

**SHREE GURU GOBIND SINGH  
TRICENTENARY UNIVERSITY**

**FACULTY OF MEDICINE & HEALTH SCIENCES**

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Curriculum & time bound programme for  
Teaching and Training in MD Course in

**[RESPIRATORY MEDICINE]**

## **Syllabus for MD**

1.. Goals

2. Objectives

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## **Curriculum**

### **MD Chest Diseases & Tuberculosis**

The infrastructure and faculty will be as per MCI guidelines.

#### **1. Goals**

The goal of Post-graduation (MD) course in Medicine (Chest) is to produce a competent chest physician who:

- ❖ Recognizes the health needs of patients having chest complaints and carries out professional obligations in keeping with principles of National Health Policy and professional ethics.
- ❖ Has acquired the competencies pertaining to chest medicine that are required to be practiced in the community and at all levels of health care system.
- ❖ Has acquired skills in effectively communicating with the patient, family and the community.
- ❖ Is aware of the contemporary advances and developments in medical sciences as related to pulmonary medicine.
- ❖ Is oriented to principles of research methodology.
- ❖ Has acquired skills in educating medical and paramedical professionals.

#### **2. Objectives**

At the end of the MD course in Medicine (Chest), the student should be able to:

- ❖ Recognize the key importance of pulmonary medicine in the context of the health priority of the country.
- ❖ Practice the specialty of Pulmonary Medicine in keeping with the principles of professional ethics.
- ❖ Identify social, economic, environmental, biological and emotional determinants of patient and institute diagnostic, therapeutic, rehabilitative, preventive and promotive measures to provide holistic care to him.
- ❖ Take detailed history, perform full physical examination and make clinical

diagnosis.

- ❖ Perform relevant investigative and therapeutic procedures for the patient.
- ❖ Interpret important imaging and laboratory results.
- ❖ Diagnose illness based on the analysis of history, physical examination and investigative workup.
- ❖ Plan and deliver comprehensive treatment for illness using principles of rational drug therapy.
- ❖ Plan rehabilitation of patients suffering from chronic illness.
- ❖ Manage respiratory emergencies efficiently.
- ❖ Demonstrate skills in documentation of case details, and of morbidity and mortality data relevant to the assigned situation.
- ❖ Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities.
- ❖ Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities.
- ❖ Develop skills as a self-directed learner, recognize continuing educational needs; use appropriate learning resources, and critically analyze relevant published literature in order to practice evidence-based pediatrics.

### **3. Syllabus**

General Guidelines. During the training period effort will always be made that adequate time is spent in discussing pulmonary problems of public health importance in the country.

#### **3.1.Theory**

- ❖ Approach to Important Clinical Problems
- ❖ Respiratory. Cough/chronic cough, noisy breathing, wheezy child, respiratory distress, hemoptysis.
- ❖ Critical Care Medicine. All patients on ventilator with special reference to

acute severe COPD and bronchial asthma

- ❖ Nutrition. TB suspect / COPD /asthmatic
- ❖ Infections. Upper & lower respiratory infection, tuberculosis, pneumonia, fungal infections, bronchi stasis, recurrent infections, nosocomial infections.
- ❖ Oncology. Lung cancer, benign and malignatn with pleural metastasis with primary pleural malignancy
- ❖ Miscellaneous. Connective tissue disorder, drug induced pulmonary diseases, HIV related pulmonary disease and tuberculosis.

### 3.2. Practical

- ❖ Skills
  - **History and examination.** History taking including psychosocial history, physical examination, general physical examination, health function-aries and social support groups;
  - **Bedside procedures**
    - ◆ Monitoring skills: Temperature recording, capillary blood sampling, arterial blood sampling.
    - ◆ Therapeutic skills: Hydrotherapy, nasogastric feeding, endotracheal intubation, cardiopulmonary resuscitation, administration of oxygen, venepuncture and establishment of vascular access, administration of fluids, blood, blood components, parenteral nutrition, intraosseous fluid administration, intrathecal administration of drugs, common dressings, abscess drainage and basic principles of rehabilitation.

Investigative skills: Lumbar puncture, pleural, peritoneal, pericardial and subdural tap, pleural biopsy, lung biopsy, fine needle aspiration cytology, tru cut biopsy from lung, broncho scopic alveolar lavage, pulmonary function test, sleep study, collection of urine for culture, urethral catheterization.

- ◆ Bedside investigations. Hemoglobin, TLC, ESR, peripheral smear staining and examination, urine: routine and microscopic examination, PFT, bronchoscopy, sputum microscopy examination, gram stain, ZN stain, gastric aspirate.
  
- **Interpretation of X-rays of chest, CT chest, ECG, ABG findings.**
- ***Understanding of common EEG patterns, x-ray findings, CT scans, ultrasonographi abnormalities.***
- **Basic Sciences**  
*Embryogenesis of different organ systems especially heart, genitourinary system, gastro-intestinal tract, applied anatomy of different organs, functions of kidney, liver, lungs, heart and endocrinal glands. Physiology of micturition and defecation, placental physiology, fetal and neonatal circulation, regulation of temperature (especially newborn), blood pressure, acid base balance, fluid electrolyte balance, calcium metabolism, vitamins and their functions, hematopoiesis, hemostasis, bilirubin meta-bolism. Growth and development at different ages, puberty and its regulation, nutrition, normal requirements of various nutrients. Basic immunology, bio-statistics, clinical epidemio-logy, ethical and medicolegal issues, teaching methodology and managerial skills, pharmaco-kinetics of commonly used drugs, microbial agents and their epidemiology.*
  
- **Community and Social Pulmonary Medicine**  
*Prevention and cure of tuberculosis under RNTCP, impementation of DOTS. Prevention of HIV (VCTC) as it increases prevalence of tuberculosis, investigation of adverse events following anti tubercular therpay, general principles of prevention and control of tuberculosis and nosocominal infection (pneumonia), prevention of drop let infection.*

## **4. Teaching Program**

### **4.1. General Principles**

Acquisition of practical competencies being the keystone of postgraduate medical education, postgraduate training is skills oriented.

Learning in postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are merely meant to supplement this core effort.

### **4.2. Teaching Sessions**

- > Clinical case discussions:
  - ◆ PG bedside
  - ◆ Teaching rounds
  - ◆ Mock Examination
- > Seminars/Journal club
- > Statistical meetings
- > Mortality meetings
- > Perinatal meetings
- > Inter departmental Meetings
- > Others – Guest lectures/vertical seminars/Central Stat meets.

### **4.3. Teaching Schedule**

In addition to bedside teaching rounds in the department, there will be daily hourly sessions of formal teaching. The suggested teaching schedule is as follows:

- |  |             |
|--|-------------|
| 1. Bed side case discussion  | Once a week |
| 2. Journal club/Seminar alternate week   | Once a week |
| 3. Grand round   | Once a week |
| 4. Emergency case discussion   | Once a week |
| 5. Weekly stat and mortality meet<br>(detailed discussion of all the deaths<br>occurring in previous week) | Once a week |

6. Central session (held in hospital auditorium regarding various topics like CPC, guest lectures, student seminars, grand round, sessions on basic sciences, biostatistics, research methodology, teaching methodology, health economics, medical ethics and legal issues) or teaching rounds at bedside. Once a week



**Note:**

- ❖ All sessions are attended by the faculty members. All PGs are supposed to attend the sessions except the ones posted in PCCU and emergency.
- ❖ All the teaching sessions are assessed by the consultants at the end of session and marks are considered for internal assessment.
- ❖ Attendance of the Residents at various sessions has to be atleast 75%.

**5. Postings**

The postgraduate student will rotate through all the clinical units in the department. In addition, following special rotations are also undertaken:

Chest Ward (including outpatient dept)	:	2-3 months
Intensive Care	:	3-4 months
Emergency	:	2- 3 months
NIV unit	:	2-3 months

No posting at one area will be for more than 2 months at a stretch.

**Weekly Teaching Programs**

<b>Sr. No.</b>	<b>Days</b>	<b>Topic</b>	<b>Timing</b>	<b>Teacher</b>
1.	Monday	Seminar	2:00 to 4:00 pm	All Faculty
2.	Tuesday	Case Presentation	2:00 to 4:00 pm	Do
3.	Wednesday	Chest X-Ray	2:00 to 4:00 pm	Do
4.	Thursday	Case Presentation	2:00 to 4:00 pm	Do
5.	Friday	Journals club	2:00 to 4:00 pm	Do
6.	Saturday	K Toman	2:00 to 4:00 pm	Do

- A.** Ward Round, Ward Teaching & Procedure every day.
- B.** Emergency Duty around the clock in wards & RICU.

During first year the resident will work under direct supervision of the 2/3 year resident/senior resident and consultant on call. S/he will be responsible for taking detailed history, examination of patients as per the file record and send appropriate investigations as advised by seniors. Initially all procedures are to be observed and then done under supervision of seniors and during 2/3 year can do procedures independently. In 2<sup>nd</sup> year, resident is posted in special clinics also and making of discharge cards including referrals. In 3<sup>rd</sup> year, resident is also encouraged to make independent decisions in management of cases. S/he is also involved in teaching of undergraduate students.

## **6. Thesis**

- ❖ Every candidate shall carry out work on an assigned research project under the guidance of a recognized Postgraduate Teacher, the project shall be written and submitted in the form of a Thesis.
- ❖ Every candidate shall submit thesis plan to the University within nine months from the date of admission.

Thesis shall be submitted to the University six months before the commencement of theory examination i.e. for examination May/June session, 30<sup>th</sup> November of the preceding year of examination and for November/December session 31<sup>st</sup> May of the year of examination.

- ❖ The student will identify a relevant research question; (ii) conduct a critical review of literature; (iii) formulate a hypothesis; (iv) determine the most suitable study design; (v) state the objectives of the study; (vi) prepare a study protocol; (vii) undertake a study according to the protocol; (viii) analyze and interpret research data, and draw conclusions; (ix) write a research paper.

## **7. Assessment**

All the PG residents will be assessed daily for their academic activities and also periodically.

### **7.1.General Principles**

- ❖ The assessment is valid, objective, and reliable.
- ❖ It covers cognitive, psychomotor and affective domains.
- ❖ Formative, continuing and summative (final) assessment is also conducted in theory as well as practicals / clinicals. In addition, thesis is also assessed separately.

### **7.2.Formative Assessment**

The formative assessment is continuous as well as end-of-term. The former is based on the feedback from the senior residents and the consultants concerned. End-of-term assessment is held at the end of each semester (upto the 5th semester). Formative assessment will not count towards pass/fail at the end of the program, but will provide feedback to the candidate.

### **7.3. Internal Assessment**

The performance of the Postgraduate student during the training period should be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student. Marks should be allotted out of 100 as followed.

<b>Sr. No.</b>	<b>Items</b>	<b>Marks</b>
<b>1</b>	<b>Personal Attributes</b>	<b>20</b>
<b>2.</b>	<b>Clinical Work</b>	<b>20</b>
<b>3.</b>	<b>Academic activities</b>	<b>20</b>
<b>4.</b>	<b>End of term theory examination</b>	<b>20</b>
<b>5.</b>	<b>End of term practical examination</b>	<b>20</b>

## 1. Personal attributes:

- ❖ **Behavior and Emotional Stability:** Dependable, disciplined, dedicated, stable in emergency situations, shows positive approach.
- ❖ **Motivation and Initiative:** Takes on responsibility, innovative, enterprising, does not shirk duties or leave any work pending.
- ❖ **Honesty and Integrity:** Truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.
- ❖ **Interpersonal Skills and Leadership Quality:** Has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has good communication skills.

## 2. Clinical Work:

- ❖ **Availability:** Punctual, available continuously on duty, responds promptly on calls and takes proper permission for leave.
- ❖ **Diligence:** Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management.
- ❖ **Academic ability:** Intelligent, shows sound knowledge and skills, participates adequately in academic activities, and performs well in oral presentation and departmental tests.
- ❖ **Clinical Performance:** Proficient in clinical presentations and case discussion during rounds and OPD work up. Preparing Documents of the case history/examination and progress notes in the file (daily notes, round discussion, investigations and management) Skill of performing bed side procedures and handling emergencies.

3. **Academic Activity:** Performance during presentation at Journal club/ Seminar/ Case discussion/Stat meeting and other academic sessions. Proficiency in skills as mentioned in job responsibilities.

4. **End of term theory examination** conducted at end of 1<sup>st</sup>, 2<sup>nd</sup> year and after 2 years 9months

5. **End of term practical/oral examinations** after 2 years 9months.

Marks for **personal attributes** and **clinical work** should be given annually by all the consultants under whom the resident was posted during the year. Average of the three years should be put as the final marks out of 20.

Marks for **academic activity** should be given by the all consultants who have attended the session presented by the resident.

The Internal assessment should be presented to the Board of examiners for due consideration at the time of Final Examinations.

#### 5.1. **Summative Assessment**

- ❖ Ratio of marks in theory and practicals will be equal.
- ❖ The pass percentage will be 50%.
- ❖ Candidate will have to pass theory and practical examinations separately.

## A. Theory Examination (Total =400)

Paper	Title	Marks
Paper1	Basic sciences as related to pulmonary medicine	100
		100
Paper2	Principles and Practice of Pulmonary Medicine	100
Paper3	Preventive & Social aspects of Pulmonary Medicine and tuberculosis	
Paper4	Recent Advances in Pulmonary Medicine	100

## B. Practical & Viva voce Examination(Total=400)

Long Case	} (s)	300
Short Case		
Viva Voce		

### 8. Job Responsibilities

- ❖ **OPD:** History and work up of all cases and presentation to the consultants
  - This includes all the special clinics also
  - Documentation. OPD card and register completion and maintenance
- ❖ **Indoors:**
  - PCCU/NIV unit Emergency : Sending investigations and filling investigation forms
  - Ward : History and work up of all cases
  - Starting initial management – Oxygen, IV antibiotics, fluids
  - Transport of sick patients
  - Preparation of weekly, monthly & annual stat
  - Sending AFP reports.
  - Performing procedures:
    - Maintaining I/Vline
    - Plural tap, peritoneal tap, pericardial tap, central line insertion,

pleural biopsy, BAL, bronchoscopy, PFT, sleep study

➤ Examination of all patients and documentation the the files.

➤ Completion offices

➤ Preparation of typed discharge summary

## 9. Suggested Reading

❖ Fishmen's Pulmonary Diseases and Disorders

❖ Croftan's Pulmonary Diseases

### 9.1 Journals

❖ Indian J Tuberculosis

❖ Chest

❖ Chest Cliics

❖ Critical Care Clinics

❖ JAPI

❖ Lung India

## Curriculum Planning of Pulmonary Medicine& Tuberculosis

Sr. No	Topics	Learning objectives (At the end of the session, the student should know)	Teaching Guidelines	Methodology	Time
1.	Anatomy & Physiology of Respiratory System	learns to describe about <ul style="list-style-type: none"><li>• various anatomical parts of Respiratory System</li><li>• functioning of various physiological units and their respiratory system</li></ul>	<ul style="list-style-type: none"><li>• Physiology of respiratory system knowing the gaseous exchange mechanics</li><li>• Congenital malformations and embryology.</li></ul>	Seminar	1 Hour

2	Symptoms & Signs of Respiratory System	Discuss signs, symptoms & causes of <ul style="list-style-type: none"> <li>• Shortness of breath</li> <li>• Cough</li> <li>• Haemoptysis</li> <li>• Pain chest</li> <li>• Wheeze</li> <li>• Sneeze</li> </ul>	<ul style="list-style-type: none"> <li>• Explain the symptoms &amp; signs in correlation to various diseases.</li> <li>• Air pollution</li> <li>• Genetic disorders</li> <li>• family history</li> </ul>	Seminar	1 Hour
3.	Pulmonary Tuberculosis	Discuss in detail <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Transmission</li> <li>• Aetio pathogenesis</li> <li>• Risk factors</li> <li>• Type of tuberculosis</li> <li>• Diagnosis</li> <li>• Management</li> <li>• Prevention</li> <li>• Natural course of disease</li> </ul>	To cover about disease in detail <ul style="list-style-type: none"> <li>• T.B. &amp; HIV</li> <li>• T.B. &amp; Diabetes</li> <li>• Post T.B. Sequele</li> </ul>	Seminar	6 Hours
4.	RNTCP & DOTS	1. To learn & Discuss evolution of National Tuberculosis programme (NTP) 2. Can Explain in detail about RNTCP <ul style="list-style-type: none"> <li>• Structure &amp; diagnosis</li> <li>• Various regimens of treatment</li> <li>• DOTS,MDR, XDR,TDR</li> <li>• Designated</li> </ul>	<ul style="list-style-type: none"> <li>• Problem of T.B. in India &amp; world</li> <li>• Side effects of ATT</li> <li>• Contraindications of various anti tuberculosis drugs</li> <li>• Pit-falls in RNTCP</li> </ul>	Seminar	2 Hours



		<p>Microscope Centre (DMC)</p> <ul style="list-style-type: none"> <li>• Surveillance</li> <li>• Recording &amp; reporting system</li> </ul>			
5.	Pleural Effusion and Empyema	<p>Can discuss in detail about</p> <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Causes</li> <li>• Signs, symptoms</li> <li>• Diagnosis</li> <li>• Pleural aspirations</li> <li>• Management &amp; thoracocentesis .</li> </ul>	<ul style="list-style-type: none"> <li>• To differentiate between pleural effusion from pleural thickening</li> <li>• Differential diagnosis</li> <li>• Analysis of pleural fluid</li> </ul>	Seminar	1 Hour
6.	COPD Chronic patient Emphysema	<p>Can discuss in detail about</p> <ul style="list-style-type: none"> <li>• Epidemiology &amp; Risk Factors</li> <li>• Diagnosis</li> <li>• Treatment</li> <li>• GOLD Classification</li> <li>• Exacerbations</li> <li>• Management</li> <li>• Prevention</li> </ul>	<p>To cover</p> <ul style="list-style-type: none"> <li>• Differential diagnosis</li> <li>• Use of Inhalers</li> <li>• Use of SPIROMETRY</li> </ul>	Seminar	1 Hour
7.	Bronchial asthma	<p>Can Discuss bronchial asthma about</p> <ul style="list-style-type: none"> <li>• Epidemiology &amp; Causes</li> <li>• GINA staging</li> <li>• Diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>• To cover differential diagnosis, complications &amp; prevention.</li> <li>• To discuss on proper inhalation</li> </ul>	Seminar	1 Hour

		<ul style="list-style-type: none"> <li>• Treatment</li> <li>• Exacerbations</li> </ul>	technique & appropriate counseling of asthmatics.		
8.	Bronchiectasis	<p>Can discuss about Bronchiectasis</p> <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Classification</li> <li>• Diagnosis &amp; Management</li> </ul>	<ol style="list-style-type: none"> <li>1. To know role of chest physiotherapy in bronchiectasis.</li> <li>2. differentiate b/w various D/d's of non CF bronchiectasis.</li> </ol>	Seminar	1 Hour
9.	Pneumothorax Hydro pneumothorax	<p>Can discuss in detail about</p> <ul style="list-style-type: none"> <li>• Epidemiology</li> <li>• Causes</li> <li>• Signs, symptoms &amp; Diagnosis</li> <li>• Management</li> </ul>	<ul style="list-style-type: none"> <li>• To know about mechanics of respirations involved in different respiratory failure</li> <li>• Appropriate clinical evaluation to differentiate pneumothorax from Hydropneumothorax.</li> </ul>	Seminar	1 Hour
10.	Pneumonia ARDS	<p>Can critically discuss Pneumonias regarding</p> <ul style="list-style-type: none"> <li>• Causes</li> <li>• Type/ classification</li> <li>• Risk Factors</li> <li>• Causative organisms</li> <li>• Signs ,symptoms &amp; diagnosis</li> <li>• Management</li> </ul>	<ul style="list-style-type: none"> <li>• To know gas exchange mechanics in various respiratory failure.</li> <li>• Clinical Evaluation of hypoxia &amp; cyanosis</li> </ul>	Seminar	1 Hour
11.	Pulmonary	Can discuss Lung	<ul style="list-style-type: none"> <li>• Role of Early cancer</li> </ul>	Seminar	1 Hour

	Tumors	tumours <ul style="list-style-type: none"> <li>• Classification</li> <li>• Risk factors</li> <li>• Diagnosis</li> <li>• Treatment</li> </ul>	screaming & Immune histochemistry. <ul style="list-style-type: none"> <li>• Role of Adjuvant chemo- radiation therapy</li> </ul>		
12.	Respiratory Failure and Ventilatory Strategies	Can explain respiratory failure <ul style="list-style-type: none"> <li>• Types &amp; Causes</li> <li>• Management</li> </ul>	<ul style="list-style-type: none"> <li>• Know O<sub>2</sub>-CO<sub>2</sub> Carriage &amp; dissociation curve</li> <li>• kRole of Ventilation – Perfusion mechanics</li> </ul>	Seminar	1 Hour
13.	Diagnostic Tools in Respiratory Diseases	Discuss diagnostic tools <ul style="list-style-type: none"> <li>• Pulse Oxymetry</li> <li>• ABG</li> <li>• Spirometry &amp; Diffusion Studies</li> <li>• 6 Min. Walk Test</li> <li>• Respirometry</li> <li>• Radiography</li> <li>• CT Scan</li> <li>• CPET Test</li> </ul>	<ul style="list-style-type: none"> <li>• To understand and correlate various pulmonary function tests &amp; clinical scenarios.</li> </ul>	Seminar	2 Hours

**Model Test Papers**  
**MODEL QUESTION PAPER**  
**MD (Chest and Tuberculosis) Paper-I**  
**Basic Sciences as related to Pulmonary Medicine**

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**Max.Marks:100**

**Time: 3hrs**

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**Attempt ALL questions**

- **Answer each question & its parts in SEQUENTIALORDER**
  - **ALL questions carry equal marks**
  - **Illustrate your answer with SUITABLEDIAGRAMS**
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- i. Etiopathogenesis, diagnosis and management of sarcoidosis.
- ii. Etiology, diagnosis and staging of pleural mesothelioma.
- iii. Risk factors and management of obstructive sleep apnea
- iv. Write a note on allergic bronchopulmonary aspergillosis
- v. Patho-physiology and management of acute exacerbation of COPD.
- vi. Describe the differential diagnosis along with anatomical planes the differential diagnosis of mediastinal masses.
- vii. Etiopathogenesis, diagnosis and management of bronchogenic carcinoma.
- viii. Describe the various congenital anomalies of the lung and mediastinum which have a clinical implication.
- ix. Etiopathogenesis, diagnosis and management of interstitial lung diseases.
- x. Describe HIV and tuberculosis co-infection

**MODEL QUESTION PAPER**  
**MD (Chest and Tuberculosis) Paper-II**  
**Principles and practice of Pulmonary Medicine**

**Max.Marks:100**

**Time: 3hrs**

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- **Attempt all questions**
- **Answer each question & its parts in SEQUENTIALORDER**
- **ALL questions carry equal marks**
- **Illustrate your answer with SUITABLEDIAGRAMS**

- I Describe the diagnosis & management of community acquired pneumonia.
- II Describe etiology, staging, diagnosis and management of non small cell lung cancer.
- III Give the Diagnosis and management of stable COPD.
- IV Immunopathogenesis of tuberculargranuloma.
- V Secondary infections in AIDS. Write a note on penumocystis jeroivi pneumonia.
- VI Describe the pathogenesis and management of pulmonary edema
- VII Describes ilicotuberculosis
- VIII Give the indications and evaluation of a patient undergoing lung transplantation, enumerate the various complications associated with it.
- IX Describe acute hypoxemic respiratory failure
- X Give the management of patient with nosocomialpneumonias

**MODEL QUESTION PAPER**  
**MD (Chest and Tuberculosis)**

**Paper-III**

**Preventive & social aspects of Pulmonary Medicine and tuberculosis**

**Max.Marks:100**

**Time: 3hrs**

- **Attempt All questions**
- **Answer each question & its parts in SEQUENTIALORDER**
- **ALL questions carry equal marks**
- **Illustrate your answer with SUITABLEDIAGRAMS**

- I Write a note on anaerobic lung infections.
- II Screening and tumour markers in bronchogenic carcinoma
- III Describe the management of MDR tuberculosis
- IV Write a note on revised national tuberculosis control programme
- V Management of acute severe asthma.
- VI Describe the rehabilitation plan for a patient of COPD
- VII Give the treatment strategies for patient of pneumothorax
- VIII Give the treatment plan for a patient with asthma who is pregnant
- IX Describe the various pulmonary function test and its clinical co-relation
- X Describe the clinical features and management of hypersensitivity pneumonia

## MODEL QUESTION PAPER

### MD (Chest and Tuberculosis) Paper-III Recent advances in Pulmonary Medicine

Max.Marks:100

Time: 3hrs

- **Attempt All questions**
- **Answer each question & its parts in SEQUENTIALORDER**
- **ALL questions carry equal marks**
- **Illustrate your answer with SUITABLEDIAGRAMS**

- I Diagnosis & management of idiopathic pulmonary fibrosis.
- II Diagnosis & management of bronchiectasis.
- III Role of immunotherapy in bronchialasthma.
- IV Describe the clinical features and management of pulmonary vembolism
- V Describe the etiology and management of haemoptysis
- VI Describe the recent advances in the management of COPD
- VII Describe the current treatment strategies for a patient of empyma
- VIII Discuss the newer strategies for management of ARDS
- IX Describe the newer techniques used in bronchoscopy
- X Describe patho-physiology, clinical features of pulmonary vacuities