



SRI GURU RAM DAS UNIVERSITY OF HEALTH SCIENCES, SRI AMRITSAR

Sub:- Syllabus and Course of Study in Medicine

The scheme of examination i.e. syllabi, paper setting, time duration and distribution of marks including theory papers (Part-I & II), practical and internal assessment will be as under:-

S. No.	Theory Paper	Marks
1.	Paper A Paper B	60 60
2.	Viva Voce (Oral) to be included in Theory	20
3.	Practical	100
4.	Internal Assessment a. Theory—30 b. Practical—30	60
Total marks		300

Note:-

1. Two Papers of 60 marks each and each of 3 hours duration (Paper A and Paper B).
2. Each question paper will consist of 6 questions.
3. Each question will be divided in the form of short notes, enumeration and diagrams, marks for each part indicated separately.
4. All questions are to be attempted by the candidate.
5. There will be four examiners (Two Internals and Two External).
6. Oral and Practical Examination shall be conducted by all the four examiners.



SRI GURU RAM DAS UNIVERSITY OF HEALTH SCIENCES, SRI AMRITSAR

Sub:- Syllabus and Course of Study in Surgery

The scheme of examination i.e. syllabi, paper setting, time duration and distribution of marks including theory papers (Part-I & II), practical and internal assessment will be as under:-

S. No.	Theory Paper	Marks
1.	Paper A Paper B	60 60
2.	Viva Voce (Oral) to be included in Theory	20
3.	Practical	100
4.	Internal Assessment a. Theory—30 b. Practical—30	60
Total marks		300

Note:-

1. Two Papers of 60 marks each and each of 3 hours duration (Paper A and Paper B).
2. Each question paper will consist of 6 questions.
3. Each question will be divided in the form of short notes, enumeration and diagrams, marks for each part indicated separately.
4. All questions are to be attempted by the candidate.
5. There will be four examiners (Two Internals and Two External).
6. Oral and Practical Examination shall be conducted by all the four examiners.



SRI GURU RAM DAS UNIVERSITY OF HEALTH SCIENCES, SRI AMRITSAR

Sub:- Syllabus and Course of Study in Obstetrics & Gynaecology

The scheme of examination i.e. syllabi, paper setting, time duration and distribution of marks including theory papers (Part-I & II), practical and internal assessment will be as under:-

S. No.	Theory Paper	Marks
1.	Paper A Paper B	40 40
2.	Viva Voce (Oral) to be included in Theory	30
3.	Practical	30
4.	Internal Assessment a. Theory—30 b. Practical—30	60
Total marks		200

Note:-

1. Two Papers of 40 marks each and each of 3 hours duration (Paper A and Paper B).
2. Each question paper will consist of 6 questions.
3. Each question will be divided in the form of short notes, enumeration and diagrams, marks for each part indicated separately.
4. All questions are to be attempted by the candidate.
5. There will be four examiners (Two Internals and Two External).
6. Oral and Practical Examination shall be conducted by all the four examiners.



SRI GURU RAM DAS UNIVERSITY OF HEALTH SCIENCES, SRI AMRITSAR

Sub:- Syllabus and Course of Study in Paediatrics

The scheme of examination i.e. syllabi, paper setting, time duration and distribution of marks including theory papers (Part-I & II), practical and internal assessment will be as under:-

S. No.	Theory Paper	Marks
1.	Paper	40
2.	Viva Voce (Oral) to be included in Theory	10
3.	Practical	30
4.	Internal Assessment a. Theory—10 b. Practical—10	20
Total marks		100

Note:-

1. One Paper of 40 marks of 3 hours duration.
2. Question paper will consist of 8 questions.
3. Question will be divided in the form of short notes, enumeration and diagrams, marks for each part indicated separately.
4. All questions are to be attempted by the candidate.
5. There will be four examiners (Two Internals and Two Externals).
6. Oral and Practical Examination shall be conducted by all the four examiners.

MEDICINE - SYLLABUS

- (a) Formulation of Examination Pattern in consonance with MCI regulations of 1997 for Final Professional MBBS Examination in Medicine.

Paper -1 : 3 questions in part(a) & (b) each (to consist of 2 parts of equal marks i.e. 30 marks each - Total 60 marks).

Portions to be covered :

General Medicine, History of Medicine, Diseases of CVS, Digestive System including Hepatobiliary System and Pancreas, Diseases of Blood, Musculoskeletal System including Joints, Connective Tissue, Locomotor System, Nervous System, Endocrine System, Metabolic Disorders, General Principles of Immunology and Genetics, Poisoning.

Paper

Part-II : (To consist of 2 parts of equal marks i.e. 30 each – Total 60 marks)

Part (a) : 30 marks : 3 Questions.

Diseases of Kidney, Infectious Diseases, Tropical Diseases, Tuberculosis, Respiratory System Diseases, Dietetics and Nutritional Deficiency Diseases, Malignant Disorders, Fluid & Electrolyte Disorders due to Physical Agents and Miscellaneous Diseases.

Part (b) : 30 Marks : 3 Questions.

Dermatology, STD, Leprosy, Psychiatry including Drugs used in Psychiatry, Radio-diagnosis.

Note : In general theory standard and course shall conform to what is given in the latest edition of Davidsons' Principles of Medicine.

Marks :

Theory : 2 papers each of 60 marks, Total 120 marks

Oral (Viva) : Interpretation of X-rays, ECG, Pathology specimens, slides, blood Films and spots. 20 Marks

Clinical & Practical (Beside) :

As follows :

Long case	50 marks	
Short case (1)	25 marks	
Short case (2)	25 marks	
Internal Assessment	Total	60 marks
Theory	30 marks	
Practical	30 marks	
Total		300 marks

Internal Assessment should be based on :

a)	Examination at the end of 1 st Clinical year	15 marks
b)	Examination at the end of 3 rd Clinical year	15 marks
c)	Near the end of 9 th semester Prefinal Send up Examination in Theory & Practical	30 marks

While giving marks for Internal Assessment due weightage should be given to day to day work and attendance in theory and clinical classes.

All students should submit at least 10 cases with detailed write up on history, physical examination, diagnosis, differential diagnosis and laboratory evaluation and treatment during their 3rd clinical year and final year.

For Clinical Examination standard and content expected will be that given in the latest edition of Hutchison & Hunter – Clinical Methods in Medicine.

For theory short answer type questions and MCQs should be progressively introduced.

In clinical examination psychomotor skill should be tested as well.

- (b) Developing Uniform Examination Schedule for Final Prof MBBS Examination for Final Prof. MBBS Examination (Part-I & II) in terms of existing rules and pattern of different universities.

It is suggested that any changes made in the existing rules for candidates appearing under old regulations will lead to legal mess and these should not be altered.

Once the new regulations come into force the pattern already mentioned under (a) should become applicable automatically. (The pattern is totally different in the three universities in the state that any attempt to make it uniform till new regulations come into effect is bound to fail).

- (c) For candidates (under new regulations) who fail in Part-I Final Prof MBBS Examination it is suggested that they may be allowed to reappear after 3 months in the first instance. However, those who fail in this repeat examination should be allowed to appear in these subjects along with their part-II Final Prof examination. After that a gap of 6 months should be maintained between successive examinations.
- (d) For failed candidates appearing under old regulations existing pattern of examination (as applicable under different universities) after 6 months each time shall continue to be followed. Any tinkering with the existing rules shall lead to unnecessary litigation.

SYLLABUS IN GENERAL SURGERY
AND ALLIED SPECIALITIES

1. Principles and practice of surgical asepsis, sterilisation, dressings, operation theatre technique, wounds and wound healing, haemorrhage, blood transfusion, immune response and immune deficiency states and organ transplantation etc.
2. Physiological responses and management of trauma, shock, burns, fluid and electrolyte balance, and nutritional deficiency states.
3. Common surgical problems related to arteries, veins and lymphatics.
4. Common surgical problems related to skin subcutaneous, connective tissues and other soft tissues including benign and malignant disorders.
5. Surgical disorders, including trauma, related to head and neck and thorax including salivary glands, thyroid, parathyroid, larynx, pharynx, chest wall, lungs, pleura, heart, major vessels, mediastinum, oesophagus and diaphragm etc.
6. Disease of the stomach, duodenum, small and large intestine, liver including biliary tract, spleen, pancreas, abdominal wall, mesentery, omentum, peritoneum and retroperitoneum.
7. Diseases of the kidney, supra renals, ureters, urinary bladder, urethra and external genitalia.
8. Common pediatric surgical, neurosurgical, plastic and reconstructive and dental surgical disorders, anaesthetic techniques and their problems and pain relief. Applied radiodiagnostic and imaging and radiotherapy techniques and applications.
9. Detection and management of accidental trauma, disaster related and other surgical emergency problems.
10. Recent advances in diagnosis and management of common surgical problems.
11. Common/ routine general surgical operative procedures/ techniques.
12. Common orthopaedic problems and their management including congenital, inflammatory, traumatic, degenerative and neoplastic disorders of bones and joints.

EXAMINATION :**THEORY :**

Two theory papers of 60 marks each.

Paper A : Part I (General Surgery .. Syllabus items 1 to 4) .. 30 marks	
Part II (Orthopaedics) .. Syllabus item 2) .. 30 marks	60 Marks
Paper B : Part I (General Surgery .. Syllabus item 5) .. 30 marks	
Part II (General Surgery .. Syllabus items 6-11) .. 30 marks	60 Marks

PRACTICAL :

Clinical : (Surgical 75 marks + Ortho 25 marks)	100 Marks
Oral Viva (To be counted towards theory*)	20 Marks

INTERNAL ASSESSMENT :

Theory (30 marks), Practical (30 marks)	30 Marks	30 Marks
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Total Marks : Practical 130 Theory : 170 Marks
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Passing Marks : Theory ... 50% collectively (Paper A + Paper B + Viva)
 Practical/ Clinical ... 50%

Internal Assessment... 50 % in theory and practical separately.

Eligibility of a candidate to be rejected if Internal Assessment of the candidate is less than 50% (as required under MCI guidelines). Candidates who do not comply with minimum requirements of Internal Assessment should not be allowed to appear in the subject. Since the application forms of the candidates are required to be submitted many months in advance of the examination, such candidates should be detained from appearing in the subject.

No. of Exams : Only two examinations one annual and one supplementary should be held in one calendar year for both old and new candidates.

Guidelines for Questions :

All questions should carry 10 marks each. Each paper to have two parts of three questions each. One question in each part should be descriptive with emphasis on basic sciences as relevant to the subject. The other two questions should be split into 3-4 sub-sections (i.e. notes) requiring short answers. Each such sub-question should carry 2-4 marks as may be indicated by the examiner. Marks for all questions and sub-questions should be clearly indicated in the question papers.

Co-ordinator for Theory paper Setting

Theory paper setting co-ordinator should be from among the senior most faculty teachers of affiliated colleges by rotation.

CURRICULUM IN OBSTETRICS & GYNAECOLOGY

GOAL

- The broad goal of the teaching of undergraduate students in Obstetrics and Gynaecology is that he/she shall acquire understanding of anatomy, physiology and pathophysiology of the reproductive system and gain the ability to optimally manage common conditions affecting it.
- The undergraduate student should grasp the basic ability to resuscitate the new born, soon after birth and to look after the neonate in the lying in period and to have the capability to diagnose the problems of the neonates in the post-partum period.

OBJECTIVES

(a) KNOWLEDGE

At the end of the course, the student shall be able to:-

1. outline the anatomy, physiology and pathophysiology of the reproductive system and the common conditions affecting it;
2. detect normal pregnancy, labour, puerperium and manage the problems he/she is likely to encounter therein;
3. list the leading causes of maternal and perinatal morbidity and mortality, identify the use, abuse, side effects of drugs in lactation also.
4. understand the principles of contraception and various techniques employed, methods of medical termination of pregnancy, sterilization and their complications;
5. identify the use, abuse and side effects of drugs in pregnancy, pre-menopausal and post-menopausal periods;
6. describe the national programme of maternal and child health and family welfare and their implementation at various levels, should know the routine post operative management soon after surgery and till the time the patient is discharged from the hospital;
7. identify common gynaecological diseases and describe principles of their management, should identify the importance of breast feeding;
8. state the indications, techniques and complications of surgeries like Caesarian Section, laprotomy, abdominal and vaginal hysterectomy, Fothergill's operation and vacuum aspiration for Medical Termination of Pregnancy (MTP).
9. Should be conversant specifically with the resuscitation of the new born and care of the new born and the diseases of new born during perinatal period.
10. Should be well versed with the problems of the adolescents counselling the adolescents and the role of sex education.
11. Should also be conversant with the problems of Geriatrics and the specific diseases of this age group and therapeutic approach to their problems (with special reference to malignancies, osteoporosis and coronary disease).

(b) **SKILLS**

At the end of the course, the student shall be able to:-

1. examine a pregnant woman; recognize high risk pregnancies and make appropriate referrals and should be able to advise a pregnant patient with low risk pregnancy – regarding antenatal care.
2. conduct a normal delivery, anticipate and recognise well in time the complications and deal with them.
3. resuscitate the new born and recognize congenital anomalies and to diagnose the post-natal complications developing during the course of lying in period.
4. advise a couple on the use of various available contraceptive devices and assist in insertion and removal of intra-uterine contraceptive devices. Distinguish between normal newborn babies and those requiring special care and institute early care to all new born babies including care of preterm and low birth weight babies, provide correct guidance and counseling in breast feeding.
5. perform pelvic examination, diagnose and manage common gynaecological problems including early detection of genital malignancies.
6. Make a vaginal cytological smear, perform a post coital test and wet vaginal smear examination for Trichomonas vaginalis, moniliasis and gram stain for gonorrhoea;
7. interpretation of data of investigations like biochemical, histopathological, radiological, ultrasound etc.

(c) **INTEGRATION**

The student shall be able to integrate clinical skills with other disciplines and bring about coordination of family welfare programmes for the national goal of population control.

(d) **GENERAL GUIDELINES FOR TRAINING**

1. attendance of a maternity hospital or the maternity wards of a general hospital including (i) antenatal care (ii) the management of the puerperium and (iii) a minimum period of 5 months in-patient and out-patient training including family welfare planning. If the medical college has its own Obst. & Gynae department functioning well, the maternity training should be carried out there only and not in the maternity (specially) wards of a general hospital.
2. of this period of clinical instruction, not less than one month shall be spent as a resident pupil in a maternity ward of a general hospital;
3. during this period, the student shall conduct at least 10 cases of labour under adequate supervision and assist in 10 other cases.
4. a certificate showing the number of cases of labour attended by the student in the maternity hospital and/or patient homes respectively, shall be signed by a responsible medical officer on the staff of the hospital and shall state:-

- a) that the student has been present during the course of labour and personally conducted each case, making the necessary abdominal and other examinations under the supervision of the certifying officer who shall describe his official position.
- b) That satisfactory written histories of the cases conducted including wherever possible antenatal and postnatal observations, were presented by the student and initiated by the supervising officer.

5. FAMILY WELFARE PLANNING

Training in Family Welfare Planning shall be emphasized in all the three phases and during internship as per guidelines provided in Appendix A.

6. Community Medicine

The teaching and training of community medicine will continue during the first two semesters of phase III

PHASE DISTRIBUTION AND TIMING OF EXAMINATION

- 1) It is recommended that 4 weeks of posting in Obst. & Gynae during 5th semester should be shifted to 6th semester because during the 5th semester the students are busy with their 2nd professional examination.
- 2) During 8th semester, the posting should be increased to 6 weeks rather than 4 weeks.
- 3) Since the number of weeks of teaching in Obst. & Gynae are equal to those in Medicine & Surgery, it is suggested that the marks allocated to the Obst. & Gynae should also be 400 marks, 1/4th of theory papers should be reserved for Family Welfare Planning. Since family welfare planning is a National Programme, its importance can be highlighted in the teaching curriculum of medical graduate and the importance of a subject in the minds of the students goes by the allocation of marks only. Hence, it is of utmost importance to highlight this subject during undergraduate training to an extent that it really deserves.

Distribution of Marks

Theory : Two papers of 40 marks each	80 marks
Paper I – Obstetrics including social obstetrics	
Paper II-Gynaecology, Family Welfare & Demography	
Shall contain one question on basic sciences and allied subjects)	
Oral (Viva) including record of delivery cases (20+10)	30 marks
Clinical	30 marks
Internal Assessment	60 marks
(Theory- 30, Practical –30)	
Total	200 marks

CURRICULUM IN PAEDIATRICS

OBJECTIVES

The objectives of training the undergraduate students in paediatrics is to ensure that at the end of the training he/she will be able to:

Diagnose and appropriately treat common paediatric and neonatal illness.

Identify paediatric and neonatal illness and problems that require secondary and tertiary care and refer them appropriately.

Advise and interpret investigations.

Counsel and guide patient's parents and relatives regarding the illness, the appropriate care, the possible complications and the prognosis.

Provide emergency cardio-pulmonary resuscitation to newborns and children.

Participate in the National Programmes effectively.

Diagnose and effectively treat acute paediatric and neonatal emergencies.

Perform routine investigative and therapeutic procedures.

Motivate parents to consent for a diagnostic autopsy.

COURSE CONTENTS

I. VITAL STATISTICS

1. Introduction to paediatrics with special reference to population explosion problem and age related morbidities.
2. Definition of mortality rates and ratios, perinatal, neonatal, infant, under five children and maternal.
3. National programmes on maternal and child health.

II. GROWTH AND DEVELOPMENT

1. Fetal (1st- 3rd trimester)
2. Neonatal
3. Infancy
4. Early & late childhood
5. Adolescence
6. Deviation in growth and development, with special reference to stunted growth.

III. NUTRITION AND RELATED DISORDERS

1. Normal nutritional requirements : protein, carbohydrates, fats, vitamins, trace elements.
2. Various aspects of infant feeding : breast feeding, weaning and nutrition in preterm babies.
3. Nutritional disorders :
 - i) Protein Energy Malnutrition.
 - ii) Causes and Management
 - iii) Vitamin deficiency diseases
 - a) Rickets
 - b) Scurvy
 - c) Vitamin A deficiency
4. National nutritional programme.

IV. IMMUNISATION

1. Principles of immunisation, vaccine preservation and cold chain.
2. National and IAP immunisation schedules
3. Newer vaccines

V. COMMON INFECTIOUS DISEASES

1. Enteric fever, polio & AFP surveillance, measles, chicken pox, diphtheria and mumps.
2. Childhood tuberculosis - difference between primary and adult tuberculosis, various types of childhood tuberculosis.
3. HIV infection in children.

VI. DISORDERS OF BLOOD

1. Anaemia :
 - i) Iron deficiency
 - ii) Megaloblastic
 - iii) Aplastic
 - iv) Hemolytic : acute & chronic
 - v) Thalassemia
2. Leukaemia (ALL etc.)
3. Bleeding disorders :
 - i) ITP
 - ii) Hemophilia

VII. RESPIRATORY SYSTEM

1. Acute URI
2. Lower respiratory tract infections : bronchopneumonia, bronchiolitis, asthma.

VIII. CARDIOVASCULAR SYSTEM

1. Classification of congenital heart disease
 - a) Cyanotic (TOF etc)
 - b) Acyanotic (VSD, PDA, ASD etc)
2. Acute Rheumatic fever and rheumatic heart disease
3. Congestive heart failure
4. Hypertension.

IX. CENTRAL NERVOUS SYSTEM

1. Meningitis (Pyogenic & Tuberculous)
2. Encephalitis
3. Seizures (Including neonatal)
4. Mental retardation, cerebral palsy, hydrocephalus.

X. GASTROINTESTINAL SYSTEM

1. Acute & chronic diarrhoea disease with fluid and electrolyte therapy and complications.
2. Hepatic disorders (hepatitis, hepatic coma)
3. Gastro – esophageal reflux
4. Helminthiasis.

XI. ENDOCRINE DISORDERS

1. Hypothyroidism – congenital & acquired, early recognition and treatment.
2. Juvenile diabetes and its management.

XII. RENAL DISEASE

1. Acute glomerulonephritis – diagnosis, investigation and treatment.
2. Nephrotic syndrome.
3. Urinary tract infection – acute recurrent
4. Renal failure – acute & chronic.

XIII. GENETIC DISORDERS

1. General clinical principles in genetics
2. Common genetic disorders like Down's syndrome
3. Genetic counselling.

XIV. METABOLIC DISORDERS

1. Common metabolic disorders like phenylketonuria, albinism, mucopolysaccharidosis.

XV. NEONATOLOGY

1. Foetal physiology of normal pregnancy. Identification of antenatal, intrapartum and immediate postnatal risk factors.
2. Definition, identification and classification of high risk neonate, neonatal resuscitation, gestational age assessment and care of the normal newborn in the hospital and home.
3. Care of the preterm and low birth weight infant, temperature maintenance, feeding, prevention of complications, appropriate method of transfer to tertiary centre.
4. Management of neonatal problems, transient metabolic disorders, infections, minor developmental defects of diabetic mothers, haemorrhagic disease of newborn, respiratory distress, feeding difficulties, birth injuries, anaemia and jaundice.
5. Management of meconium aspiration syndrome.
6. Identification and referral of neonates with congenital malformations like cleft lip, cleft palate, tracheo-esophageal fistula, diaphragmatic hernia, anorectal anomalies.

XVI. PAEDIATRIC EMERGENCIES

1. Management of shock, cardiac failure, hyperpyrexia, drowning, foreign body aspiration.

XVII. COMMON POISONING AND ACCIDENTS

1. Kerosene, organophosphorus, rat poison, acid ingestion, opium, barbiturates, dhatura, alcohol, naphthalene.
2. Insect and snake bites.
3. Road and fire accidents.
4. Food poisoning.
5. Lead poisoning.

XVIII. MISCELLANEOUS

1. Juvenile rheumatoid arthritis.
2. Behavioural disorders.

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SKILLS

The board goal is to acquire appropriate skills for optimally dealing with major health problems of children to ensure their optimal growth and development. At the end of the course, the student shall be able to :

1. Take a detailed paediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures and interpret common laboratory investigation results.
2. Take anthropometric measurements, witness resuscitation of newborn infants at birth, preparation of oral rehydration solution, tuberculin testing, vaccine administration, venesection, intravenous line access and nasogastric feeding.
3. Witness diagnostic procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap.
4. Distinguish between normal newborn babies and those requiring special care and institute early care to all newborn babies including care of preterm and low birth weight babies, providing correct guidance and counselling in breast feeding.
5. Provide ambulatory care to all sick children, identify indications for specialised inpatient care and ensure referral of those who require hospitalization.
6. Demonstrate empathy and humane approach towards patients, relatives and attendants.
7. Develop a proper attitude towards patients, colleagues and other staff and learn communication skills.
8. Maintain an ethical behaviour in all aspects of medical practice.
9. Adopt universal precautions for self protection against HIV and hepatitis and counsel patients.
10. Maintain cold chain for vaccines.

Students must also be familiar with the following :

INSTRUMENTS

Identification, indications and contraindications and technique of using them :

- Lumbar puncture needle
- Liver biopsy needle
- Bone marrow aspiration needle
- Scalp vein needle
- Ryle's tube
- Infant feeding tube
- Endotracheal tube
- Ambu Bag
- Tongue depressor
- Tuberculin syringe.

VACCINES

- DPT
- DT
- Oral polio vaccine
- Measles vaccine
- MMR vaccine
- BCG
- Old tuberculin
- H. Influenza type B vaccine
- Hepatitis B vaccine
- Pneumococcal vaccine

NUTRITION TRAY

- Milk
- Feeding bottle
- Rice, raw-parboiled
- Wheat
- Red gram dal
- Black gram dal
- Green gram dal
- Bengal gram – whole and dal
- Groundnut
- Jaggery
- Sugar
- Green leafy vegetables
- Tomato
- Egg, fish, meat
- Banana

ORAL REHYDRATION SALT PACKET**X-RAYS**

- Rickets
- Scurvy
- Pneumonia
- Hair on end appearance – haemolytic anemia
- Skull X-ray – sutural separation
- Epiphyseal dysgenesis (hypothyroidism)
- Congenital heart disease - Pulmonary plethora
- Pulmonary oligemia
- Cardiomegaly.

Distribution of marks

Theory: One Paper	40 marks
(Shall contain one question on basic sciences and allied subjects)	
Oral (Viva)	10 marks
Clinical	30 marks
Internal Assessment (Theory 10 Practical 10)	20 marks
Total	100 marks