.10.13	Ankle joint veins and lymphatics of lower extremity
16.	22 & 23.10.13	Arches of foot
17.	24,25 & 26.10.13	Joints of foot
18.	28 & 29.10.13	Revision
19.	30.10.13	PCT (lower limb)

NOTE:

1. Dissection will be conducted and helped by Senior demonstrator & P.G Students. It will be supervised by senior faculty.
2. Days when there is no Lecture & Demonstrations scheduled, dissections will be held from 11AM to 2PM.

TEACHING SCHEDULE OF THORAX

EFFECTIVE FROM 31ST October 2013

S.No	Date	Topic
1.	31.10.13	Introduction of thorax
2.	11.11.13	Thoracic Wall and inlet
3.	14.11.13	Lungs and pulmonary plexus
4.	15.11.13	Bronchopulmonary Segment
5.	18.11.13	Heart I (chambers of heart)
6.	19.11.13	Heart II (blood supply of heart)
7.	2.12.13	PART COMPLETION TEST

Lectures

Every Tuesday- Embryology

&

Friday- Histology

Demonstrations

S.No	Date	Topic
1.	12.11.13	Sternum
2.	19.11.13	Thoracic vertebra
3.	22.11.13	Oesophagus
4.	26.11.13	Rib I
5.	29.11.13	Rib II

S.No	Date	Topic
1.	12.11.13	Intercostal space - nerves vessels and muscles
2.	13.11.13	Divisions of Mediastinum & pleura
3.	16.11.13	Introduction of heart & pericardium
4.	20.11.13	Arch of aorta & superior vena cava
5.	21.11.13	Trachea & cardiac plexus
6.	22.11.13	Azygous vein & thoracic duct
7.	23.11.13	Sympathetic system & joints of thorax
8.	25.11.13	Diaphragm & mechanism of respiration
9.	27.11.13	Cross sectional anatomy
10.	28.11.13	Surface anatomy
11.	30.11.13	Radiology

Dissection

S.No.	Date	Topic
1.	31.10.13	Introduction
2.	11.11.13	Thoracic wall (Thoracic Cage & Inlet)
3.	12.11.13	Intercostal Space I
4.	13.11.13	Intercostal Space II (Nerves, Vessels & Muscles)
5.	14.11.13	Pleura & Lungs
6.	15.11.13	Lungs & Brouchopulmonary Segments
7.	18.11.13	Anterior & Middle Mediastinum- I (Introduction of Heart & Pericardium)
8.	19 & 20.11.13	Anterior & Middle Mediastinum- II (Heart Chambers & Blood Supply)
9.	21 & 22.11.13	Superior Mediastinum- I (Arch. of Aorta & SVC)
10.	23.11.13	Superior Mediastinum-II (Trachea & Cardiac Plexus)
11.	25.11.13	Posterior Mediastinum - I (Oesophagus & Cardiac Plexus)
12.	26.11.13	PM II (Azygos vein & Thoracic duct)
13.	27.11.13	PM III (Sympathetic Chain)
14.	28.11.13	Joint of Thorax
15.	29 & 30.11.13	Revision

NOTE:

1. Dissection will be conducted and helped by Senior demonstrator & P.G Students. It will be supervised by senior faculty.
2. Days when there is no Lecture & Demonstrations scheduled, dissections will be held from 11AM to 2PM.
3. Histology on all week days as per batch conducted by table incharge.
4. If any staff on leave/preoccupied with some other duty, will make an alternative arrangement on his/her own for lecture/demonstration/practical.

TEACHING SCHEDULE OF ABDOMEN

EFFECTIVE FROM 3rd December 2013

Lectures

Every Tuesday- Embryology & Friday- Histology

S.No.	Date	Topic
1.	4.12.13	Anterior abdominal wall
2.	11.12.13	Male genital organ
3.	18.12.13	Portal vein
4.		Kidney
5.		Ureter & Suprarenal gland

1st Semester exam from 1st January 2014 to 15th January 2014.

Demonstrations

S.No.	Date	Topic
1.	5.12.13	Inguinal region
2.	7.12.13	Peritoneum & peritoneal recess I
3.	9.12.13	Peritoneum & peritoneal recess II
4.	9.12.13	Lumbar vertebra (During D.H)
5.	12.12.13	Stomach
6.	14.12.13	Duodenum, Small & Large intestine
7.	16.12.13	Diaphragm
8.	19.12.13	Pancreas & Spleen
9.	21.12.13	Coeliac trunk
10.		Liver
11.		Biliary apparatus

Dissection

S.No.	Date	Topic
1.	3,4,5 & 6.12.13	Anterior abdominal wall (Introduction, muscles, vessels & nerves & Rectus sheath)
2.	7 & 9.12.13	Inguinal region
3.	10.12.13	Male genital organs
4.	11 & 12.12.13	Peritoneum I
5.	13 & 14.12.13	Peritoneum II
6.	16 & 17.12.13	Coeliac trunk
7.	18.12.13	Stomach
8.	19.12.13	Mesentry & Mesenteric vessels
9.	20.12.13	Small intestine
10.	21.12.13	Duodenum, pancreas & Spleen
11.		Liver
12.		Biliary system & portal vein
13.		Kidney, ureter & suprarenal gland
14.		Diaphragm

TEACHING SCHEDULE OF PELVIC REGION

EFFECTIVE FROM 16 January 2013

Lectures

Every Tuesday- Embryology & Friday- Histology

S.No.	Topic
1.	Perineum I (Introduction & Ischiorectal fossa)
2.	Perineum II (Urogenital triangle & Perineal pouch)
3.	Pelvic viscera I (Urinary bladder & Ductus deferens)
4.	Pelvic viscera II (Prostate & Urethra)
5.	Autonomic innervations of pelvic & abdominal organ

Demonstrations

S.No.	Topic
1.	Sacrum (Revision)
2.	Bony Pelvis (Revision)
3.	Pelvic viscera-III (Uterus, Ovary & Uterine tube)
4.	Surface anatomy (Revision)

Demonstrations

S.No.	Topic
1.	Sacrum
2.	Bony pelvis
3.	Pelvic fascia, pelvic diaphragm & sacroiliac joint
4.	Rectum & Anal canal
5.	Radiology of Abdomen & Pelvis
6.	Sectional & Surface anatomy of abdomen & pelvis

Dissection

S.No.	Topic
1.	Posterior Abdominal wall- I
2.	Posterior Abdominal wall- II
3.	Pelvic Viscera-I, II, III, IV
4.	Rectum
5.	Anal Canal
6.	Pelvic wall-I
7.	Pelvic wall-II
8.	Revision

TEACHING SCHEDULE OF BRAIN

Lectures

Every Tuesday- Embryology

&

Friday- Histology

S.No.	Topic
1.	Scalp
2.	Brain stem nuclei and Reticular formation
3.	Ascending Pathway (SC-I)
4.	Descending Pathway (SC-II)
5.	Cerebrum
6.	Cerebellum
7.	Thalamus
8.	Hypothalamo-hypophyseal system
9.	White matter and Internal Capsule
10.	Limbic System

Demonstrations

S.No.	Topic
1.	Cranial Cavity
2.	External Features and Meninges of Brain and spinal Cord
3.	Dural venous sinuses
4.	Blood supply of Brain and Spinal Cord
5.	Brain Stem (Medulla)
6.	Brain Stem (Pons and fourth ventricle)
7.	Brain Stem (Mid Brain)
8.	Diencephalon and Third Ventricle
9.	Lateral Ventricle and Basal Ganglia

Dissection

S.No.	Topic
1.	Scalp
2.	Removal of Brain
3.	Introduction of Brain
4.	Dura mater and subarachnoid cisterns – C.S.F. circulation
5.	Dural Venous Sinuses
6.	Blood Supply of Brain
7.	Spinal Cord
8.	Medulla Oblongata
9.	Pons
10.	Cerebellum
11.	Fourth Ventricle
12.	Cerebrum
13.	Mid Brain
14.	White Matter and Internal Capsule
15.	Third Ventricle and Lateral Ventricle
16.	Basal Ganglia
17.	Thalamus
18.	Hypothalamus

TEACHING SCHEDULE OF HEAD & NECK

Lectures

Every Tuesday- Embryology

&

Friday- Histology

S.No.	Topic
1.	Cervical Fascia
2.	Parotid gland & Lacrimal apparatus
3.	Orbit – I (N. & vessels)
4.	Orbit – II (Muscles)
5.	T.M.J.
6.	Hyoglossus & Submandibular region
7.	Venous drainage of HFN & Subclavian artery
8.	Cranial n V & VII
9.	IX, X & XI Cranial n.
10.	I.T.F. – I (Boundaries & Muscles)
11.	I.T.F. – II (N:S & vessels)
12.	Thyroid gland Palatine tonsil & Auditory Tube
13.	Palatine tonsil & Auditory tube
14.	Palate, Pharnx & Mech. of deglut ⁿ .
15.	Nose & PNS & Pterygopalating fossa.
16.	Larynx & Phonation
17.	Ear

Demonstrations

S.No.	Topic
1.	Introduction of H.F.N. & Norma I
2.	Facial muscles & deep structures of face
3.	Post triangle & Ext. Jug.V.
4.	Revision
5.	Suboccipital Δ
6.	Muscular Δ , Digastric Δ & Submental Δ
8.	Carotid Δ & E.C.A.
9.	Nose & PNS & Pterygopalating fossa.
10.	Scalenus muscle & Styloid apparatus.
11.	Tongue
13.	Cross sectional anatomy of H.f.N.
14.	Radiology
15.	Surface Anatomy
16.	Revision

Demonstrations/ Tutorial / Osteology (Demo.)

S.No.	Topic
1.	Norma II (Basalis)
2.	Frontal (During dissection hours)
3.	Cervical vertebra
4.	Tutorial
5.	Occipital bone
6.	Parietal bone
8.	Bony orbit
9.	Revision
10.	Maxilla & Zygomatic bone
11.	Sphenoid
13.	Temporal
14.	Mandible & Hyoid bone
15.	Tutorial

Dissection

S.No.	Topic
1.	Scalp
2.	Dural venous sinuses
3.	Removal of Brain
4.	Superficial dissection of face I, II, III
5.	Deep dissection of face I, II
6.	Side of neck & Face I, II, III
7.	Side of Neck I, II, III
8.	Suboccipital triangle I, II
9.	Orbit
10.	Anterior triangle of Neck I, II
11.	Deep dissection of neck I, II, III, IV
12.	Temporal & Infratemporal region I, II
13.	Submandibular region I, II
14.	Mouth & Pharynx I, II
15.	Nose & paranasal sinuses I & II
16.	Larynx
17.	Ear
18.	Craniovertebral joints
19.	Eyeball
20.	REVISION

DR. SAMPURNANAND MEDICAL COLLEGE, JODHPUR

DEPARTMENT OF PHYSIOLOGY Teaching Faculty

Professor & Head	Dr. N.D.Soni
Professor	Dr. Jayant Kumar
Professor (Biophysics)	Dr. R.K. Vyas
Associate professor	Dr. Raghuveer Choudhary
Senior Demonstrator	Dr. Prakash Joshi
	Dr. Manoj Bundela
	Dr. Sonika Choudhary
	Dr. Rajani
	Ms. Kamla Choudhary
	Ms. Urmila Choudhary
	Ms. Sunita Choudhary

DEPARTMENT OF PHYSIOLOGY, DATE WISE THEORY SCHEDULE

TENTATIVE TIME TABLE OF PHYSIOLOGY THEORY CLASSES FROM 01.08.13 to 23.12.13

TENTATIVE TIME TABLE OF PHYSIOLOGY		
S. No.	Date	Topics
1	01.08.13	Orientation
2	02.08.13	Blood
3	03.08.13	Blood
4	05.08.13	Blood
5	06.08.13	Blood
6	07.08.13	Blood
7	08.08.13	Blood
8	10.08.13	Blood
9	12.08.13	Blood
10	13.08.13	Blood
11	14.08.13	Blood
12	16.08.13	Blood
13	17.08.13	Blood
14	19.08.13	Blood
15	21.08.13	Blood
16	22.08.13	Blood
17	23.08.13	Blood
18	24.08.13	Blood
19	26.08.13	Blood
20	27.08.13	Blood
21	29.08.13	Blood
22	30.08.13	Blood
23	31.08.13	Cell Biophysics
24	02.09.13	ANS

THEORY CLASSES FROM 01.08.13 to 24.12.13		
42	25.09.13	Digestion
43	26.09.13	Respiration
44	27.09.13	Muscle & Nerve
45	28.09.13	Digestion
46	30.09.13	Respiration
47	01.10.13	Muscle & Nerve
48	03.10.13	Digestion
49	04.10.13	Respiration
50	07.10.13	Muscle & Nerve
51	08.10.13	Digestion
52	09.10.13	Respiration
53	10.10.13	Muscle & Nerve
54	11.10.13	Digestion
55	14.10.13	Respiration
56	15.10.13	Muscle & Nerve
57	17.10.13	Digestion
58	18.10.13	Respiration
59	19.10.13	Muscle & Nerve
60	21.10.13	Digestion
61	22.10.13	Respiration
62	23.10.13	Muscle & Nerve
63	24.10.13	Digestion
64	25.10.13	Respiration
65	26.10.13	Muscle & Nerve
66	28.10.13	Digestion

25	03.09.13	Respiration
26	04.09.13	Cell Biophysics
27	05.09.13	ANS
28	06.09.13	Respiration
29	09.09.13	Cell Biophysics
30	10.09.13	ANS
31	11.09.13	Respiration
32	12.09.13	Cell Biophysics
33	13.09.13	ANS
34	16.09.13	Respiration
35	17.09.13	Cell Biophysics
36	18.09.13	Digestion
37	19.09.13	Respiration
38	20.09.13	Cell Biophysics
39	21.09.13	Digestion
40	23.09.13	Respiration
41	24.09.13	Muscle & Nerve
84	28.11.13	Sp. Senses
85	29.11.13	Excretion
86	30.11.13	Reproduction
87	02.12.13	Sp. Senses
88	03.12.13	Excretion
89	04.12.13	Reproduction
90	05.12.13	Sp. Senses
91	06.12.13	Excretion
92	07.12.13	Reproduction
93	09.12.13	Sp. Senses
94	10.12.13	Excretion
95	11.12.13	Reproduction

67	29.10.13	Excretion
68	30.10.13	Muscle & Nerve
69	31.10.13	Digestion
70	11.11.13	Excretion
71	12.11.13	Reproduction
72	13.11.13	Digestion
73	14.11.13	Excretion
74	16.11.13	Reproduction
75	18.11.13	Digestion
76	19.11.13	Excretion
77	20.11.13	Reproduction
78	21.11.13	Sp. Senses
79	22.11.13	Excretion
80	23.11.13	Reproduction
81	25.11.13	Sp. Senses
82	26.11.13	Excretion
83	27.11.13	Reproduction
96	12.12.13	Sp. Senses
97	13.12.13	Excretion
98	14.12.13	Reproduction
99	16.12.13	Sp. Senses
100	17.12.13	Excretion
101	18.12.13	C N S
102	19.12.13	Sp. Senses
103	20.12.13	Excretion
104	21.12.13	C N S
105	23.12.13	Sp. Senses
106	24.12.13	Excretion

DETAILED LIST OF TOPICS TO BE COVERED IN EACH SYSTEM

- 1. General Physiology & Biophysics** **Classes 06**
 - a. Molecular structure of cell membrane and its functions. Types of transport across cell membrane.
 - b. Intercellular connections.
 - c. Resting membrane potential and Action potential.
 - d. Homeostasis.
 - e. Physical principles governing flow of blood in heart and blood vessels (to be taught with CVS).
 - f. Physical principles governing air flow in respiratory passage (to be taught with Respiratory System).

- 2. Nerve muscle physiology:** **10**
 - a. Neurone: Structure, degeneration, regeneration, denervation hypersensitivity, electro genesis of action potential.
 - b. Neuro muscular transmission and its clinical application.
 - c. Functional anatomy of skeletal muscle. Mechanism of muscle contraction and relaxation, contracture, rigor mortis, isotonic & isometric contraction, energy sources and metabolism, motor unit, size principle, recruitment.
 - d. Types of smooth muscles and mechanism of contraction.

- 3. Blood:** **22**
 - a. Composition and functions of blood.
 - b. Plasma proteins – types, origin, functions, applied importance
 - c. R.B.C – morphology, erythropoiesis, functions, fate
 - d. ESR and its clinical importance
 - e. Haemoglobin – structure, types, compounds of haemoglobin, abnormal haemoglobin, RBC indices - PCV, MCV, MCH, MCHC, Colour index.
 - f. Anaemia - Types with examples
 - g. Polycythemia
 - h. Iron metabolism
 - i. WBC Types, morphology, leucopoiesis, functions

- j. Immunity: Humoral & cellular, mechanism of immune response, immunoglobulins.
- k. Monocyte – Macrophage system.
- l. Platelets: structure and functions
- m. Haemostasis: Role of platelets, Blood coagulation, anticlotting mechanisms, anticoagulants.
- n. Bleeding disorders: Purpura, Hemophilia, Vitamin K deficiency, tests for bleeding disorders.
- o. Thrombotic disorders: Thrombosis embolism
- p. Blood group: different systems, Blood grouping & cross matching and clinical importance.
- q. Blood transfusion: Hazards of blood transfusion, storage of blood

4. Gastrointestinal System:

14

- a. Characteristics of G.I wall
- b. Neural control of G.I function.
- c. G.I. Hormones
- d. Saliva: Composition, Functions, control of secretion.
- e. Gastric juice: Composition, mechanism of secretion, functions, regulation of secretion, mucosal barrier, peptic ulcer, gastrectomy, Dumping Syndrome, gastric function tests (to be taught in Biochemistry)
- f. Pancreatic juice: Composition, functions, regulation, applied importance
- g. Liver & Gall Bladder: Composition & functions of bile, control of secretion, functions of gall bladder, gall stones, enterohepatic circulation, jaundice, functions of liver & L.F.T.
- h. Small intestine: Composition & regulation of secretion and functions of intestinal juice.
- i. Large intestine: Functions
- j. Digestion & Absorption: (to be taught in Biochemistry)
- k. Movements of GI tract: Mastication deglutition, gastric motility and emptying, intestinal motility with reference to BER, small bowel wave, peristalsis, paralytic ileus defecation.

I. Respiratory Systems:

14

- m. Functional Anatomy and functions of respiratory system.
- n. Mechanics of respiration.
- o. Lung volumes and capacities: definition, normal values, their measurement and clinical importance
- p. Pulmonary ventilation,, alveolar ventilation, dead space.
- q. Diffusion of gases across alveocapillary membrane, diffusing capacity.
- r. Pulmonary circulation.
- s. Oxygen & carbon dioxide transport in blood.
- t. Pressure changes during ventilation, pressure volume relationship including surfactant and compliance, airway resistance, work of breathing
- u. Control of respiration: neural control, chemical control, response to exercise, periodic breathing.
- v. Hypoxia including high altitude physiology and acclimatization, asphyxia, cyanosis, oxygen therapy and toxicity.
- w. Effects of increased barometric pressure – nitrogen narcosis, high pressure nervous syndrome, decompression sickness (Caissons disease).
- x. Artificial respiration
- y. Lung function tests.

5. Cardio-vascular system:

22

- a. Functional anatomy of heart and blood vessels.
- b. Properties of cardiac muscle.
- c. Origin & spread of cardiac impulse, heart block, cardiac arrhythmias.
- d. ECG: leads, principles of normal recording, normal waves & internal & their interpretations, electrical axis of the heart including left and right axis deviation, clinical uses of ECG.
- e. Cardiac cycle: Mechanical events, pressure changes in atria, ventricles, aorta, pulmonary artery and jugular vein. End diastolic volume, end systolic volume, ejection fraction.
- f. Heart sounds: normal character, physiological basis of splitting, murmur.
- g. Cardiac output: definition, determination, factors regulating, venous return.
- h. Arterial pulse: normal & abnormal

- i. Physical principles governing flow of blood in heart & blood vessels, laminar flow, turbulent flow, Reynolds number, peripheral resistance, Poiseuille-Hagen formulae.
- j. Arterial pressure: total pressure, lateral pressure, Bernoulli's principle, importance of different pressure, measurement, factors controlling B.P effects of gravity, posture and exercise on B.P Hypertension & hypotension
- k. Regulation of CVS: local regulation including auto regulation of blood flow, vasoconstrictors & vasodilators, substances secreted by endothelium including NO. systemic regulation – humoral & neural, innervation of heart and blood vessels, cardiovascular centers, cardiovascular reflexes, regulation of B.P & heart rate.
- l. Regional circulation: coronary circulation, cutaneous circulation, pulmonary cerebral, renal circulation will be taught in respective systems.
- m. Cardio – vascular adjustments in health & disease: effects of exercise, haemorrhage & shock.

6. Endocrine system:

22

- a. General organization of endocrine glands & control system
- b. Mechanism of hormone action.
- c. Biosynthesis, regulation of secretion, transport, fate and actions hormones secreted from Hypothalamus, Pituitary, Thyroid, Adrenal cortex, adrenal medulla, Parathyroid (along with calcium metabolism) and endocrine pancreas, importance to be given to clinical conditions associated with hypo and hyper functions of these glands.

7. Excretory System:

12

- a. Functional anatomy of kidney, nephron-structure, parts, function, types,
- b. Juxtaglomerular apparatus: autoregulation, peculiarities, measurement.
- c. Glomerular filtration: filtration barrier, forces governing filtration, measurement.
- d. Tubular functions: reabsorption, secretion, T_m values
- e. Regulation of ECF – volume, osmolality and electrolytes
- f. Acid base balance (to be taught in biochemistry)
- g. Micturition
- h. Renal function tests, renal clearance, abnormal constituents of urine
- i. Excretory functions of skin

RECOMMENDED THEORY BOOKS

Theory

- | | | |
|----|-----------------------------------|------------------------------|
| 1. | Medical physiology | A. C. Guyton |
| 2. | Review of medical physiology | W. F. Ganong |
| 3. | Medical Physiology
Sembulingam | Sembulingam &
Sembulingam |

Practical

- | | | |
|----|----------------------|------------|
| 1. | Practical physiology | C. L. Ghai |
|----|----------------------|------------|

PRACTICAL SCHEDULE

Whole batch will be divided into four batches. One batch will go to PSM, Another to Biochemistry and two batches will come to physiology department. Each of the two batches will be given practical exercises simultaneously in the hematology and Amphibian Labs from Monday to Thursday. Practical Demonstrations will be given on Friday and Saturday. Therefore each student is going to be exposed to a specific experiment once a week.

Number of the working weeks falling within the period from 1st Aug to 23rd Dec are 19. But due to the gazetted and local holidays, the batch which is scheduled to come on that day, will be lagging behind in comparison to other batches. To compensate for this unavoidable holiday's loss, we will have to provide at least two extra revision weeks for left out topics. So practically we will be having 17 weeks for practical training during the above said period.

PRACTICAL CLASSES SCHEDULED TO BE HELD IN HEMATOLOGY LAB.

FROM 1st. AUG. TO 21st DEC. 2013

S. No.	TOPICS	WEEKS	DATES
1	MICROSCOPE	1	05.08.13 to 10.08.13
2	COMMON OBJECTS	1	12.08.13 to 17.08.13
3	BLOOD FILM PREPARATION & STAINING	3	19.08.13 to 07.09.13
4	IDENTIFICATION OF WBCs	2	09.09.13 to 21.09.13
5	DLC	2	23.09.13 to 12.10.13
6	TLC	2	14.10.13 to 19.10.13
7	TRBC	1	21.10.13 to 26.10.13
8	HEMOGLOBIN ESTIMATION, ARNETH COUNT	1	28.10.13 to 31.10.13
9	BLOOD GROUPS, BT & CT	1	11.11.13 to 16.11.13
10	BLOOD INDICES	1	18.11.13 to 23.11.13
11	ESR, PCV	1	25.11.13 to 30.11.13
12	PRACTICALS OF LEFT OUT TOPICS & REVISION	3	02.12.13 to 21.12.13

**PRACTICAL CLASSES SCHEDULED TO BE HELD IN AMPHIBIAN LAB.
FROM 1st. AUG. TO 21st DEC. 2013**

S. No.	TOPICS	WEEKS	DATES
1	AMPHIBIAN EXPERIMENT INSTRUMENTS	1	05.08.13 to 08.08.13
2	GN MUSCLE NERVE PREPARATION	1	12.08.13 to 15.08.13
3	RECORDING OF SMC	1	19.08.13 to 22.08.13
4	EFFECT OF TEMPERATURE ON SMC	1	26.09.13 to 29.09.13
5	EFFECT OF TWO SUCCESSIVE STIMULI	1	02.09.13 to 05.09.13
6	CLONUS	1	09.09.13 to 12.09.13
7	TETANUS	1	23.09.13 to 26.09.13
8	EFFECT OF LOAD	1	30.09.13 to 03.10.13
9	GENESIS OF FATIGUE DETERMINATION OF NERVE CONDUCTION	1	07.10.13 to 10.10.13
10	VELOCITY	1	14.10.13 to 17.10.13
11	RECORDING OF NORMAL CARDIOGRAM	1	21.10.13 to 24.10.13
12	EFFECT OF TEMPERATURE ON CARDIOGRAM	1	28.10.13 to 31.10.13
14	EFFECT OF STIMULATION OF VAGUS NERVE	1	11.11.13 to 16.11.13
15	EFFECT OF ELECTROLYTES ON FROG'S HEART	1	18.11.13 to 23.11.13
16	PRACTICALS OF LEFT OUT TOPICS & REVISION	4	25.11.13 to 19.12.13

EXAMINATION SYSTEM

Two Internal Assesment Examinations will held

- (i) January 2014
- (ii) June 2014

DISTRIBUTION OF THEORY & PRACTICAL MARKS

THEORY -

Theory Paper - I	50 Marks
Theory Paper - II	50 Marks
Internal Assesments	20 Marks
Viva	20 Marks
Intermnal Assesment	20 Marks
Total	140 Marks

PRACTICAL

Practical Exam	40 Marks
Practcal Internal Assesment	20 Marks
Total	60 Marks

Grand Total of Theory & Practical 140 +60 = 200 Marks

DR. SAMPURNANAND MEDICAL COLLEGE, JODHPUR

DEPARTMENT OF BIOCHEMISTRY

STAFF

Name of Doctor	Post
Dr (Mrs) Ranjana Mathur	Senior Professor & Head
Dr. Jairam Rawtani	Assoc. Professor
Dr. Nitin Sharma	Assistant Professor
Dr Monika Gupta	Assistant Professor
Dr.Manisha Gurjar	Sr.Demonstrator
Dr. Mota Ram	Sr.Demonstrator
Miss Ritu Gupta	Sr.Demonstrator
Ms Mamta Swami	Sr. Demonstrator
Dr Hemant Singh	Sr. Demonstrator
Ms Anukriti Choudhary	Sr.Demonstrator
Dr Ankita Agarwal	Sr. Demonstrator
Dr Swati Duggal	Sr. Demonstrator
Mr Om Prakash	Sr.Demonstrator
Ms Monika Yadav	Sr.Demonstrator
Dr Kanaram Patel	Sr.Demonstrator

Pattern of Examination in Department of Biochemistry

Ist Semester Examination

Theory

Course-All what is taught from day 1 to 24st December 2013.

Marks-Theory Paper will have 2 sections

Section A-26 marks

Students will have to attempt any 3 questions out of 4 questions.

Question number 1 is compulsory.

Section B-24 marks

Students will have to attempt 3 questions.

Viva

Grand viva on theory will be of 10 marks.

Practicals

Practicals and spot viva will be of 40 marks.

IInd Semester Examination

Theory

Course-All what is taught after 1st semester.

Marks-Theory Paper will have 2 sections

Section A-26 marks

Students will have to attempt any 3 questions out of 4 questions.

Question number 1 is compulsory.

Section B-24 marks

Students will have to attempt 3 questions.

Viva

Grand viva on theory will be of 10 marks.

Practicals

Practicals and spot viva will be of 40 marks.

University Examination

RUHS conducts the examination.

Theory

Paper 1-50 marks

Course-Chemistry, Metabolism, Vitamins and Enzymes

Marks-Theory Paper will have 2 sections

Section A-26 marks

Students will have to attempt any 3 questions out of 4 questions.

Question number 1 is compulsory.

Section B-24 marks

Students will have to attempt 3 questions.

Paper 2-50 marks

Course-Molecular Biology, Immunology, Regulation of metabolism and Clinical Biochemistry

Marks-Theory Paper will have 2 sections

Section A-26 marks

Students will have to attempt any 3 questions out of 4 questions.

Question number 1 is compulsory.

Section B-24 marks

Students will have to attempt 3 questions.

Practical and Viva

Practical will be of 40 marks and grand viva will be of 20 marks.

Internal Assessments

Theory-20 marks

Practical-20 marks

SYLLABUS

THEORY:

PAPER-1

1. Molecular and functional organization of a cell and its subcellular components.
2. Structure, function and inter-relationship of biomolecules and consequences of deviation from normal (carbohydrates, protein, plasma, lipids, Nucleic acids, Vitamins, Haemoglobin)
3. Fundamental aspects of enzymology, and clinical application wherein regulation of enzymatic activity is altered.
4. Molecular concept of body defences and their application in medicine.
5. Molecular mechanism of gene expression and regulation, the principles of genetic engineering and their application in medicine.
6. Principles of various conventional and specialized laboratory investigations and instrumentation analysis and interpretation of given data.

[Functional tests and instrumentation (Electrophoresis, chromatography, colorimetry, radioactive isotopes and immunometry etc.), analysis and interpretation of given data]

PAPER-2

1. Digestion and assimilation of nutrients.
2. Integration of the various aspects of metabolism and their regulatory pathways.
3. Biochemical basis of inherited disorders with their associated sequelae and disorders of malnutrition. (Relevant aspects of 1,2 and w.r.t vitamin, minerals, biological oxidation, carbohydrates, lipids, protein, nucleic acids, Hb, Detoxication)
4. Mechanisms involved in maintenance of body fluid and p^H homeostasis.
5. Biochemical basis of environmental health hazards, biochemical basis of cancer and carcinogenesis.
6. Experiments to support theoretical concepts and clinical diagnosis.

LECTURE SCHEDULE FOR FIRST M.B.B.S.

S.No.	TOPICS AND SUBTOPICS	LECTURES
1.	Introduction	1
2.	Cell	2
a.	Organelles its structure and function	
b.	Membrane structure and transport mechanisms	
3.	Carbohydrates	5
a.	Introduction and classification	
b.	Monosaccharides	
c.	Disaccharides	
d.	Homopolysaccharides	
e.	Heteropolysaccharides	
4.	Proteins	8
a.	Classification of amino acids	
b.	Properties of amino acids and Biologically active peptides	
c.	Structure of proteins	
d.	Physical properties of proteins	
e.	Classification of proteins	
f.	Plasma proteins	
g.	Immunoglobulins	2
5.	Enzymes	7
a.	Introduction and terminology	
b.	Nomenclature and classification	
c.	Coenzymes, Metalloenzymes, Mechanism of action	
d.	Active center and Factors influencing enzyme's activity (Enzyme, Substrate, p ^H , Temp. and Time)	
e.	Enzyme activation and inhibition	
f.	Enzyme regulation	
g.	Diagnostic importance of Enzymes, Isoenzymes	

S.No.	TOPICS AND SUBTOPICS	LECTURES
6.	Lipids	5
a.	Introduction and classification	
b.	Fats & Oils – Structure and properties	
c.	Phospholipids	
d.	Glycolipids and other lipids	
e.	Fatty acids and Steroids	
7.	Nucleic acid	3
a.	Bases, Nucleosides, Nucleotides	
b.	Structures of DNA	
c.	Structure of RNAs and Biologically active Nucleotides	
8.	Vitamins	7
a.	Introduction	
b.	Vitamin A	
c.	Vitamin D	
d.	Vitamin E & K	
e.	Vitamins B1 & B12	
f.	Nicotinic acid & Pyridoxine	
g.	Folic acid & Vitamin B12	
h.	Other B complex vitamins	
i.	Vitamin C	
9.	Haemoglobin	3
a.	Porphyrin, Porphyrinogen and their metabolism	
b.	Porphyrias, Structure of Haemoglobin & Catabolism	
c.	Abnormal haemoglobins	
10.	Biological Oxidation	2
a.	Oxidation reduction reactions	
b.	ETC & Oxidative phosphorylation	
11.	Carbohydrate metabolism	8
a.	Introduction to metabolism & Digestion and absorption	

S.No.	TOPICS AND SUBTOPICS	LECTURES
b.	Glycolysis, Gluconeogenesis & regulation	
c.	Glycogenesis, Glycogenolysis & Glycogen storage disease	
d.	HMP shunt	
e.	Citric acid cycle	
f.	Metabolism of other sugars	
g.	Genetic disorders associated with carbohydrate metabolism	
h.	Blood glucose regulation & Diabetes mellitus	
12.	Protein metabolism	8
a.	Digestion & absorption of AA pool	
b.	General fate of AAs	
c.	Ammonia detoxification, Urea formation and disorders associated	
d.	1 C metabolism, Individual AA catabolism and disorders associated	3
e.	Synthesis of Biochemically important compounds from AA & protein malnutrition	2
13.	Lipid metabolism	10
a.	Digestion, absorption & disorders	
b.	Lipoprotein composition	
c.	Fatty acid catabolism & disorders	
d.	Fatty acid biosynthesis	
e.	Ketone body metabolism & Ketosis	
f.	Phospholipid	
g.	TG metabolism and disorders	
h.	Cholesterol metabolism	
i.	Eicosanoids	
j.	Lipoproteinemias	
14.	Nucleic acid metabolism	3
a.	Purine & pyrimidine metabolism, regulation and disorders	
15.	Biochemical genetics	7
a.	Replication	

S.No.	TOPICS AND SUBTOPICS	LECTURES
b.	Transcription	
c.	Genetic code, Translation, post translational modification & inhibitors	2
d.	Mutation	
e.	Restriction endonucleases & Recombinant technology	
f.	Probe, Finger printing, PCR, Monoclonal antibodies etc.	
16.	Mineral metabolism	3
a.	Calcium	
b.	Iron	
c.	Trace elements	
17.	Integrated metabolism	3
a.	Common metabolic pathway	
b.	Detoxification	
c.	Free radicals and antioxidants	
18.	Biochemistry of cancer and tumour marker	4
19.	Water & Electrolyte regulation	3
a.	p ^H & Acid-base regulation	2
20.	Environmental pollution & Toxicology	2
21.	Nutrition	3
22.	Immunology	5
23.	Cancer	3

DEMONSTRATIONS AND PRACTICALS OF FIRST M.B.B.S

DEMONSTRATION	PRACTICAL DAYS
1. Tests of Carbohydrates	5
2. Tests of Proteins	3 + 1
3. Tests of Lipids & Vitamins	1
4. Tests of Miscellaneous Group (Unknown)	1 + 1
5. Study of composition of Saliva & Bile	1
6. Study of composition of Gastric juice, Pepsin activity & CSF	2
7. Study of composition of Milk/ Egg/ Meat/ Wheat flour	2
8. Study of Normal constituents of Urine	1
9. Study of Abnormal constituents of Urine	3
10. Study of Hemoglobin & its derivatives	1
11. Estimation of Free & Combined Acidity & Gastric Function Tests	2
12. Estimation of Acidity & Ammonia in Urine	1 + 1
13. Establishment of Beer's Law	1
14. Estimation of Blood Glucose & GTT	1
15. Estimation of Serum Cholesterol	1
16. Estimation of Serum Total Protein & A:G Ratio	1
17. Estimation of Serum Uric acid	1
18. Estimation of Serum Urea	1
19. Estimation of Serum Inorganic Phosphorous	1
20. Estimation of Serum Amylase	1
21. Estimation of Serum Calcium	1
22. Estimation of Serum Creatinine	1
23. Spectroscopy, Clinical enzyme	1
24. Electrophoresis	1
25. Chromatography	1
26. Liver Function Tests	1
27. Kidney Function Tests	2
28. a. Urea clearance	
b. Creatinine clearance	
REVISION AND TUTORIALS	9

THEORY CLASSES – (1ST Aug – 31ST Dec)

S.No.	Date	Topic
1.	03-08-13	Carbohydrate Chemistry
2.	05-08-13	Amino-Acid Chemistry
3.	08-8-13	Lipid Chemistry
4.	10-08-13	Carbohydrate Chemistry
5.	12-08-13	Amino-Acid Chemistry
6.	17-8-13	Carbohydrate Chemistry
7.	19-08-13	Protein Chemistry
8.	22-8-13	Lipid Chemistry
9.	24-8-13	Carbohydrate Chemistry
10.	26-8-13	Protein Chemistry
11.	29-8-13	Lipid Chemistry
12.	31-8-13	Carbohydrate Chemistry
13.	2-9-13	Protein Chemistry
14.	5-9-13	Lipid Chemistry
15.	7-9-13	Water Soluble Vitamins
16.	9-9-13	Fat Soluble Vitamins
17.	12-9-13	Lipid Chemistry
18.	16-9-13	Fat Soluble Vitamins
19.	19-9-13	Nucleic Acid
20.	21-9-13	Water Soluble Vitamins
21.	23-9-13	Fat Soluble Vitamins
22.	26-9-13	Nucleic Acid
23.	28-9-13	Water Soluble Vitamins
24.	30-9-13	Water Soluble Vitamins
25.	3-10-13	Nucleic Acid
26.	7-10-13	Water Soluble Vitamins

27.	10-10-13	Nutrition
28.	14-10-13	Minerals
29.	17-10-13	Nutrition
30.	19-10-13	Enzymes
31.	21-10-13	Minerals
32.	24-10-13	Nutrition
33.	26-10-13	Enzymes
34.	28-10-13	Minerals
35.	31-10-13	Hemoglobin
36.	11-11-13	Biological Oxidation
37.	14-11-13	Hemoglobin
38.	16-11-13	Enzymes
39.	18-11-13	Biological Oxidation
40.	21-11-13	Hemoglobin
41.	23-11-13	Enzymes
42.	25-11-13	Biological Oxidation
43.	28-11-13	Carbohydrate Metabolism
44.	30-11-13	Enzymes
45.	2-12-13	Carbohydrate Metabolism
46.	5-12-13	Carbohydrate Metabolism
47.	7-12-13	Carbohydrate Metabolism
48.	9-12-13	Carbohydrate Metabolism
49.	12-12-13	Carbohydrate Metabolism
50.	14-12-13	Carbohydrate Metabolism
51.	16-12-13	Carbohydrate Metabolism
52.	19-12-13	Lipid Metabolism
53.	21-12-13	Lipid Metabolism
54.	23-12-13	Lipid Metabolism
	25-31 Dec	Winter vacations
	1-15 Jan	Semester Examination

TEACHING SCHEDULE

DEMONSTRATION CLASSES – (1ST Aug – 31ST Dec)

S.No.	Date	Topic
1	2-8-13	Carbohydrates : Molisch's Test
2.	16-8-13	Fehling's Test Benedict's Test Barfoed's Test
3.	23-8-13	Seliwanoff's Test Inversion Test Osazone Test
4.	30-8-13	Half & Full Saturation Test Iodine Test Scheme for Detection of Unknown Carbohydrate
5.	6-9-13	Lipids: Solubility Test Grease Spot Test Emulsification Test Acrolein Test Dunstan's Test Salkowski's Test Liebermann Burchard's Test
6.	13-9-13	Proteins: Biuret Test, Heat Coagulation Test, Heller's Nitric Acid Test
7.	20-9-13	Precipitation of Casein at its Isoelectric pH Neumann's Test Half and Full Saturation Test
8.	27-9-13	Precipitation of Proteins with Alkaloidal Reagents and Heavy Metal Salt Solutions
9.	4-10-13	Ninhydrin Test Xanthoproteic Acid Test Millon Nasse's Test Lead Sulphide Test

10.	11-10-13	Aldehyde Test Sakaguchi Test Scheme for Detection of Unknown Protein
11.	18-10-13	Analysis of Food Stuff: Milk
12.	25-10-13	Gastric Juice Analysis: Free and Total Acidity
13.	22-11-13	Gastric Juice Analysis: Total Chloride
14.	29-11-13	Pathological Urine
14.	06-12-13	Colorimetry
15.	13-12-13	Blood Sugar
16.	20-12-13	Normal Urine
	Dec25 to 31	Winter Vacation
		Ist Semester Examination

TEACHING SCHEDULE

PRACTICAL CLASSES – (1ST Aug – 31ST Dec)

S.No.	Date	Topic
1.	Aug 5,6,7,8	Glasswares, Apparatus & Instruments
2.	Aug 12,13,14	Carbohydrates : Molisch's Test
3.	Aug 19,21,22	Fehling's Test Benedict's Test
4.	Aug 26,27,29	Barfoed's Test Seliwanoff's Test Inversion Test
5.	Sep 2,3,4,5	Osazone Test Iodine Test Half & Full Saturation Test
6.	Sep 9,10,11,12	Detection of Unknown Carbohydrate
7.	Sep 16,17,18,19	Lipids: Solubility Test Grease Spot Test Emulsification Test Acrolein Test Dunstan's Test Salkowski's Test Liebermann Burchard's Test
8.	Sep 23,24,25,26	Proteins: Biuret Test, Heat Coagulation Test, Heller's Nitric Acid Test
9.	Sep 30, Oct 1,3	Precipitation of Casein at its Isoelectric pH Neumann's Test Half and Full Saturation Test
10.	Oct 7,8,9,10	Precipitation of Proteins with Alkaloidal Reagents Precipitation of Proteins with Heavy Metal Salt Solutions

11.	Oct 14,15,17	Ninhydrin Test Xanthoproteic Acid Test Millon Nasse's Test
12.	Oct 21,22,23,24	Lead Sulphide Test Aldehyde Test Sakaguchi Test
13.	Oct 28,29,30,31	Detection of Unknown Protein
15.	Nov 11,12,13,14	Analysis of Food Stuff: Milk
16.	Nov 18,19,20,21	Gastric Juice Analysis: Free and Total Acidity
17.	Nov 25,26,27,28	Total Chloride Estimation
18.	Dec 2,3,4,5	Analysis of Pathological Urine
19.	Dec 9,10,11,12	Analysis of Pathological Urine
20.	Dec 16,17,18,19	Blood Glucose
21.	Dec 23,24	Blood Glucose
	Dec 25-31	Winter Vacation
		I st Semester Examination

DEPARTMENT OF
COMMUNITY MEDICINE

TEACHING FACULTY

No.	Name	Designation
1.	Dr Rita Meena	Prof & Head
2.	Dr. Suman Bhansali	Professor
3.	Dr. Afzal Hakim	Associate Professor
4.	Dr. Anoop Singh	Astt. Professor
5.	Dr. G.L. Saini	Astt. Professor
6.	Dr. Savitri Sharma	Astt. Professor
7.	Dr. S.S.Shekhawat	Asst. Professor
8.	Dr. C. P. Sharma	Sr. Demonstrator
9.	Dr. Sukhdev Ujjwal	Sr. Demo
10.	Dr. Sandeep Deora	M.O./I.C. (H.T.C. Bhadwasia)

DEPARTMENT OF COMMUNITY MEDICINE
DR. S.N. MEDICAL COLLEGE, JODHPUR

Comm. Med./MC/JU/285

Date: 27.07.13

: Notice :

Following is the teaching programme for the theory classes of
I Semester(adm.2013) from 01.08.13 to 31.12.13
Time - 8.00AM - 9.00AM

Date	Topic	Teacher
07.08.13	Concept of Community Medicine	Dr.Afzal Hakim
14.08.13	Concept of Community Medicine	Dr.Afzal Hakim
21.08.13	Communication for Health Education	Dr.Anoop Singh
04.09.13	Communication for Health Education	Dr.Anoop Singh
11.09.13	Communication for Health Education	Dr.Anoop Singh
18.09.13	Man and Medicine	Dr. Rita Meena
25.09.13	Man and Medicine	Dr. Rita Meena
09.10.13	International Health Agencies	Dr. Rita Meena
23.10.13	International Health Agencies	Dr. Rita Meena
30.10.13	International Health Agencies	Dr. Rita Meena
13.11.13	Health Care of the Community	Dr.S.S.Shekhawat
20.11.13	Health Care of the Community	Dr.S.S.Shekhawat
27.11.13	Health Care of the Community	Dr.S.S.Shekhawat
04.12.13	Health Care of the Community	Dr.S.S.Shekhawat
11.12.13	Disaster Management	Dr. G.L. Saini
18.12.13	Disaster Management	Dr. G.L. Saini

Sd/-

**Professor & Head
Community Medicine**

Copy to-

1. Principal & Controller .
2. Concerned teacher.
3. Notice board.

Sd/-

**Professor & Head
Community Medicine**

DEPARTMENT OF COMMUNITY MEDICINE
DR. S.N. MEDICAL COLLEGE, JODHPUR

Comm. Med./MC/JU/ 286

Date: 27.07.13

Notice :

Following is the teaching programme for the Practical Classes of

I Semester(adm.2013) from 01.08.13 to 31.12.13

Time - 9.00AM - 10.45AM

Week	Visit
I Week	Urban Health Training Centre
II Week	Rural Health Training Centre
III Week	ARV Clinic
IV Week	Immunization Clinic
V Week	Sub Centre
VI Week	Primary Health Centre
VII Week	Community Health Centre
VIII Week	Anganwadi centre
IX Week	Reproduction & Child Health Office
X Week	Record Room
XI Week	Family Welfare Clinic
XII Week	Incinerator
XIII Week	Rehabilitation Research Centre
XIV Week	Saras Dairy
XV Week	Water Filtration Plant
XVI Week	Nagar Nigam
XVII Week	PHED Lab
XVIII Week	Revision

Recommended Books :-

S.No.	Author	Title	Publisher
1	K.Park	Parks Textbook of Preventive & Social Medicine	Banarasidas Bhanot
2	A.H.Suryakantha	Community medicine with recent advances	Jaypee
3	Sunderlal, Adarsh,Pankaj	Textbook of Community Medicine	CBS
4	D.K.Mahabalaraju	Essential of Community Medicine Practicals	Jaypee
5	Poornima Tiwari,Shashank Tiwari	Mastering Practicals-Community Medicine	Wolters Kluwer
6	B.K. Mahajan	Methods in Biostatistics	Jaypee

ACADEMIC SECTION

DR. S.N. MEDICAL COLLEGE, JODHPUR

WELCOMES

THE 2013 BATCH

- **Prof. SUMAN BHANSALI** (Academic Incharge - Post Graduate) 94144-12645
- **Dr. AFZAL HAKIM** (Academic Incharge - Under Graduate) 99283-66737
- **Shri RAMKUMAR PRAJAPAT** 98286-25121
- **Shri PYARE MIYAN** 94144-12430
- **Shri CHANDRA SHEKKHAR ACHARYA** 94134-62443
- **Shri OM MATHUR** 96949-00236