UG - MBBS

Program Outcomes Anatomy:

- PO1.Comprehend the normal disposition, clinically relevant interrelationships, functional and cross-sectional anatomy of the various structures in the body.
- PO2. 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.
- PO3. Comprehend the basic structure and connections of the central nervous system to analyze the integrative and regulative functions of the organs and systems. He/She should be able to locate the site of gross lesions according to the deficits encountered.
- PO4. Demonstrate knowledge of the basic principles and sequential development of the organs and systems, recognize the critical stages of development and the effects of common teratogens, genetic mutations and environmental hazards. He/She should be able to explain the developmental basis of the major variations and abnormalities.

Skills:

At the end of the course the student should be able to:

- PO5. Identify and locate all the structures of the body and mark the topography of the living anatomy.
- PO6. Identify the organs and tissues under the microscope.
- PO7. Understand the principles of karyotyping and identify the gross congenital anomalies.

PO8. Understand principles of newer imaging techniques and interpretation of Computerized Tomography (CT) Scan, Sonogram etc.

PO9. Understand clinical basis of some common clinical procedures i.e., intramuscular & intravenous injection, lumbar puncture and kidney biopsy etc.

Integration:

PO10. From the integrated teaching of other basic sciences, student should be able to comprehend the regulation and integration of the functions of the organs and systems in the body and thus interpret the anatomical basis of disease process.

Physiology:

Cognitive Based:

- PO1. Explain the normal functioning of all the organ systems and their interactions for well coordinated total body function.
- PO2. Assess the relative contribution of each organ system to the maintenance of the milieu interior.
- PO3. Elucidate the physiological aspects of normal growth and development.
- PO4. Describe the physiological response and adaptations to environmental stresses.
- PO5. List the physiological principles underlying pathogenesis and treatment of disease

Skill Based:

At the end of the course the student should be able to:

- PO6. Conduct experiments designed for study of physiological phenomena.
- PO7. Interpret experimental/investigative data.
- PO8. Distinguish between normal and abnormal data derived as a result of tests which he/she has performed and observed in the laboratory.

Integration:

PO9. At the end of the integrated teaching the student should acquire an integrated knowledge of organ structure and function and its regulatory mechanisms.

Biochemistry:

- PO1. Able to understand central role of biochemistry as a core discipline within the medical sciences.
- PO2. Describe the principles and fundamental concepts of biochemistry and have an awareness of how molecules, pathways, cells and organs interact in a controlled fashion at cellular and molecular level to maintain Homeostasis.
- PO3. Understand the relationship between the structure of biomolecules and their function.
- PO4. Able to perform a selected number of biochemical techniques.
- PO5. Knowledge of key applications of biochemistry which are relevant to biomedical/pharmaceutical sciences, pharmacy and laboratory medicine.

Pathology:

Cognitive Based:

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

- PO1. Describe the structure and ultrastructure of a sick cell, mechanisms of cell degeneration, cell death and repair and be able to correlate structural and functional alterations.
- PO2. Explain the pathophysiological processes which govern the maintenance of homeostasis, mechanisms of their disturbance and the morphological and clinical manifestations associated with it
- PO3. Describe the mechanisms and patterns to tissue response to injury such that she/he can appreciate the pathophysiology of disease processes and their clinical manifestations.
- PO4. Correlate normal and altered morphology (gross and microscopic) of different organ systems in common diseases to the extent needed for understanding of disease processes and their clinical significance.

Skill Based:

- PO5. Describe the rationale and principles of technical procedures of the diagnostic laboratory tests and interpretation of the results.
- PO6. Perform the simple bedside tests on blood, urine and other biological fluid samples PO7. Draw a rational scheme of investigations aimed at diagnosing and managing the cases of common disorders.
- PO8. Understand biochemical/physiological disturbances that occur as a result of disease in collaboration with preclinical departments.

Integration:

At the end of training he/she should be able to integrate the causes of disease and relationship of different etiological factors (social, economic and environmental) that contribute to the natural history of diseases most prevalent in India.

Microbiology:

Cognitive Based:

At the end of the course, the student should be able to:

- PO1. State the infective micro-organisms of the human body and describe the host parasite relationship.
- PO2. List pathogenic micro-organisms (bacteria, viruses, parasites, fungi) and describe the pathogenesis of the diseases produced by them.
- PO3. State or indicate the modes of transmission of pathogenic and opportunistic organisms and their sources, including insect vectors Responsible for transmission of infection.
- PO4. Describe the mechanisms of immunity to infections.
- PO5. Acquire knowledge on suitable antimicrobial agents for treatment of infections and scope of immunotherapy and different vaccines available for prevention of communicable diseases.
- PO6. Apply methods of disinfection and sterilization to control and prevent hospital and community acquired infections.
- PO7. Recommend laboratory investigations regarding bacteriological examination of food, water, milk and air.
- PO8. Plan and interpret laboratory investigations for the diagnosis of infectious diseases and to correlate the clinical manifestations with the etiological agent.
- PO9. Identify the common infectious agents with the help of laboratory procedures and use antimicrobial sensitivity tests to select suitable antimicrobial agents.
- PO10. Perform commonly employed bed-side tests for detection of infectious agents such as blood film for malaria, filaria, gram staining and AFB staining and stool sample for ova cyst.
- PO11. Use the correct method of collection, storage and transport of clinical material for microbiological investigations.
- PO12. The student should understand infectious diseases of national importance in relation to the clinical, therapeutic and preventive aspects.

Skill Based:

- PO13. Describe the rationale and principles of technical procedures of the diagnostic laboratory tests and interpretation of the results.
- PO14. Perform the simple bed-side tests on blood, urine and other biological fluid samples
- PO15. Draw a rational scheme of investigations aimed at diagnosing and managing the cases of common disorders.

PO16. Understand biochemical/physiological disturbances that occur as a result of disease in collaboration with preclinical departments.

Integration:

CO17. At the end of training he/she should be able to integrate the causes of disease and relationship of different etiological factors (social, economic and environmental) that contribute to the natural history of diseases most prevalent in India.

Forensic Medicine and Toxicology

Cognitive Based:

At the end of the course, the student should be able to:

- CO1. Identify the basic medicolegal aspects of hospital and general practice.
- PO2. Define the medicolegal responsibilities of a general physician while rendering community service either in a rural primary health center or an urban health center.
- PO3. Appreciate the physician's responsibilities in criminal matters and respect for the codes of medical ethics.
- PO4. Diagnose, manage and identify also legal aspects of common acute and chronic poisonings.
- PO5. Describe the medicolegal aspects and findings of post -mortem examination in case of death due to common unnatural conditions & poisonings.
- PO6. Detect occupational and environmental poisoning, prevention and epidemiology of common poisoning and their legal aspects particularly pertaining to Workmen's Compensation Act.
- PO7. Describe the general principles of analytical toxicology.

Skill Based:

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

- PO8. Make observations and logical inferences in order to initiate enquiries in criminal matters and medicolegal problems.
- PO9. Diagnose and treat common emergencies in poisoning and manage chronic toxicity.
- CO10. Make observations and interpret findings at postmortem examination.
- CO11. Observe the principles of medical ethics in the practise of his profession

Integration:

CO12. Department shall provide an integrated approach towards allied disciplines like Pathology, Radiology, Forensic Sciences, Hospital Administration etc. to impart training regarding medico legal responsibilities of physicians at all levels of health care. Integration with

relevant disciplines will provide scientific basis of clinical toxicology e.g. medicine, pharmacology etc.

Pharmacology

Cognitive Based:

- PO1. Describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs.
- PO2. List the indications, contraindications, interactions and adverse reactions of commonly used drugs.
- PO3. Indicate the use of appropriate drug in a disease with consideration to its cost, efficacy and safety for
 - I) Individual needs.
 - II) Mass therapy under national health program.
- PO4. Describe the pharmacokinetic basis, clinical presentation, diagnosis and management of common poisonings.
- PO5. List the drugs of addiction and recommend the management.
- PO6. Classify environmental and occupational pollutants and state the management issues.
- PO7. Indicate causations in prescription of drugs in special medical situations such as pregnancy, lactation, infancy and old age.
- PO8. Integrate the concept of rational drug therapy in clinical pharmacology.
- PO9. State the principles underlying the concept of 'Essential Drugs'
- PO10. Evaluate the ethics and modalities involved in the development and introduction of new drugs.

Skill Based:

At the end of the course, the student should be able to:

- PO11. Prescribe drugs for common ailments.
- PO12. Recognize adverse reactions and interactions of commonly used drugs.
- PO13. Observe experiments designed for study of effects of drugs, bioassay and interpretation of the experimental data.
- PO14. Scan information on common pharmaceutical preparations and critically evaluate drug formulations.

Integration:

PO15. Practical knowledge of use of drugs in clinical practice will be acquired through integrated teaching with clinical departments and pre clinical departments.

Community Medicine

Cognitive Based:

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

- PO1. Describe the health care delivery system including rehabilitation of the disabled in the country.
- PO2. Describe the National Health Programmed with emphasis on maternal and child health programmed, family welfare planning and population control.
- PO3. List epidemiological methods and describe their application to communicable and non-communicable diseases in the community or hospital situation.
- PO4. Apply biostatistical methods and techniques
- PO5. Outline the demographic pattern of the country and appreciate the roles of the individual, family, community and socio-cultural milieu in health and disease.
- PO6. Describe the health information systems.
- PO7. Enunciate the principles and components of primary health care and the national health policies to achieve the goal of 'Health for All'.
- PO8. Identify the environmental and occupational hazards and their control.
- PO9. Describe the importance of water and sanitation in human health.
- PO10. To understand the principles of health economics, health administration, health education in relation to community.

Skill Based:

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

- PO11. Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.
- PO12. Collect, analyse, interpret and present simple community and hospital based data.
- PO13. Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs.
- PO14. diagnose and manage maternal and child health problems and advise a couple and the community on the family planning methods available in the context of the national priorities.
- PO15. Diagnose and manage common nutritional problems at the individual and community level.
- PO16. plan, implement and evaluate a health education programme with the skill to use simple audio-visual aids.
- PO17. Interact with other members of the health care team and participate in the organisation of health care services and implementations of national health programmes.

Integration:

PO18. Develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures for this.

General Medicine:

Cognitive Based:

At the end of the course, the student should be able to:

- PO1. Diagnose common clinical disorders with special reference to infectious diseases, nutritional disorders, tropical and environmental diseases.
- PO2. Propose diagnostic and investigative procedures and ability to interpret them.
- PO3. Plan modes of management including drug therapeutics especially dosage, side effects, toxicity, interactions, indications and contra-indications.
- PO4. Provide first level management of acute emergencies promptly and efficiently and decide the timing and level of referral, if required.
- PO5. Recognize geriatric disorders and their management.
- PO6. Baseline knowledge of carrying out ethical research.

Skill Based:

At the end of the course, the student should have:

- PO7. Clinical skills (history taking, clinical examination and other instruments of examination) to diagnose various common medical disorders and emergencies.
- PO8. Refer a patient to secondary and/or tertiary level of health care after having instituted primary care.
- PO9. Perform simple routine investigations like hemogram, stool, urine, sputum and biological fluid examinations.
- PO10. Assist the common bedside investigative procedures like pleural tap, lumbar puncture, bone marrow aspiration/biopsy and liver biopsy.
- PO11. To develop communication skills to communicate with patient & relatives regarding disease process, outcome, breaking bad news.
- PO12. To provide basic life support

Integration:

PO13. With community medicine and physical medicine and rehabilitation to have the knowledge and be able to manage important current national health programs, also to be able to view the patient in his/her total physical, social and economic milieu.

PO14. With other relevant academic inputs which provide scientific basis of clinical medicine e.g. anatomy, physiology, biochemistry, microbiology, pathology and pharmacology. To correlate pathophysiology with disease process.

Psychiatry

Cognitive Based

At the end of the course, the student should be able to:

- PO1. Comprehend nature and development of different aspects of normal human Behavior like learning, memory, motivation, personality and intelligence.
- PO2. Recognize differences between normal and abnormal behavior
- PO3. Classify psychiatric disorders
- PO4. Recognize clinical manifestations of the following common psychiatric conditions /syndromes and plan their appropriate, effective, primary, management of organic psychosis, neuropsychiatric disorders, functional psychosis, schizophrenia, affective disorders, neurotic disorders, sleep and sexual disorders, personality disorders, psychophysiological disorders, drug and alcohol dependence, psychiatric disorders of childhood and adolescence;

PO5. Describe rational use of different modes of therapy in psychiatric disorders.

Skills

The student should be able to:

- PO6. Interview the patient and understand different methods of communications in patient-doctor relationship.
- PO7. Elicit detailed psychiatric case history and conduct clinical examination for assessment of mental status
- PO8. Define, elicit and interpret psycho-pathological symptoms and signs
- PO9. Diagnose and manage common psychiatric disorders
- PO10. Identify and manage psychological reactions and psychiatric disorders in medical and surgical patients in clinical practice and in community setting.

Integration

PO11. Training in Psychiatry should prepare the students to deliver preventive, promotive, curative and re-habilitative services for the care of patients both in the family and community and to refer advance cases to a specialized Psychiatry/Mental Hospital. Training should be integrated with the departments of Medicine, Neuro Anatomy, Behavioural Sciences and Forensic medicine.

Dermatology

Cognitive Based

At the end of the course of Dermato-S.T.D. and Leprology, the student shall be able to:

- PO1. Demonstrate sound knowledge of common diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis:
- PO2. Demonstrate comprehensive knowledge of various modes of therapy used in treatment of respiratory diseases
- PO3. Describe the mode of action of commonly used drugs, their doses, side effects/toxicity, indications and contra-indications and interactions
- PO4. Describe commonly used modes of management including the medical and surgical procedures available for the treatment of various diseases and to offer a comprehensive plan of management for a given disorder

Skill

The student should be able to:

- PO5. Interview the patient, elicit relevant and correct information and describe the history in a chronological order.
- PO6. Conduct clinical examination, elicit and interpret physical findings and diagnose common disorders and emergencies
- PO7. Perform simple, routine investigative and office procedures required for making the bedside diagnosis, especially the examination of scrapings for fungus, preparation of slit smears and staining for AFB for leprosy patients and for STD cases
- PO8. Take a skin biopsy for diagnostic purposes
- PO9. Manage common diseases recognizing the need for referral for specialized care, in case of inappropriateness of therapeutic response

Pediatrics

Cognitive Based

At the end of the course, the student should be able to:

PO1 Describe the normal growth and development during foetal life, neonatal period, childhood and adolescence and outline deviations thereof.

- PO2 Describe the common pediatrics disorders and emergencies in terms of epidemiology, etiopathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation.
- PO3 State age related requirements of calories, nutrients, fluids, drugs etc. in health and disease.
- PO4 Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse.

PO5 Outline national programmed relating to child health including immunization programmes.

Skills

At the end of the course, the student should be able to:

PO6. Take a detailed pediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigation results and plan and institute therapy.

PO7. Take anthropometric measurements, resuscitate newborn infants at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programs, perform venesection, start an intravenous saline and provide nasogastric feeding.

PO8. Conduct diagnostic procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap.

PO9. 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, provide correct guidance and counselling in breast feeding.

PO10. Provide ambulatory care to all sick children, identify indications for specialized/inpatient care and ensure timely referral of those who require hospitalization

Integration

PO11. The training in pediatrics should prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of a team in an integrated form with other disciplines, e.g. Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Forensic Medicine, Community Medicine and Physical Medicine and Rehabilitation.

General Surgery

Cognitive Based

At the end of the Course, the student be capable of delivery of efficient first contact surgical care.

He / She should be able to:

PO1: Describe etiopathology, pathophysiology, principles of diagnosis and management of common surgical conditions, including emergencies

PO2: Understand the concepts of fluid therapy, sterilization and disinfection, judicious antibiotic usage

PO3: Describe common malignancies in the country and outline their management, including preventive strategies

PO4: Enumerate different types of anaesthetic agents, their indications, mode of administration, contraindications and side-effects

Skills

At the end of the course, the student should be able to:

- PO5. Diagnose common surgical conditions both acute and chronic, in adult and children.
- PO6. Plan various laboratory tests for surgical conditions and interpret the results.
- PO7. Identify and manage patients of hemorrhagic, septicemic and other types of shock.
- PO8. Be able to maintain patent airway and resuscitate
 - i) a critically injured patient
 - ii) patient with cardio-respiratory failure
 - iii) a drowning case
- PO9. Monitor patients of head, chest, spinal and abdominal injuries, both in adults and children.
- PO10. Provide primary care for a patient of burns
- PO11. Acquire principles of operative surgery, including pre-operative, operative and post operative care and monitoring.
- PO12. Treat open wounds including preventive measures against tetanus and gas gangrene.
- PO13. Diagnose neonatal and pediatric surgical emergencies and provide sound primary care before referring the patient to secondary/tertiary centres.
- PO14. Identify congenital anomalies and refer them for appropriate management.

In addition to these he should have observed/assisted/performed the following:

- 1. Incision and drainage of abscess
- 2. Debridement and suturing open wound
- 3. Venesection
- 4. Excision of simple cyst and tumours
- 5. Biopsy of surface malignancy
- 6. Catheterisation and nasogastric intubation
- 7. Circumcision
- 8. Meatotomy

- 9. Vasectomy
- 10. Peritoneal and pleural aspirations
- 11. Diagnostic proctoscopy
- 12. Hydrocele operation
- 13. Endotracheal intubation
- 14. Tracheostomy and cricothyroidotomy
- 15. Chest tube insertion.

Integration

PO15. The undergraduate teaching in surgery should be integrated at various stages with different pre and para and other clinical departments.

Anesthesiology

Cognitive based

- PO1 Perform pre-anesthetic checkup and prescribe pre-anesthetic medications.
- PO2 Perform venipuncture and set up intravenous drip
- PO3 Perform laryngoscopy and endotracheal intubation
- PO4 Perform lumbar puncture, spinal anaesthesia and simple nerve blocks
- PO5 Conduct simple general anesthetic procedures under supervision
- PO6 Monitor patients during anaesthesia and post-operative period
- PO7 Recognize and manage problems associated with emergency anesthesia
- PO8 Maintain anesthetic records
- PO9 Recognize and treat complication in post-operative period
- PO10 Perform cardio-pulmonary brain resuscitation (C.P.B.R.) currently, including recognition of cardiac arrest.

Orthopedics

Cognitive based

The student should be able to:

- PO1. Explain the principles of recognition of bone injuries and dislocation.
- PO2. Apply suitable methods to detect and manage common infections of bones and joints
- PO3. Identify congenital, skeletal anomalies and their referral for appropriate correction or rehabilitation.
- PO4. recognize metabolic bone diseases as seen in this country.

PO5. explain ectogenesis, manifestations, diagnosis of neoplasm affecting bones

Skills

At the end of the course, the student should be able to:

- PO6. Detect sprains and deliver first aid measures for common fractures and sprains and manage uncomplicated fractures of clavicle, Collis's forearm, phalanges etc.
- PO7. Techniques of splinting, plaster, immobilization etc.
- PO8. Management of common bone infections, learn indications for sequestration, amputations and corrective measures for bone deformities.
- PO9. Aspects of rehabilitation for Polio, Cerebral Palsy and Amputation.

Integration

PO10. Integration with anatomy, surgery, pathology, radiology and Forensic Medicine be done

Radiodiagnosis

Cognitive based

The student should be able to

- PO1. Understand basics of X-ray production, its uses and hazards.
- PO2. Appreciate and diagnose changes in bones -like fractures, infections, tumors and metabolic bone diseases.
- PO3. Identify and diagnose various radiological changes in disease conditions of chest and mediastinum, skeletal system, G.I. Tract, Hepatobiliary system and G.U. system.
- PO4. Learn about various imaging techniques, including isotopes C.T., Ultrasound, M.R.I. and D.S.A.

Skills

At the end of the course the student should be able to:

- PO5. Use basic protective techniques during various imaging procedures.
- PO6. Interpret common X-ray, radio-diagnostic techniques in various community situations.
- PO7. Advise appropriate diagnostic procedures in specialized circumstances to appropriate specialists.

ENT

Cognitive based

At the end of the course, the student should be able to:

PO1. Describe the basic pathophysiology of common ENT diseases and emergencies.

PO2. Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions. Suggest common investigative procedures and their interpretation.

Skills

At the end of the course, the student should be able to:

- PO3. Examine and diagnose common ENT problems including the pre-malignant and malignant disorders of the head and neck.
- PO4. Manage ENT problems at the first level of care and be able to refer whenever necessary.
- PO5. Assist/carry out minor surgical procedures like ear syringing, ear dressings, nasal packing etc.
- PO6. Assist in certain procedures such as tracheostomy, endoscopies and removal of foreign bodies.

Integration

PO7. The undergraduate training in ENT will provide an integrated approach towards other disciplines especially neurosciences, ophthalmology and general surgery.

Ophthalmology

Cognitive based

At the end of the course, the student should have knowledge of:

- PO1. Common problems affecting the eye:
- PO2. Principles of management of major ophthalmic emergencies
- PO3. Pain systemic diseases affecting the eye
- PO4. Effects of local and systemic diseases on patient's vision and the necessary action required to minimise the segualae of such diseases
- PO5. Adverse drug reactions with special reference to ophthalmic manifestations
- PO6. Magnitude of blindness in India and its main causes
- PO7. National programme of control of blindness and its implementation at various levels
- PO8. Eye care education for prevention of eye problems
- PO9. Role of primary health centre in organization of eye camps
- PO10. Organization of primary health care and the functioning of the ophthalmic assistant.
- PO11. Integration of the national programme for control of blindness with the other national health programme

eye bank organization

Skills

At the end of the course, the student should be able to:

- PO12. Elicit a history pertinent to general health and ocular status.
- PO13. Assist in diagnostic procedures such as visual acuity testing, examination of eye, Schiotz tonometry, staining for corneal pathology, confrontation perimetry, Subjective refraction including correction of presbyopia and aphakia, direct ophthalmoscopy and conjunctival smear examination and Cover test.
- PO14. Diagnose and treat common problems affecting the eye.
- PO15. Interpret ophthalmic signs in relation to common systemic disorders.
- PO16. Assist/observe therapeutic procedures such as subconjunctival injection,

Corneal/Conjunctival foreign body removal, Carbolic cautery for corneal ulcers, Nasolacrimal duct syringing and tarsorrhaphy.

- PO17. Provide first aid in major ophthalmic emergencies, assist to organize community surveys for visual checkup.
- PO18. Assist to organise primary eye care service through primary health centres.
- PO19. Use effective means of communication with the public and individual to motivate for surgery in cataract and for eye donation.
- PO20. Establish rapport with his seniors, colleagues and paramedical workers, so as to effectively function as a member of the eye care team.

Integration: -

PO 21. The undergraduate training in Ophthalmology will provide an integrated approach towards other disciplines especially neurosciences, otorhino-laryngology, General Surgery and Medicine.

OBGY

Cognitive Based

At the end of the course, the student should be able to:

- PO1. Outline the anatomy, physiology and pathophysiology of the reproductive system and the common conditions affecting it.
- PO2. Detect normal pregnancy, labour puerperium and manage the problems he/she is likely to encounter therein.
- PO3. List the leading causes of maternal and perinatal morbidity and mortality.
- PO4. Understand the principles of contraception and various techniques employed, methods of medical termination of pregnancy, sterilization and their complications.

- PO5. Identify the use, abuse and side effects of drugs in pregnancy, pre-menopausal and post-menopausal periods.
- PO6. Describe the national programme of maternal and child health and family welfare and their implementation at various levels.
- PO7. Identify common gynaecological diseases and describe principles of their management.
- PO8. State the indications, techniques and complications of surgeries like Caesarian section, laparotomy, abdominal and vaginal hysterectomy, Fothergill operation and vacuum aspiration for M.T.P

Skills

At the end of the course, the student should be able to:

- PO9. Examine a pregnant woman; recognise high risk pregnancies and make appropriate referrals.
- PO10. Conduct a normal delivery, recognise complications and provide postnatal care.
- PO11. Resuscitate the newborn and recognise congenital anomalies.
- PO12. Advise a couple on the use of various available contraceptive devices and assist in insertion in and removal of intra-uterine contraceptive devices.
- PO13. Perform pelvic examination, diagnose and manage common gynaecological problems including early detection of genital malignancies.
- PO14. Make a vaginal cytological smear, perform a post coital test and wet vaginal smear examination for Trichomonas vaginalis, moniliasis and gram stain for gonorrhoea.
- PO15. Interpretation of data of investigations like biochemical, histopathological, radiological, ultrasound etc.

Integration

PO16. The student should be able to integrate clinical skills with other disciplines and bring about coordination's of family welfare programmes for the national goal of population control.