GOAL:
The aim of teaching the undergraduate student in Tuberculosis and Chest Diseases is to impart such knowledge and skills that may enable him/her to diagnose and manage common ailments affecting the chest with the special emphasis on management and prevention of Tuberculosis and especially National Tuberculosis control programme.

OBJECTIVES:

(a) KNOWLEDGE:
At the end of the course of Tuberculosis and Chest diseases, the student shall be able to:

1) demonstrate sound knowledge of common chest diseases, their clinical manifestations, including emergent situations and of investigative procedures to confirm their diagnosis;
2) demonstrate comprehensive knowledge of various modes of therapy used in treatment of respiratory diseases;
3) describe the mode of action of commonly used drugs, their doses, side effects/toxicity, indications and contrindications and interactions.;
4) describe commonly used modes of management including medical and surgical procedures available for treatment of various diseases and to offer a comprehensive plan of management inclusive of National Tuberculosis Control Programme.

(b) SKILLS
The student shall be able to:

1) interview the patient, elicit relevant and correct information and describe the history in chronological order;
2) conduct clinical examination, elicit and interpret clinical findings and diagnose common Respiratory disorders and emergencies;
3) perform simple, routine investigative and office procedures required for making the bed side diagnosis, especially sputum collection and examination for etiologic organisms especially Acid Fast Bacilli (AFB), interpretation of the chest x-rays and respiratory function tests;
4) Interpret and manage various blood gases and PH abnormalities in various respiratory diseases.
5) Manage common diseases recognizing need for referral for specialized care, in case of inappropriateness of therapeutic response;

6) Assist in the performance of common procedures, like laryngoscopic examination, pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneumothoracic drainage/aspiration

(c)

INTEGRATION:

The broad goal of effective teaching can be obtained through integration with departments of Medicine, Surgery, Microbiology, Pathology, Pharmacology and Preventive and Social Medicine

Tuberculosis:

History and introduction.

Pathogenesis and pathology

Role of host related factors.

Microbiology of AFB

Clinical features of pulmonary tuberculosis

Anti tuberculosis drugs

Pharmacology & schedules of drug therapy

Resistant tuberculosis

DOTS

Prophylaxis

HIV & TB

Extra Pulmonary tuberculosis

Pleural Effusion

Others.

Respiratory System:

1. Applied anatomy & Physiology of R.S.
2. Lung function tests
3. Respiratory infections, pneumonias, fungus,
5. Bronchial Asthma.
7. Mediastinum & its disorders.
8. Pleural Diseases
9. Occupational Lung Disease
10. Respiratory emergencies.

Lecture cum Demos (Resp. system)

Pleural disease
- pneumothorax, pyopneumothorax, Pleural

Clinical examination of the respiratory system
Functional anatomy, physiology and investigations

Major manifestations of lung disease

Cough

Dyspnoea

Chest pain

Haemoptysis

The solitary radiographic pulmonary lesion

Respiratory failure

Upper and lower respiratory infections

Bronchial asthma

Chronic obstructive pulmonary disease
Pulmonary tuberculosis
Suppurative lung diseases
Bronchiectasis
Lung abscess
Plural effusion and empyema
Syllabus MBBS — AIIMS
Interstitial and infiltrative lung diseases
Occupational lung diseases
Tumors of the bronchus and lung
Pulmonary vascular diseases
- Pulmonary hypertension
- Pulmonary thromboembolism
Acute respiratory distress syndrome
Obstructive sleep apnoea
Diseases of the nasopharynx, larynx and trachea
Diseases of the mediastinum, diaphragm and chest wall
Respiratory emergencies & Introduction to mechanical ventilators
TUBERCULOSIS : 6 TH SEMESTER
History and introduction
Pathogenesis and pathology
Role of host related factors
Microbiology of AFB
Clinical features of pulmonary tuberculosis and its investigations
Anti Tubercular drugs
Pharmacology & Schedules of treatment.
Resistant tuberculosis

DOTS Prophylaxis

Drugs /BCG/ Tuberculin test.

HIV & TB
PG COURSE:

Curriculum for M.D. (Pulmonary Medicine)

(1) NEED AND SCOPE :-

Lung diseases are a major cause of morbidity and mortality all over the world. Tuberculosis, which primarily involves the lungs, is reported in 2-3% of general population. The recent threat of AIDS has further aggravated the TB. is also responsible for considerable morbidity & mortality.

Besides TB. there is heavy burden of non-T.B. lung diseases & respiratory emergencies. Diseases such as Br. Asthma, COPD, Respi. Infections, Lung Cancer and others account for about 70% of the Lung diseases seen in any large hospital in INDIA. Asthma alone may affect 5-7% of adults and about 10% of children. Prevalence of occupational and environment hazards has also increases. Respiratory failure secondary to infections, road accidents and other trauma, poisoning and intoxication, asthma and several other conditions may account for a heavy mortality. Tobboco smoking, a widely prevalent habit is the major cause of many lung diseases in INDIA, and may be responsible for 7-13 million patients of COPD and 0.11-0.21 million of COPD deaths.

Moreover Post-graduate degree in M.D. (T.B. & Chest dz.) is not available at Medical College and S.S.G. Hospital, Baroda. Diploma course (T.D.D.\ D.T.C.D.) is running since 1966, so most of the facilities are available at our department.

(2) DURATION OF THE COURSE:

The course is to be completed by residency or P.G. student ship of three years under Recognized P.G. teacher in the subject concerned. Out of these years maximum of one year (Two terms) may be by rotation under recognized P.G. teacher of teachers of allied branches viz. general medicine, cardiology if available.

(3) DESSERTATION :-

Every candidate presenting himself for the the examination for the first time shall submit with his application for admission to the exam, six types written copies of a dissertation prepared under the direction and guidance and to the satisfaction of his P.G. teacher. The dissertation and application for admission to the exam must be submitted six month before the exam. Institutional Ethical committee should have passed the dissertation topic.

The dissertation will be an original expatiation on a subject, which is original in it self its interpretation based on the work of the candidate.
Minimum 4 and maximum 6 examiners will assess the dissertation of each fresh candidate. They may or may not be examiners for clinical and theory exams. If majority of examiners have accepted dissertation, it will be considered “accepted” & if majority rejects the dissertation it will be considered “non-accepted”

In case rejection by an examiner, he shall give reason for rejection in writing for the guidance of the candidate.

The length of dissertation should be five to seven thousand words.

Goals:

The postgraduate training course would train a MBBS doctor who will practice efficiently and effectively, backed by scientific knowledge and skill base

Exercise empathy and a caring attitude and maintain high ethical standards.

Continue to evince keen interest in continuing education in the speciality irrespective of whether he is in a teaching institution or in the speciality

Be a motivated ‘teacher’ – defined as specialist keen to share his knowledge and skill with a colleague or a junior or any learner.

Objectives:

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The objectives may be considered under the subheadings.

1. Knowledge (Cognitive domain)

2. Skills (Psycho motor domain)

3. Human Values, Ethical practice and Communication abilities)

Knowledge:

Describe aetiology, pathophysiology, principles of diagnosis and management of common problems including emergencies, in adults and children.

Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion.

Describe common malignancies in the country and their management including prevention.

Demonstrate understanding of basic science relevant to this specialty.
Identify social, economic, environmental and emotional determinant in a given case, and take them into account for planning therapeutic measures.

Recognize conditions that may be outside the area of his specialty/competence and to refer them to the proper specialist.

Advice regarding the operative or non-operative management of the case and to carry out this management effectively.

Update oneself by self study and by attending courses, conferences and seminars relevant to the specialty.

Teach and guide his team, colleagues and other students.

Undertake audit, use information technology tools and carry out research. both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

Skills:

- Take a proper clinical history, examine the patient, and perform essential diagnosis
- Procedures and order relevant tests and interpret them to come to a reasonable Diagnosis about the condition.
- Provide basic and advanced life saving support services (BLS & ALSI) emergency situations
- Undertake complete patient monitoring including the care of the patient
- To perform pulmonary function tests including spirometry

Human values, Ethical practice and communication abilities

- Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, Caste, creed or religion of the patient.
- Develop communication skills, in particular the skill to explain various option available in management and to obtain a true informed consent from the patient.
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask to help from colleagues when needed.
• Respect patient’s rights and privileges including patient’s right to information and right to seek a second opinion.

(4) Suggested Reading Material

A. Textbooks

Tuberculosis-
- Tuberculosis by Sharma Mohan
- Tuberculosis by K.N. Rao
- Tuberculosis by Satya Shri
- Tuberculosis - Menon,
- Case finding & Chemotherapy in Tuberculosis by K. Toman

Chest-
- Textbook of Pulmonary Medicine by Crofton & Douglas
- Textbook of Respi. Medicine by Fishman
- Textbook of Respiratory Medicine by Murray & Nadel
- Textbook of Respiratory Diseases by D. Behra
- Textbook of Critical Care Medicine by F. Udwadia

Medicine-
- Principles of Internal medicine by Harrison’s
- Textbook of Medicine by Cecil
- Textbook of General Medicine by Golwala

B. Journals

- Indian Journal of Tuberculosis
- Lung India
- Indian journal of chest diseases and allied sciences
- Tuberculosis and lung disease
- American review of respiratory diseases
- Thorax,
- Chest ,
- North American clinics.
- Lancet

SYLLABUS:

CHEST:

• Development, Structure and congenital anomalies of respiratory tract.
• Respiratory Physiology and Pulmonary function tests.
• Lung defences and Immunology.
• Clinical manifestation of respiratory diseases.
• Radiology and diagnostic imaging of chest.
• Diagnostic Procedure like Bronchoscopy, Bronchography, Pleural, lung and lymph node Biopsies, Pleural aspiration and tube thoracostomy.
• Drugs used in respiratory disease and drug induced lung disease.
• Acute and chronic, upper and lower respiratory tract infections due to viral, bacterial fungal and parasitic organisms.
• Collagen disease and pulmonary manifestations of systemic disease.
• Tumors of the Chest.
• ARDS, pulmonary edema pulmonary hypertension; and Pulmonary Thromboembolism and Respiratory failure.
• Bronchial asthma and allergic disease of upper and lower respiratory tract.
• All Obstructive and Restrictive Airway Diseases.
• Occupational & Interstitial lung disease.
• Air Pollution
• Smoking & its hazards.
• Diseases of chest wall and Mediastinum
• Uncommon lung diseases (Sarcoidosis, Granulomatous lung diseases, PAP, Haemosiderosis)

• Heart diseases secondary to lung diseases

• Intensive Respiratory Care (Ventilators, Oxygen therapy, Tracheostomy, etc.)

TUBERCULOSIS:

• History, epidemiology and prevention of tuberculosis

• Histopathology, Bacteriology, Immunology of TB

• Clinical manifestations of pulmonary tuberculosis

• Radiological (X-ray, CT, HRCT, CECT, MRI, USG) manifestation of Pulmonary TB.

• Diagnosis, complications and sequel of pulmonary TB

• Extrapulmonary TB

• Community control of TB, Mantoux test, BCG vaccination, Chemoprophylaxis and rehabilitation

• TB in relation with other diseases

• Childhood TB and TB in Elderly

• Newer diagnostic techniques of Tuberculosis (PCR, MGIT, Interferon) etc.

• Airborne Infection control,

• RNTCP (DOTS & DOTS PLUS)

• DR, MDR, XDR & TDR Tuberculosis.

• Study and interpretation of laboratory investigation

• International standards of TB Care.
GENERAL MEDICINE

As per syllabus of M.D. (Medicine)

Course Contents :

Theory:

1) Basic sciences including Anatomy, Physiology, Pathology, Microbiology and Pharmacology.

2) Arterial blood gases and acid base disturbance.

3) Tuberculosis – Pulmonary
   - Extra- Pulmonary and allied topics in Tuberculosis

4) Non-Tubercular Respiratory Diseases.
   a) Immunology of respiratory diseases.
   b) Upper respiratory tract infection
   c) Pneumonia
   d) Emphysema
   e) Lung abscess
   f) Disease of Pleura
   g) Fungal infection of the lung
   h) Chronic bronchitis and emphysema
   i) Pulmonary hypertension
   j) Respiratory failure
   k) Bronchiectasis
   l) Parasitic diseases of the lung
   m) Sarcoidosis
   n) Bronchial asthma
o) Pulmonary eosinophilia, PAN, Wegner’s granulomatosis
p) Pneumothrax and Mediastinal emphysema
q) Pulmonary thrombo embolism
r) Occupational lung diseases
s) Tumors of the lung
t) Diffuse fibrosing alveolitis
u) Respiratory manifestations of systemic diseases
v) Hyaline Membrane Diseases, Cystic Fibrosis Goodpasture’s syndrome
w) Diseases of Mediastinum
x) Diseases of chest wall
y) Diseases of diaphragm
z) Lung transplantation

Internal Medicine – basic level
Practical
- Pulmonary function test
- Spirometry
- ICD
- Pleural biopsy
- Arterial puncture
- FNAC
- True-cut lung biopsy
Teaching/ Learning Activities:

1. Clinical Case discussion twice a week
2. Journal Club Once a week
3. Subject Seminar once in 15 days
4. Mortality Meeting Once a month

A candidate pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic/ laboratory/ nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself/herself from work without valid reasons.

A list of teaching and learning activities designed to facilitate students acquire essential knowledge and skills outlined is given below. Depending on the facilities available, any or all of these methods may be employed. However, the activities for which details are given mandatory.

1. Lecture: Lecture are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.
   a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples:
      1) Bio-statistics
      2) Use of library,
      3) Research Methods
      4) Medical code of conduct and Medical Ethics
      5) National Health and Diseases Control Programmes
      6) Communication skill etc.
      These topics may preferable taken up in the first few weeks of the 1st year
   b) Integrated Lectures: These are recommended to be taken by multidisciplinary teams for selected topics, eg, Jaundice. Diabetes mellitus, Thyroid etc.
2. Journal Club: Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the log book relevant details. Further, every candidate must make a presentation from the allotted journal(s), selected articles at least four times a year and a total of 12 seminar presentation in three years. The presentation would be evaluated using checklist and would carry weightage for internal assessment (see checklist in chapter IV) A timetable with names of the students and the moderator should be announced at the beginning of every year.

3. Subject Seminar: Recommended to be held once a week. All the PG students are expected to attend actively participate in discussion and enter in the log book relevant details. Further, every candidate must present on selected topics at least four times a year and total of 12 seminar presentations in three years. The presentation would be evaluated using check lists and would carry weightage for internal assessment (See checklist in chapter IV) A timetable for the subject with names of the student and the moderator should be scheduled at the beginning of every year.

4. Student Symposium: Recommended as an optional multi disciplinary programmed the evaluation may be similar to that described for subject seminar.

5. Ward Rounds: Ward rounds may be service or teaching rounds.
   a) Service Rounds: Postgraduate students and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day.
   b) Teaching Rounds: Every unit should have ‘grand rounds’ for teaching purpose. A diary should be maintained for day to day activities by the students.

Entries of (a) and (b) should be made in the Log Book.

6. Clinico-Pathological Conference: Recommended once a month for all post graduate students. Presentation is done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.

7. Inter Departmental Meetings: Strongly recommended particularly with department of pathology and Radio-Diagnosis at least once a week. These meeting should be attended by post graduate students and relevant entries must be made in the Log book.

Pathology: A dozen interesting cases may be chosen and presented by the post graduate students and discussed by them as well as the senior staff of surgery department. The staff of Pathology department would then show the slides and present final diagnosis. In the sessions the advance immunohistochemical techniques, the burgeoning markers other recent developments can be discussed.

Radio-diagnosis: Interesting cases and the imaging modalities should be discussed.

8. Microbiology: Collection of specimen, AFB staining, Culture techniques and interpretation
9. Work in PFT laboratory

10. Teaching Skills: Post graduate students must teach under graduate students (Eg. Medical, Nursing) by taking demonstrations, bedsides clinics, tutorials, lectures etc. Assessment is made using a checklist by surgery faculty as well students. (See model checklist in chapter IV). Record of their participation be kept in Log book. Training of post graduate students in educational science and technology is recommended.

11. Continuing Medical Education Programmes (CME): Recommended that at least 2 state level CME Programmes should be attended by each students in 3 years.

12. Conferences: Attending conference is optional. However it is encouraged.

Rotation Postings:

In the parents department of TB and Respiratory Medicine - 26 months

Department of Medicine 6 months

ICCU 2 months

Department of Radio-diagnosis 1 month

Casualty 1 month

Total: 36 months

Monitoring Learning Progress:

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching/learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklist is given in chapter IV.

The learning outcomes to be assessed should included (i) Personal attitude (ii) Acquisition of knowledge (iii) Clinical and operative skills (iv) Teaching skills and (v) Dissertations

I ) Personal Attitude: The essential items are:

- Caring attitude
- Initiative
- Organizational ability
- Potential to cope with stressful situation and undertake responsibility
- Trust worthiness and reliability
- To understand and communicate intelligible with patients and others
- To behave in a manner which establishes professional relationship with patients and colleagues
- Ability to work it team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consisted of observation. It is appreciated that these terms requires a degree of subjective assessment by the guide, supervisors and peers.

II ) Acquisition of knowledge : The methods used comprise of ‘Log book’ which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentation are made to be recorded. The log book should periodically be validated by supervisors. Some of the activities are listed. The list is not complete Institution may include additional activities , if so, desired.

Journal Review Meeting ( Journal Club) : The ability to do literature search, in depth study, presentation skills, and use audio-visual aids are to be assessed. The assessed is made by faculty members and peers attending the meeting using a checklist ( see Model Checklist-I Chapter-IV)

Seminars / Symposia: The topics should be assigned to the students well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio-visual aids are to be assessed using a checklist ( See Model checklist IV Chapter IV)

Clinico-Pathological Conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

III ) Clinical Skills :

Day to day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates sincerity and punctuality, analytical ability and communication skills ( see Model Checklist III, Chapter IV)

Clinical Meetings: Candidate should periodically presents cases to his peers and faculty members. This should be assessed using a checklist ( See Model checklist IV Chapter IV)

Clinical and Procedural skills : The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation particulars are recorded by the students in the log book ( Table No 3, Chapter IV)
IV) Teaching skills: Candidate should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model Checklist V, Chapter IV)

V) Dissertation in the Department: Periodic presentation is to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalization for critical evaluation and another before final submission of the complete works (see Model Checklist VI & VII Chapter IV)

VI) Periodic tests: The departments may conduct three tests, two of them be annual tests, one at the end of first year and other in the second year. The third test may be held three months before the final examination. The tests may include written papers practical/clinical and Viva voce.

VII) Work diary/Log book – every candidate shall maintain a work diary and record his/her participation in the training Programmes conducted by the department such as journals reviews, seminars etc special mention may be made of the presentation by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

VIII) Records: Records logbooks and marks obtained in tests will be maintained by the head of the departments and will be made available to the University or MCI

Log book:

The logbook is a record of the important activities of the candidates during his training; internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training Programmes of the institute by external agencies. The record includes academic activities as well as the presentation and procedures carried out by the candidate.

Format for the Log book for the different activities is given in table 1,2 and 3 of chapter IV. Copies may be made and used by the institutions.

Postgraduate student’s diary should include following activities:

Format for PG Diary (Log book)

1. Cases seen on rounds – description of interesting cases and other miscellaneous topics discussed.
2. Outpatient cases seen and details of interesting cases will follow up.
3. Procedures done on inpatients and outpatients and consultation done.
4. Undergraduate teaching done during the day details.
5. PG training programmes attended – details of bedside clinic, basic sciences, subject and clinical seminars, journal clubs, mortality meet and hospital conference.


7. Details of study with topics covered during off hours in library/home. Periodicals and Journals reviewed with notes on interesting articles.

8. Medical meeting Seminars. Local API/CSI meeting or other interesting CME seminars attended.

9. Diary should be reviewed on weekly basis by unit faculty and certified on monthly basis for PG’s benefit at the end of each medical/speciality rotation. Faculty should comment regarding absences and irregularities (Late arrivals and early departure) and make appropriate comment and suggest remedial measure for problematic prodigies.

10. Size of note books: 15 cm with 200 pages. All note books should have seal of college and H.O.D’s approval: Extra note books may be utilized as and when necessary. Dairy should be presented at the time of University clinical exam for review by examiners as per University regulation.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the department committee may recommend that defaulting candidate be withheld from appearing examination. If she/he fails to fulfill the requirements in spite of being adequate chances to set herself right.

Internal evaluation of P.G. students performance during three years.

1 year of M.D. Students:

Assessment of student with multiple choice questions multiple short notes covering wide range of topics and practical examination with attention to history taking. Clinical skills, relevant diagnostics and therapeutic plan ascertained. Suggested time of evaluation after first six months and at the end of the first year rotation.

II year of M.D. Students:

Students should be evaluated at the end of the II year on the theory and practical examination along with one faculty from General Medicine. For other specialties with short rotation of one month may evaluate the candidate for comprehension of the subject and clinical skills.

III year of M.D. Students:

P.G.’s should be evaluated at the beginning of his 3rd year training by panel of senior postgraduate teachers. Suggested pattern of assessment with two type theory papers and multiple choice questions (200)- clinical skills, diagnostic and therapeutics skills evaluated intermittently by unit faculties.
Mock examination suggested – 3 to 4 months prior to final University exam should consist of two question papers each 3 hours duration, and clinical and viva voce similar to university examination under the supervision of seminar faculty.

Results of evaluation should be entered into P.G.’s diary and department file documentation purposes. Main Purpose of periodic examination and accountability is to ensure clinical expertise of students with practical and communication skills and balance broader concept of diagnostic and therapeutic challenges.

LIST OF LECTURES

1. Clinical Aspects of Respiratory Diseases
2. Diagnostic Imaging and Radiology
3. Hazards of Smoking and Air Pollution
4. Tuberculosis: Pathology
5. Pulmonary Tuberculosis: Clinical Features
6. Pulmonary Tuberculosis: Diagnosis
7. Pulmonary Tuberculosis: Investigations
8. Pulmonary Tuberculosis: Treatment
9. Newer Diagnostic Modalities for Tuberculosis
10. Radiological Features of Pulmonary Tuberculosis
11. Extra-Pulmonary Tuberculosis
12. MDR-Tuberculosis
13. XDR-Tuberculosis
14. RNTCP
15. DOTS PLUS PROGRAMME Management
16. HIV-TB
17. Acute Upper Respiratory Infections
18. Pneumonias
19. Empyema
20. Lung Abscess
21. CNS Tuberculosis
22. Abdominal Tuberculosis
23. Chronic Bronchitis and Emphysema
24. Respiratory Failure
25. Pulmonary Thromboembolism
26. Pulmonary Hypertension and Core Pulmonale
27. Bronchiectasis
28. Diseases of Pleura
29. Pneumothorax
30. Malignancies of the Lung
31. Asthma:Epidemiology,Pathogenesis and Management
32. Occupational Lung Diseases