POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASE EXAMINATION
OCTOBER, 1994

Date: 31st October,1994 Time: 9.00 a.m. - 12.00 noon

PAPER I

Answer all questions
Answer Part A and Part B in separate books.
All questions carry equal marks.

PART A

1. Discuss the indications for inhaled corticosterolds in the management of asthma. What advice would you give a patient, when prescribing this form of treatment?

2. A middle aged patient is admitted to an emergency unit in the early hours of the morning with acute severe shortness of breath. Discuss the differential diagnosis and the immediate investigations that you would do.

3. Write short notes on;

   (a) HIV Infection and tuberculosis.

   (b) The management of a patient, whose sputum is persistently positive for acid fast bacilli, while on anti tuberculous chemotherapy for two months.

   (c) Diagnostic features of fibrosing alveolitis.

PART B

4. A 40-year-old smoker presents with a rounded well-defined opacity in the right mid zone of the chest x-ray. Discuss the differential diagnosis and how you would investigate this patient.

5. Discuss the uses of fibreoptic bronchoscopy and what are its advantages over rigid bronchoscopy ?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES EXAMINATION
NOVEMBER, 1994.

Date: 1st November, 1994 Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer all questions,
Answer Part A and B in separate book.
All questions carry equal marks.

PART A

1. Discuss the contraindications to surgery in carcinoma of the bronchus.

2. Discuss the clinical features, diagnosis and management of tuberculous pleural effusion.

3. Discuss the uses of the peak-flow meter in the diagnosis and management of respiratory disease.

4. Write short notes on:

   (a) Pathogenesis of bronchiectasis.
   (b) Mesothelioma of the pleura.
   (c) Graphite pneumoconiosis.

PART B

5. Discuss the indications for corticosterolds in the treatment of tuberculosis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
MAY, 1999

Date: - 24th May 1999 Time: - 2.00 p.m. - 5.00 p.m.

PAPER I

Answer all questions.
Answer Part A and Part B in separate Books.
All questions carry equal marks.

PART A

1. A 50-year-old man seeks treatment for a cough and shortness of breath of 3 months duration. He has been prescribed inhaled beclamethasone dipropionate capsules one month earlier, but there has been no response. X-ray chest is normal. PEFR is 275 liters/minute.
   Discuss the differential diagnosis and the management of this patient.

2. Describe the management of a patient with multiple drug resistant tuberculosis.
   Discuss what measures you would take to prevent this condition.

3. Describe the management of the following -
   (a) An alcoholic with jaundice and active pulmonary tuberculosis

   (b) A patient with a relapse of pulmonary tuberculosis, who has taken treatment for 2 months, 1 year earlier

   (c) A new born of a mother with active pulmonary tuberculosis

PART B

4. Define interstitial lung disease and discuss what factors affect its prognosis.
   How would you initially investigate such a patient Enumerate treatments that are available.

5. Write brief notes on -
   (a) Benefits of smoking cessation on the respiratory system.
   (b) Interpretation of a mantoux test
   (c) Indications for pulmonary function studies
   (d) Types of lung biopsies and their indications.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
MAY, 1999

Date: - 25th May 1999 Time 9.00 a.m. 12.00 noon

PAPER II

Answer all questions.
Answer Part A and Part B in separate Books.
All questions carry equal marks.

PART A

1. Discuss the pathogenesis and management of tuberculous meningitis

2. Discuss the role of surgical intervention in the present day management of pulmonary tuberculosis

3. A 45-year-old man presents with fever, cough and right sided chest pain of three days duration. The chest radiograph shows consolidation of right lower lobe.

   (a) Discuss the factors, which affect the immediate prognosis of this patient.

   (b) Repeat chest radiograph in three weeks shows no improvement. Discuss the differential diagnosis and how you would investigate this patient.

PART B

4. A 50-year-old man, a heavy smoker and an alcoholic present with fever and dyspnoea of ten day's duration. The chest radiograph shows right sided pleural effusion. Discuss the differential diagnosis and how you would investigate this patient.

5. Write short notes on -

   (i) Bronchiolo-alveolar carcinoma
   (ii) Middle lobe syndrome
   (iii) Bilateral hilar lymphadenopathy

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSI S & CHEST DI SEASES EXAMINATION NOVEMBER, 1999

Date: 8th November 1999 Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer all questions. Each question in a separate Book.
All questions carry equal marks.

PART A

1. As the DTCO of a District Chest Clinic, in Sri Lanka, it is brought to your notice that 3 children - two with TB Meningitis and one with Miliary TB have been notified from your district.

   (a) What is the significance of this situation ?

   (b) Enumerate the possible factors, which might have contributed to the above occurrence.

   (c) ow would you investigate this situation ?

   (d) What remedial measures would you take to prevent the recurrence of such a situation ?

2. Discuss the similarities and differences between sarcoidosis and tuberculosis.

3. A 50-year-old man from Seeduwa who had received a full course of Anti TB drugs 5 years ago presents with coughing up half a bottle of blood, over the last 12 hours.

   (a) Describe the immediate management of this patient.

   (b) The chest radiograph reveals right apical fibrosis with a cavity in the right upper lobe.

      i. List the possible causes for the haemoptysis in this patient.
      ii. What investigations would help you to arrive at a diagnosis?

   (c) He has had 3 further heavy bleeds while in the ward. Discuss briefly other management options to arrest his bleeding.

PART B

4.

(a) Discuss the management of a 2 year old child without a BCG scar.

(b) A 50-year-old female with a contact history of pulmonary tuberculosis presents with adominal pain and ascites. How would you investigate this patient ?

(c) Outline the Management of a HIV positive contact of a smear positive pulmonary tuberculosis patient.

5. A 63-year-old man who smoked ten cigarettes daily for several years presented with a four-year history of breathlessness. During the previous two months his breathlessness had been worse and associated with left sided chest pain. He had never taken any regular medication nor had he kept any pets. He had worked as a stoker in the navy for ten years as a young man. On examination, he had finger clubbing and wheezes. At the right lung base there were late inspiratory crackles and at the left base there was dullness to percussion and reduced breath sounds. His chest radiograph showed right basal shadowing and diaphragmatic calcification, and there was a moderate left pleural effusion. Investigations showed: -

Hb	13.5 g/dl	
WBC	7.6 x 10 9/1 DC	N 80, L10, E10
ESR	30 mm in the first hour	
FEV1	1.91 (predicted 2.5 - 3.8)	
FVC	3.11 (predicted 3.4 - 5.1)	
FEV1 /FVC	61%	
TLC	5.01 (predicted 5.4 - 8.1)	
TLCO	0.9 mmol/min/kPa/l (Predicted1.2 -1.7)	

(a) Discuss the lung functions abnormalities of this patient.

(b) Discuss the likely underlying causes of the clinical/ radiological abnormalities.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION NOVEMBER, 1999

Date: 9th November, 1999 Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer all questions. Each question in a separate Book.
All questions carry equal marks.

PART A

1. A 38-year-old Diabetic patient presents with fever, a neutrophil leucocytosis (WBC 15,000/cumm, N 80, L17, E3) and high ESR (120 mm first hour). He has been a heavy smoker and the chest radiograph showed left midzonal rounded opacity with a fluid level within it. Discuss
   (a) The Differential Diagnosis.
   (b) The Investigations.
   (c) The Basic Management Plan.

2. A 65-year-old man is admitted with a history of bilateral ankle oedema and worsening breathlessness of 3 days duration. He gives a past history of cough of 5 years and breathlessness of 3 years duration.
   He was hospitalized for 3 days, 4 months ago for haemoptysis.
   The patient is a smoker and gives a 25-pack year history of smoking.
   Discuss the immediate and long-term management of this patient.

3.
   (a) What are the indications for a pleural biopsy ?

   (b) Describe how you world perform a pleural biopsy

   (c) The pleural biopsy sent for culture on Lowenstein-Jensen medium shows several colonies after 2 weeks. How would you interpret this result and what further investigations would you perform to arrive at a definitive diagnosis?

4. Writes short notes on-

   (i) The house dust mite in respect to Bronchial Asthma.
   (ii) Kartegener's syndrome.
   (iii) How would you assess a patient with a non-small cell carcinoma of the bronchus with a view for surgery?

PART B

5. A 24-year-old man presents with multiple enlarged cervical lymph nodes of four weeks duration.

   (a) What features in the history and examination AND What investigations would help you to arrive at a diagnosis?

   (b) The subsequent investigation of this patient revealed a Mantoux Test of 20 mm.
      (i) How do you interpret this result?

      (ii) What other measures would help you to diagnose tuberculous lymphadenitis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION - NOVEMBER, 2000

Date: 6th November 2000 Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer all questions. Each question in a separate Book.
All questions carry equal marks.

PART A

1. This is a Tuberculosis Treatment card (TB 01) of a patient from a chest clinic.
   (a) Make your observations on the short comings of this chart as a DTCO.
   (b) He is referred back to you today by a General Practitioner who has treated him for a viral fever.

   What action would you take at this juncture?

2.
   (a) What is DOTS ?

   (b) Enumerate the different components of this form of therapy.

   (c) Discuss briefly the problems Sri Lanka faces in implementing each of these components and what steps would you take to overcome them in your district.

3.
   (i)
      (a) What criteria would you use to diagnose Tuberculosis in children ?

      (b) List the factors, which increase the risk of tuberculous infection in children.

   (ii) Outline the management of a child contact in a house with a sputum positive adult.

PART B

4. A 30-year-old married female presenting with a cough and is found to be sputum positive for AFB.

   (i) Describe the management of this patient at the initial diagnosis.

   (ii) Three weeks after commencing treatment she develops a severe prurites and a rash - How would you manage her now?

   (iii) After completing 5 months of treatment she is found to be sputum positive - Outline her further management now.

5. 30-year-old female presents with dyspnoea at rest for 2 weeks. She had given birth to a healthy child one month ago. On examination her lungs were clear.

   (i) Discuss the differential diagnosis.

   (ii) How would you investigate this patient?

POSTGRADUATE INSTITUTE OF MEDICINE
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DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION NOVEMBER, 2000

Date: 7th November 2000 Time: 9.30 a.m. - 12.30 p.m.

PAPER II

Answer all questions. Each question in a separate Book.
All questions carry equal marks.

1.
(a) What are the common sites of Extra Pulmonary Tuberculosis ?
(b) How would you establish the diagnosis at each site ?
(c) Outline the management of TB pericarditis.

2. What are the indications for ?

(a) Intercostal tube drainage.
(b) Surgery in Bronchiectasis.
(c) Surgery in spinal TB.

3. Write short notes on
(a) Lung diseases acquired from animals.
(b) The assessment of a 60 year old COPD patient wishing to travel by air to UK.
(c) The use of Leukotriene Antagonists in Asthma.

4.
(a) How will you classify pneumonias from a therapeutic point of view ?

(b) What are the indications to admit a patient to hospital when he has signs and symptoms of pneumonia ?

(c) How will the chest x-ray appearance influence the choice of your initial antibiotic?

5. How does the drug history help you to diagnose and manage a patient with respiratory disease ?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
JUNE, 2002

Date : 25th June 2002 Time : 1.30 p.m. – 4.30 p.m.

PAPER I

Answer all questions. Answer each question in a separate Book.
All questions carry equal marks.

PART A

1. Answer the following questions regarding the information entered in the copy of the District TB register attached herewith. You are checking it in September 1992.

   a) What is the treatment outcome of patient number one ?

   b) What *are* the possible outcomes of treatment of patient number two ?

   c) On what basis could a diagnosis have been made in patient number three.

   d) Make your comments about patient number four.

   e) Make your comments about patient number five.

   f) The nurse at the DOTS Centre tells you that the patient number six did not come for treatment after the 15th of March and patient number seven came for the full course of treatment but after that he has left the area without reporting back to the chest clinic. What are the treatment outcomes in cases six and seven.

2. Analysis of the new cases of Tuberculosis detected in the first two quarters of the year 2002 in the District of Moneragala, Sri Lanka reveals that the highest number of cases (45 patients) have been reported from a Tea Plantation named Kumarawatte.

   a) As the District Tuberculosis Control Officer. outline the immediate and long term measures you would take in this situation.

   b) Enumerate the points you would make in preparation for a Health Education Programme for the Health Care Workers in this area.

3, A close contact of a TB patient presents to you with clinical and radiological features suggestive of pulmonary TB. However three sputum samples were negative for

AFB on direct smear.

a) Discuss the reasons for false negative AFB results.
b) How would you manage this patient ?
c) What is a trial of anti TB therapy ?

PART B

4. 31 year old man was brought to hospital with sub acute onset of dyspnoea. over 2 to 3 weeks. H.is $Pa0_2$ was 60 mm Hg and clinical examination revealed wide spread. fine crepitations in both lungs. His BP was 90/60. pulse 120/min and he was afebrile.

Chest x ray revealed bilateral diffuse infiltrates.

a) Discuss the differential diagnosis and the basic investigations of this patient.
b) If the clinical examination of this patient revealed severe oral candidiasis. cervical adenopathy and the sputum becomes positive for AFB what further action would you take.
c) Outline the management of this patient.
d) What particular problems would you encounter in his management.

5. A 55 year old female suffering from Rheumatoid Arthritis, on long term Oral Steroids presents with a persistent cough and shortness of breath. On examination the patient is cushingoid and clubbed. Auscultation of the chest reveals rhonchi with bi basal crepitations.

a) List three possible diagnoses.
b) How would you manage this patient ?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
JUNE, 2002

Date : 26th June,2002 Time: 9.30 a.m. - 12 30 p.m.

PAPER II

Answer all questions. Each question in a separate Book.
All questions carry equal marks.

1. A 60 year old male who has progressive dyspnoea over past 5 years is admitted to the Chest Ward with acute worsening of dyspnoea. He has a 25 pack year history of smoking. On examination he is cyanosed and has bilateral ankle oedema. His pulse rate is 110 per minute and he has bilateral crackles and rhonchi on auscultation. Discuss the immediate and long term management of this patient.

2. 50 year old female presents with a long standing backache. She gives a past history of cough and haemoptysis - 2 years back.

   a) What differential diagnosis would you consider in this patient ?
   b) How would you manage this patient.
      Subsequently she was diagnosed as having potts disease of the spine.
   c) Discuss further management of this patient.

3. Write short notes on :

   a) Indications for surgery in the management of pulmonary tuberculosis
   b) Indications for tuberculin testing
   c) Interpretation of the tuberculin test.

4.
   a) Discuss briefly the pathogenesis of Miliary Tuberculosis
   b) Outline the varied clinical presentations and management of Miliary Tuberculosis.

5. An 80 year old man presented to the Chest Clinic with history of cough and fever of 10 days duration. On auscultation he had bronchial breathing over the lower zone or right lung. The chest radiograph showed evidence of consolidation of right lower lobe.

a) What is the immediate management of the patient.
A chest radiographs done 4 weeks later reveals poor resolution.

b) Discuss the possible causes for this situation.

c) Outline further management.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
MARCH, 2005

Date :- 14th March, 2005 Time:- 1.30 p.m. - 4.30 p.m.

PAPER I

Answer all questions.
Answer each question in a separate book
All questions carry equal marks.

PART A

1. Following are the reports submitted by ~ District Tuberculosis Control Officer.

1.1. Case Finding first quarter 2003

Type Sex	Pulmonary Tuberculosis							Extra-pulmonary		Total
	Smear Positive					Smear Negative		New	Other	
	New	Relapse	Failure	Return after Default	Other	New	Other			
Male	55	3	4	7	1	50	-	60		180
Female	25	2	-	3	-	30		30		90
Total	80	5	4	10	1	80		90		270

(a) Calculate the proportion of New Smear positive cases to All New Pulmonary Cases ?
(b) What is the expected percentage of Smear Positive cases ?
(c) What are the possible causes of the results you obtained ?
(d) What are your comments on the number of extra- pulmonary cases of TB ?

1.2. Quarterly report on sputum conversion of smear positive patients at the end of the intensive phase of treatment.

First Quarter 2003

Type of case	Number registered	Negative	Positive	Not available	Died	Defaulted	Transfer Out
New (Smear positive)	80 .	20	2	35	10	10	3
Relapse (smear Positive)	5	1	1	3	-	3	-
Failure (smear Positive)	4	3	-	-	1	-	-
Return after Default (smear positive)	10	2	-	7	-	1	-

(a) Calculate the Smear conversion rate at the end of two months of treatment ?

(b) What is the expected rate ?

(c) What are the possible causes of this sputum conversion rate ?.

(d) How do you cross check this information ?.

(e) How do you propose to correct this ?

2. **(In answering this question please assume that you are unable to obtain Chest Physician Opinion)**

A mentally handicapped 14 year old child from an orphanage was referred to the Chest Clinic from the adjacent main hospital. She had bilateral upper lobe shadows on chest x ray and loss of weight. She had a tuberculin reading of 18 mm.. and her sputum had been negative for AAFB on three occasions. She was given anti TB treatment by the hospital team for 10 days and three sputum smears at the Chest Clinic were also negative for AAFB.

(a) What actions would you take ?

She showed good clinical improvement, but at the end of the intensive phase, she was sputum positive (two smears).

(b) How do you handle this situation ?

(c) What other investigations would have been done before starting anti TB drugs.

At the end of the third month of anti TB treatment the child was asymptomatic and her sputum was negative for AAFB. The chest x ray showed good improvement.

(d) What will you do now ?

The results of a culture done at the end of the intensive phase, came as negative.

(e) What are your observations on the culture results
(f) What will be the total duration of treatment ?
(g) What is the treatment out come if her sputum is. negative at the end of treatment ?
(h) What follow up actions would you take ?

3. Discuss the risk factors that determine the progression of TB infection to active disease.

PART B

4. List the main responsibilities of a District Chest Clinic.

5. A 50 year old man is referred to Chest Clinic by a Community Treatment Supporter because c cough of more than three months duration. Patient has recently been commenced on an anti hypertensive agent. Patient is not aware of the name of the drug. On further questioning patier admits to limitation of exercise tolerance due to breathlessness. Patient states he suffers from "phlegm" for many years.

Patient has also suffered from dyspeptic symptoms on an off and has taken anta-acid mixture from time to time. Patient has a 20 pack year history of smoking. During a recent visit to General Practitioner routine investigations and a chest radiograph has been done. The blood shows an eosinophilia of around 9% and is otherwise normal. Chest

radiograph is normal.

(a) List the commonest possible causes of this patients cough ?

(b) What information in the history would you obtain to confirm or exclude the causes you have listed ?

(c) What initial investigations would you perform in this patient ?

(d) Patient has recently had a course for DEC (diethyl carbemazine) two tablets three times a day for a period of three weeks. His GP has told that the patient has "phlegm in his blood" what are your comments on this ?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

DIPLOMA IN TUBERCULOSIS & CHEST DISEASES EXAMINATION
MARCH, 2005

Date :- 15th March, 2005 Time :- 9.30 p.m. - 12.30 p.m.

PAPER II

Answer all questions.
Answer each question in a separate book
All questions carry equal marks.

1. A 23-year-old nurse is referred with cervical lymph node enlargement with a suspected diagnosis of tuberculous lymphadenitis.

   a) Discuss the differential diagnosis

   b) Describe how you would confirm the diagnosis of tuberculous lymphadenitis

   c) Describe the histopathology of this condition

2. A 50-year-old man is admitted to the hospital with a massive haemoptysis

   a) Define the term massive haemoptysis

   b) List three (03) underlying mechanisms in the causation of haemoptysis

   c) Describe the immediate and subsequent management of this patient

3. A 55-year-old man visits the chest clinic with a history of cough and fever for 7 days. On examination, he has signs of consolidation over the right lower chest.

   a) What additional information in the history and examination would you obtain to plan further management of this patient

   .

   b) Describe the management of this patient,

4. Write short notes on

   a) management of infective exacerbation of chronic obstructive airway disease (COPD)

   b) differences between Type I and Type II respiratory failure, giving examples

   c) pulmonary infections in the immunocompromised host

5. A 40-year-old woman with seropositive rheumatoid arthritis has been a regular attendee at the chest clinic for long standing progressive breathlessness. She is admitted to the hospital with increasing shortness of breath, fever and right sided chest pain over the last five days.

   a) List five possible causes for her recent worsening symptoms

   b) What is the likely cause for her long-term breathlessness

   c) Describe how you would investigate the condition mentioned in 5(b)

   d) Outline the management of the condition mentioned in 5(b)