Intended Learning Outcomes (ILOs) for program:

a- Knowledge and Understanding:

By the end of the program, the graduate will have acquired the ability to:

- a.1- Identify the normal structure of different body organs
- **a.2** Discuss the normal functions of different body systems.
- **a.3-** Describe the genetic basis of the human body
- **a.4-** Explain the biochemical and cytological mechanism involved in maintaining the internal environment of the human body.
- **a.5-** Identify the changes in humanswith development and growth through different age categories.
- **a.6-**Describe the basics of human mind with various disorders of mentality and behavior.
- **a.7-**Compare different abnormalities of the body structure in relation to gender and age and their role in disease pathogenesis
- **a.8-** Outline different abnormalities of the function of different body systems in relation to gender and age with their impact on the development of various diseases.
- **a.9-** Define therisk factors, precipitating factors and etiopathogenesis of common diseases and emergent conditions
- **a.10-** Memorize clinical manifestations, differential diagnosis and complications common diseases and emergent conditions.
- a.11- Clarify the basis of medical treatment for common diseases and emergent conditions
- **a.12-** Outline the basis of surgical interventions with preoperative and postoperative care for common diseases and emergent conditions.
- **a.13-** Describe the methods for pain control and methods of palliative care for terminal cases .
- a.14- Recognize the principles of primary health care
- **a.15-**Discuss the methods of screening and prevention for common diseases of the community.

- a.16- Clarify the principles and organization of national health care system
- **a.17-** Define the principles of epidemiology and the effect of social and demographic patterns on disease and vulnerability.
- **a.18-** Define the incidence and prevalence of common diseases
- **a.19-** Discuss the methods of spread of communicable diseases and methods of prevention and control.
- **a.20-** Explain the approaches for providing health services to the community.
- **a.21-**Recognize the basics of ethics and human rights
- **a.22-** Define the medicolegal aspects of medical practice.
- **a.23-**Outline the safety protocols for practical laboratory work and medical practice concerning doctor and patient.
- **a.24** Describe the principles of infection control in clinical practice.
- **a.25-** Outline the principles of clinical audit.

b. Intellectual Skills

By the end of the program, the graduate will acquire the skills required to:

- **b.1-** Integrate basic anatomical, biochemical, histopathological and physiological facts with clinical data.
- **b.2-** Solve clinical problems with effective reasoning and recognition of problem definition and priority.
- **b.3-**Interpret and analyze clinical data considering what is missing
- **b.4-**Apply critical problem solving using personal judgement and available information.
- **b.5-**Integrate the clinical data obtained from history, clinical examination and investigations to formulate a diagnosis.
- **b.6-**Formulate an appropriate management plan for common chronic diseases with proper methods of diagnosis and treatment.
- **b.7-**Construct a management plan for emergency cases and critically ill patients with first priority to patient stabilization.
- **b.8-**Classify risk factors for disease and injury to help provide different strategies for risk management.

- **b.9-**Use evidence based medicine to solve clinical problems based on analysis of data retrieved from the literature.
- **b.10-** Apply the use of consultation, referral and counselling in dealing with uncertain conditions.
- **b.11-** Design scientific research through the formulation of targeted research questions with adoption of the principles of critical appraisal.
- **b.12-** Apply the precision in the collection, analysis and interpretation of medical data to support the scientific research.

c. Practical and Clinical Skills

By the end of the program, the graduate will be able to:

- c.1-Conduct basic practical tests essential for future medical practice .
- **c.2-** Take and record a comprehensive patient history with appropriate structure and content.
- **c.3-** Conduct full clinical examination for patients with acute and chronic diseases with respect to cultural and religious concepts and considering age and gender of the patient.
- c.4- Conduct a mental and psychological assessment for the patient
- **c.5-**Construct a systematic record for patient's data with clear and adequate presentation.
- **c.6-** Construct appropriate management strategies both diagnostic and therapeutic for patients with common acute, chronic diseases
- **c.7-** Formulate the initial plan of management for stabilization of injured and critically-ill patients.
- **c.8-**Formulate drug dosage and safe prescription of different drugs based on patient's criteria and health condition
- c.9-. Provide first aid measures for emergency cases.

Procedures and technical skills acquired under appropriate supervision during undergraduate and house officer training: By the end of the program, the graduate will acquire the model-based skills(using manikin and simulators) required to:

- c.10- Perform venipuncture, and collect blood samples.
- c.11-Perform cannulation for peripheral veins
- c.12- Practice enteral, parenteral, inhalational and topical methods for drug administration
- c.13- Operate suturing of superficial wounds.
- **c.14-** Perform cardiopulmonary resuscitation and basic life-support in an effective manner.
- **c.15-**Administer compulsory vaccines to children according to national health care system.
- c.16-Perform and interpret basic laboratory tests.
- c.17- Perform and interpret ECG findings and their reflection of cardiac diseases.
- c.18-Administer oxygen therapy in various respiratory disorders.
- c.19-Perform and interpret basic respiratory function tests.
- c.20- Administer inhalation therapy using nebulizer.
- c.21- Insert a nasogastric tube
- c.22- Insert bladder catheter.
- c.23- Assist and perform procedure of normal labor.
- c.24-Apply suitable measures for safety and infection control.

d. General and Transferable Skills

By the end of the program, the graduate will acquire the skills required to:

- d.1- Apply the principles of continuous medical education; CME.
- **d.2-** Use information and communication technology efficiently in reaching biomedical information to remain current with advances in knowledge and practice.
- d.3-Collect, analyze and manipulate data using electronic means.

- **d.4-** Present information in written, electronic and verbal forms in a clear and structured manner with use of appropriate English language as needed in relation to medicine.
- **d.5-** Share ideas and engage in arguments in a simple and effective manner with a clear delivery of information.
- **d.6-** Work effectively within a multidisciplinary team with collaboration and respect to other team members.
- d.7-Apply simple statistical methods to analyze various types of data .
- **d.8-** Deal with patients and their relatives in a clear and sympathetic manner with adequate counselling, taking into consideration beliefs, values, goals and concerns.
- **d.9-** share the patient or his caretaker in decision making regarding management of the patient condition.
- **d.10-** Work and share experience with other healthcare professions in patient's management regardless of degree or occupation
- **d.11-** Apply the national code of ethics issued by the Egyptian Medical Syndicate.
- **d.12-** Recognize when to refer patients to more specialized health facility on facing a defect in knowledge or skills without delay that harms the patient.
- **d.13-** Establish a good doctor patient relationship that enables the doctor to break bad news to patients or their relatives and deal with other stressful situations.

House officers should be able, under appropriate supervision to:

- Use evidence based medicine to select the appropriate management plan.**d.14**-Manage time and resources effectively with proper setting of priorities and dealing with shortage and surplus.
- **d.15-** Work effectively with other colleagues and other healthcare professionals as a healthcare team
- **d.16-** Lead the health team providing education, motivation and supervision to other team members.

- **d.17-** Solve problems related to patients or work environment in a professional and realistic manner.
- **d.18-**Manage problems among other colleagues with respect to personal duties and rights.
- **d.19-**Cope with a changing work environment at the level of personnel and facilities.
- **d.20-** Apply safety protocols within the healthcare facilities
- **d.21-** Use feedback to evaluate the health services and apply corrective measures.
- **d.22-** Ensure confidentiality and privacy of patients information as an integral part of patients rights.
- **d.23-** Treat all patients equally regardless of their culture, beliefs, socioeconomic levelor their disabilities.
- **d.24-**Provide cost effective health services for management of different diseases with respect to patient's benefit and socioeconomic level.
- **d.25-** Report any physical or mental disability among the healthcare team that endangers patients' safety .