

Department Of Anatomy

Faculty

Professor & Head DR. SUNITA GUPTA

Associate Professor Dr Dimple S. Patel

Dr.Mayuri Shah

Assistant Professor

Dr Parul Damor

Dr Monika Vyas

Junior lecturers

Dr.Ruchakumari Dave

Dr.Jignesh Bodat

Dr.Prakash Gosai

Books Recommended For Study

{a} Text Books-MUST HAVE

1. Human Anatomy by Chaurasia Vol. I / II / III / IV(Includes Neuroanatomy)
- 2.Embryology by Brijesh Kumar/ Inderbir Singh
- 3.Human Histology by Brijesh Kumar / Inderbir Singh
4. General Anatomy – BD Chaurasia/G P Pal
5. Human Genetics by GP Pal/ S D Gangane
6. Grant's Dissector
7. Clinical Anatomy Volume-I &II-Neeta V.Kulkarni

{b} Reference Books

1. Cunningham's manual of Practical Anatomy (Vol I,II,III) / Thieme's Dissectors(3 volumes)
2. Gray's Anatomy for Students-1st South Asia Edition
3. Grant's Atlas-AUGUR
4. Histology Atlas by di'Fiore
5. Vishram Singh -3 Volumes
6. Embryology-Vishram Singh
7. Histology/Osteology – G P Pal
8. THIEME'S ATLAS
9. Neuro-Anatomy by Inderbir Singh / Vishram singh

Distribution of Topics(As per Gujarat University)

Paper I:

1. General Anatomy
2. General Embryology
3. General Histology
4. Upper Limb
5. Head & Neck & Brain (Neuro Anatomy)

Paper II:

1. Lower Limb
2. Thorax
3. Abdomen, Pelvis & Perineum
4. Family Welfare [taught in PSM]
5. Genetics
6. Systemic Embryology.
7. Systemic Histology

Semester	Theory {Lecture & Tutorials}	Practicals& Dissection
I	1. General Anatomy(General Terms,Fascia,Muscle,Joint,Bones,Nerves,Blood Vessels)	1. Upper limb
	2. Upper limb	2. Lower limb
	3. Lower limb	3. Thorax
	4. Thorax	4. Histology Practicals (Slides)
	5. General Histology	5. Embryology Models' study
	6. General Embryology	
	7. Genetics[selected topics]	
II	1. Abdomen	1. Abdomen
	2. Head & Neck/Brain(Neuroanatomy)	2. Head & Neck\Brain
	3. Systemic Histology(Microscopic study of various tissues)	3. Histology (Slides)-In Histology Practical
	4. Systemic Embryology : Development of various important systems	4.Embryology Models' study

Department Of Anatomy

Style of Internal Examination & Marking System

Test	Theory			Practical	
	Duration	Type	Marks	Head	Marks
I Internal	1 paper of 50 marks Of 3 hrs. Practical Exam-50 Marks	Q.1 Applied Anat. {2 out of 3}	10	Viva soft parts	20
		Q.2 Short Notes {3 out of 4}	09	Skeleton	10
		Q.3 Short Notes {2 out of 4}	06	Embryology/models/ Histology	10
		Q. 4 Short Notes {2 out of 3}	10	Surface Anatomy X-ray	10

		Q.5 Short Notes {3 out of 4}	09		
		Q.6 Objectives {6 out of 8}	06		
Preliminary	2 papers of 50 marks each of 3 hrs. Practical Exam -60 Marks	Q.1 Notes {2 out of 3}	10	Viva soft parts	20
		Q.2 Short Notes {3 out of 4 }	09	Skeleton	10
		Q.3 Short Notes {2 out of 4}	06	Embryology/models/ Histology	15
		Q.4 Short Notes {2 out of 3}	10	Surface Anatomy & x-rays	15
		Q.5 Short Notes {3 out of 4 }	09		
		Q.6 Objectives {6 out of 8}	06		

Faculty

Professor & Head

Dr JANARDAN V BHATT

Associate Professor

Dr RajulaTyagi

Dr Hina Mod

Assistant Professor

Dr Mahendra R Shah

Dr Pragna Raval

Jr.Lecturers

Dr Devanshi Upadhyaya

Dr.Nitesh Ninama

Distribution of Topics (As per Gujarat University)

Paper I :

1. General Physiology
2. Bio-Physics
3. Blood
4. Excretory system including Skin
5. Cardio-vascular system
6. Respiratory system
7. Environmental Physiology
8. Exercise Physiology

Paper II :

1. Nerve Muscle Physiology
2. Special senses
3. Central nervous system including Autonomic nervous system
4. Digestive system
5. Endocrine system
6. Reproductive system

* In the Preliminary & University Examinations

Books Recommended For Study

{a} Text Books

1. Text book of Physiology by A.K.Jain
2. Text book of Medical Physiology---InduKhurana
3. Text book of Physiology Guyton
4. Ganong's –Review of Physiology
5. Understanding Medical Physiology—R.L.Bijlani
6. Text book of Physiology by G K Pal

{b} Reference Books

1. Text book of Physiology –Dr N Geeta
2. Text book of Practical Physiology –G.K.Pal
3. Practical Physiology by A.K.Jain

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Department Of Physiology

Syllabus & Teaching Schedule

Semester	Theory {Lecture & Tutorials}	Practicals
	1.General Physiology/ Biophysics 2. Blood	1. Haematology

I	3. Respiratory system	2. Clinical Physiology
	4. Endocrine	3. Instruments
	5. Muscle & Nerve	4. Graphs of Nerve & Skeletal muscle
	6. Digestive system	
	7. Initial topics of CNS	
	8. Initial topics of CVS	
	9. Autonomic Nervous System	
II	1. Reproductive system	1. Haematology
	2. Excretory system	2. Clinical Physiology
	3. Skin	3. Instruments
	4. Cardiovascular system	4. Graphs of Cardiac muscle
	5. Central Nervous system	5. Photographs of Endocrine disorders
	6. Special senses	
	7. Exercise and Yoga	
	8. Environmental Physiology	
	9. Stress Physiology	

Department Of Physiology

Style of examination & Marking system

Test	Theory			Practical	
	Duration	Type	Marks	Head	Marks
I Internal	1 Paper of 50 marks of 3 Hours.	Q.1 Applied Phy {2 out of 3}	10	Haematology	15
		Q.2 Short Notes {3 out of 5}	9	Clinical Physiology	10
		Q.3 Short Notes {2 out of 3}	6	Graphs & Charts	10
		Q. 4 Notes {2 out of 3}	10	Viva -Voce Instruments	10
		Q.5 Short Notes {3 out of 5}	09		05
		Q.6 Objectives {6 out of 8}	06		50
Preliminary	2 Papers of 50 marks Each of 3 hours	Q.1 Notes {2 out of 3}	10	Haematology	15
		Q.2 Short Notes {3 out of 5}	09	Clinical Physiology	10
		Q.3 Short Notes {2 out of 3}	06	Graphs & Charts	10
		Q. 4 Notes {2 out of 3}	10	Viva voce	20

		Q.5 Short Notes {3 out of 5}	09	Instruments	05
		Q.6 Objectives {6 out of 8}	06		60

Department OF Biochemistry

Faculty

Professor & Head

Dr Mahesh Madole

Associate Professor

Dr.Smita Bahediya

Assistant Professor

Dr Ranjeeta Gaur

Junior Lecturers

Dr Dhanalakshmi Shankar

Dr Nasima H Momin

Dr Namrata B Maheshwari

Books Recommended For Study

{a} Text Books

1. Text-book of Biochemistry for Medical students by Vasudevan&Sreekumari, 8th Ed., 2016.
2. Text-book of Medical Biochemistry by U.Satyanarayan 4th Ed. 2013.
3. Text-book of Biochemistry for undergraduates by M.Rafi 3rd Ed. 2017.
4. Text-book of Medical Biochemistry by R. Chawla, 2nd Ed. 2017

{b} Reference Books

1. Harper's illustrated Biochemistry by R.K.Murry, Rodwell, et al. 30th Ed., 2015.
2. Lippincott's illustrated review of Biochemistry by Denise R Ferrier 7thEd.,2017.

3. Biochemistry by PankajaNayak 4th Ed. 2015.
4. Biochemistry made Easy—A Problem Based Approach by N.Haridas 1st Ed.2012.
5. Text book of Medical Biochemistry by Dinesh Puri 3rd Ed, 2014.

Distribution of Topics (As per Gujarat University)

Paper I :Cell, Cell membrane , Chemistry & Metabolism of Lipid, Carbohydrates and Porphyrins.

Enzymes, Body Fluids, pH, Acid Base Balance & regulation, Biological Oxidation.

Body Defence mechanisms and its applications in medicine. Environmental Biochemistry

and Cancer Biochemistry, Organ function tests, Newer Techniques, Signal transduction & Endocrine Function, Muscle & Cytoskeleton, Biochemistry of blood cells

Paper II :Protein Chemistry & Metabolism, Nucleic acid chemistry, Transcription, Replication,

Translation, Molecular Biology, Genetic engineering, Biotechnology, Integration of

metabolism, Purine, Pyrimidine chemistry & Metabolism, Vitamins , Minerals & Nutrition.

Chemistry of collagen & associated disorders, Immunohistochemistry

Department Of Biochemistry

Syllabus & Teaching Schedule

Semester	Theory {Lecture & Tutorials}	Practicals / Demonstration
1 st	1. Introduction to Biochemistry	1. Familiarization to laboratory & Analytical chemistry
	2. Chemical composition of cell	2. Chemistry of milk
	3. Cell membrane	3. Cerebrospinal Fluid & Saliva
	4. Chemistry of Proteins	4. Normal & abnormal constituents of Urine
	5. Enzymes	5. Normal Gastric juice & Abnormal constituents of Gastric juice
	6. Chemistry of Carbohydrates	6. Spectroscopic examination of Haemoglobin
	7. Chemistry of Lipids	7. Newer Biochemical techniques
	8. Body fluid distribution & Electrolyte and Acid-Base Balance	8. Electrophoresis, Chromatography
	9. Haem structure & Bile pigments	9. Colorimetry & Spectrophotometer
	10. Chemistry & metabolism of Purine, Pyrimidine & Nucleic acids	10. Semi & Auto Analyzer
	11. Fat soluble & Water soluble Vitamins	11. Renal function tests
	12. Minerals	12. Analysis of renal calculi
	13. Biological oxidation – ETC inhibitors	13. Glucose tolerance tests

	14.Blood Chemistry	14.Cardiac profil
	15 Muscle and cytoskeleton	15.Qualitative analysis of Carbohydrate,proteins

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Department of Biochemistry

Syllabus & Teaching Schedule

Semester	Theory {Lecture & Tutorials}	Practicals / Demonstration
2 nd	1. Digestion & absorption of Proteins & related disorders	1. Estimation of Serum Urea & Creatinine
	2. Metabolism of proteins, Amino acids & Related disorders	2. Urine analysis for Sugar, Acetone, Bile salts & pigments, Albumin & Blood
	3. Digestion & absorption of Carbohydrates & Related disorders	3. Estimation of fasting & post-prandial sugar in serum
	4. Metabolism of Carbohydrates	4. Estimation of total & HDL Cholesterol
	5. Digestion, absorption & metabolism of Lipids & related disorders	5. Liver function tests
	6. Integration of various aspects of metabolism; Metabolism in starvation	6. Gall stone analysis
	7. Biological Oxidation & Mitochondrial function; Electron transport chain.	7. pH & Blood gas analyzer
	8. Genetic code & Control of gene expression; Molecular Biology	8. Tumor markers
	9. Molecular concept of body defence	9. Thyroid function tests

	10. Genetic Engineering & Gene therapy	10. Investigation of suspected Porphyrrias
	11. Environmental Biochemistry	11. Investigation of diseases of Iron metabolism
	12. Biochemistry of AIDS & Cancer	12. Investigation of Gout
	13. Composition of diet; Requirements of essential nutrients	13. Interpretation of Biochemical values
	14. Protein Calorie Malnutrition	14. Case reports
	15. Recent advances of techniques in detection of Biochemical disorders	15. Estimation of Total Protein, Albumin & A:G ratio
	16. Bioinformatics	
	17. Mechanism of Hormone action	

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Department of Biochemistry

Style of examination & Marking system

Test	Theory			Practical	
	Duration	Type	Marks	Head	Marks
I Internal	1 Paper of	Q.1 Applied Biochemistry Short notes {2 out of 3}	10	Viva voce	15

	50 marks of 3 Hours.	Q.2 Short Notes {3 out of 5}	09	Quantitative Estimation	20
		Q.3 Short Notes {2 out of 3}	10	Qualitative Test	15
		Q.4 Short Notes {3 out of 5}	09		50
		Q.5 Case report	06		
		Q.6 Justify/Objectives {6 out of 8}	06		
Preliminary examination	2 Papers of 50 marks Each of 3 hours	Q.1 Applied Biochemistry Short notes {2 out of 3}	10	Viva voce	15
		Q.2 Short Notes {3 out of 5}	09	Quantitative Estimation	20
		Q.3 Short Notes {2 out of 3} OR Case Report	06	Qualitative Test	10
		Q. 4 Notes {2 out of 3}	10	Minor exercise	05
		Q.5 Short Notes {3 out of 5}	09		
		Q.6 Objectives{6 out of 8}	06		50

EVALUATION

Common for Anatomy, Physiology & Biochemistry

1. Internal evaluation-Departmental
2. External evaluation-University examination

Internal evaluation

- ❖ Theory : 20 marks
- ❖ Practical : 20 marks

Break up of Internal evaluation marks in Anatomy, Physiology & Biochemistry .

	Theory	Practical
	Marks	Marks
1 st internal test	5.0	5.0

2 nd internal test[prelim]	7.5	7.5
Day to day evaluation	7.5	7.5
TOTAL	20	20

GUJARAT UNIVERSITY EXAMINATION

External Examination	Theory	Practical
	100	60
Paper I	50	-
Paper II	50	-
Internal Exams	20	20
Total [Theory+practical] 200 marks	120	80

Faculty

Professor & Head	DR SHEETAL VYAS
Associate Professor	Dr Rachna Kapoor Dr Jay Sheth
Assistant Professor	Dr Anand Solanki[Epidemiologist] Dr Mayank J Patel [Statistician] Dr.Urvish Joshi Dr.Himanshu K.Nayak Dr.Hemant Gameti
Jr Lecturers	Dr Pallavi Upadhyay Dr Mitali Leuva Dr Krushna Modi

Books Recommended For Study

{a} Text Books*(Latest editions of....)*

1. Park's Text-book of Preventive & Social Medicine by K. **Park**–24th Edition
2. Textbook of Community Medicine – By Rajvir **Bhalvar**
3. Methods In Bio-Statistics by B.K. **Mahajan**
4. Review of Preventive and Social Medicine (Including Bio-statistics)- By **Vivek Jain**
5. Community Medicine & Recent Advances – **Suryakantha**
6. Epidemiology and Management of Health Care for All by **Sathe&Sathe**-II edition

7. Text-book of Community Medicine by Dr. A. P **Kulkarni** and Dr. J. P. **Baride**
8. Text-book of Preventive Medicine by Dr. **O.P.Ghai**
9. Text book of Preventive & Social Medicine by **Gupta &Mahajan**
10. National Health Programs of India by **J Kishor**

{b} Reference Books

1. Maxcy–Rouseneau's Public Health & Preventive Medicine
2. Health in Industry by Donald Hunter

Department of Community Medicine

Syllabus & Teaching Schedule

Semester	Sr. no Theory {Lecture & Tutorials} (Lecture Hrs)	Practicals / Demonstration
	1. Introduction to Humanities & P.S.M. 2	I. Visits / Field Visits:
	2. Concept of Health& Disease 1	1. Urban Health Training Center
	3. Concept of Control & Prevention 1	2. Family Visit in the Community
	4. Demography & Population Dynamics 1	3. Rural Health Training Centre
	5. Social Science and Health 3	4. Integrated Counseling and Testing Centre
	6. Health for ALL 2	5. NVBDCP
	7. Health Care Delivery System 2	6. Psychiatry dept.
	8. Hospital Management 1	7. Blood Bank
	9. Health Economics& budgeting 1	8. Post-partum Unit & family welfare centre
	10. Health Economics& budgeting 1	9. RNTCP centre
		10. S.T.D. Clinic
	Total = 15	11. Hospital: {a} Medical record Section
		{b} Operation Theaters

	12.Basic Nursing Practice
	13.CSSD
	14.Physiotherapy Centre
	15 Civic Centre Visit

Note: Teaching schedule of Community Medicine in Semesters of III – VII is given in the information brochure on III M.B;B.S.

Department of Community Medicine

Style of examination & Marking system

Test	Theory			practicals	
	Duration	Type	marks	heads	marks
1.community posting					
a.posting IV Sem	3 HRS	–	–	Spot QuestionsViva, Journal	50
b.posting VI Sem	3 HRS	–	–	Spot Questions Statistics Viva, Journal	50

c.posting VII Sem	3 HRS	–	–	Statistics Epidemiology Spot Questions Viva Voce Case Study Project Work Journal	10 10 10 10 20 20
1. First internal [end of IV sem]	One paper Of 3 HRS [60 marks]	Section 1 Q.1 notes 2/3 Q.2 S.N. 3/4 Q.3 S.N. 2/3 Section 2 Q.4 notes 2/3 Q.5 S.N. ¾ Q.6 S.A. 6/8	 12 12 06 12 12 06	–	–
3.Second Internal Examination (end of VI sem)	One paper Of 3 HRS [60 marks]	Section 1 Q.1 notes 2/3 Q.2 S.N. 3/4 Q.3 S.N. 2/3 Section 2 Q.4 notes 2/3 Q.5 S.N. ¾ Q.6 S.A. 6/8	 12 12 06 12 12 06		
3. Preliminary examination [end of VII sem]	Two papers Of 3HRS each [60 marks each]	Section 1 Q.1 notes 2/3 Q.2 S.N. 3/4 Q.3 S.N. 2/3 Section 2 Q.4 notes 2/3 Q.5 S.N. ¾ Q.6 S.A. 6/8	 12 12 06 12 12 06	Viva Voce Statistics Epidemiology Spot Questions	10 10 10 10

S.N i.e short notes , S.A. i.e. short answers

Notes: {1} University examination of Community Medicine would be conducted at the end of VII semester - i.e. III M.B;B.S. Part I examination.

{2} I internal theory examination would be conducted at the end of IV semester, II Internal Theory examination at the end of VI semester and Preliminary theory and practical examination would be conducted in VII semester.

{3} Three posting examinations would be conducted at the end of each posting in the department and it will have weightage in day to day assessment.

{4} Three community posting of 4 weeks each during IV, VI &-VII semesters

Evaluation in Community Medicine

	Theory	Practical
Internal evaluation	20	20
1 st Internal	5	-
2 nd Internal	5	-
Preliminary exam	10	8
Day to Day assessment	-	12
Gujarat University Examination	120	40

Part - I	60	-
Part – II	60	-
Total 200 Marks (Theory+Practical)	140	60

Note

The student who has not paid the college fees for I / II semester will not be allowed to appear at I M.B;B.S. examination till the fees are paid and the forms will be sent up only for the University examination conducted after the deficiencies are rectified.