

APRIL 2001

[KD 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe physiology of pleural fluid formation and causes of recurrent effusion. (25)
 2. Describe Broncho pulmonary segments and discuss the role of Fibre optic Bronchoscopy. (25)
 3. Write briefly : (5 × 10 = 50)
 - (a) Spirometry
 - (b) Allergen testing
 - (c) Toxic effect of Theophyllin
 - (d) Rapid Bactae method of detection of M.T.B
 - (e) Agenesis of Lung.
-

NOVEMBER 2001

[KE 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. What are the causes of increased residual volume?
Describe the commonly used lung function tests in
asthmatic patients.
 2. Describe the various toxic manifestations of
antitubercular drugs used in short course chemotherapy
and their management.
 3. Write briefly on :
 - (a) Pulmonary sequestration
 - (b) Airway resistance
 - (c) Tuberculin Test
 - (d) Directly Observed Treatment (DOT)
 - (e) Magnetic Resonance Imaging (M.R.I).
-

MARCH 2002

[KG 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the applied anatomy of Broncho-Pulmonary Segments. (25)
 2. Describe the measurement of dynamic lung volumes and their role in Pulmonary Medicine. (25)
 3. Write briefly (5 × 10 = 50)
 - (a) Respiratory Alkalosis.
 - (b) Sputum Smear Gram Staining.
 - (c) Sarcoid Granuloma.
 - (d) Fluorescent staining for Mycobacteria.
 - (e) Azygos Lobe of the lung.
-

SEPTEMBER 2002

[KH 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. What are the tests of airway function, respiratory muscle power and pulmonary gas exchange? (25)
 2. Describe the lymphatic drainage of lung. (25)
 3. Write briefly : (5 × 10 = 50)
 - (a) Azygos lobe
 - (b) Control of respiration
 - (c) Central sleep apnoea
 - (d) Bronchopulmonary segments
 - (e) Eventration of diaphragm.
-

APRIL 2003

[KI 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Classify the causes of Alveolar Hypoventilation and describe the pathogenesis and pathophysiology of cor pulmonale in detail. (25)
 2. Classify anti-asthmatic drugs and discuss their mechanism of action and modes of administration in patients with bronchial asthma with different stages of severity. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Broncho-pulmonary sequestration
 - (b) Alpha 1 anti-trypsin deficiency
 - (c) MAC infection
 - (d) Collateral ventilation
 - (e) Cord factor.
-

OCTOBER 2003

[KJ 1540]

Sub. Code : 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES EXAMINATION.

(New Regulations)

Part I

Paper I — BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Time : Three hours

Maximum : 100 marks

Theory : Two hours and forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the answer sheet provided as per the instructions given on the first page of the M.C.Q. Booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

Essay Questions :

(2 × 15 = 30)

1. What is Community Acquired Pneumonia (CAP)? Describe briefly microbial profile and pathology of CAP?
2. Describe factors affecting gaseous diffusion in lungs. What is DLCO, its significance and methods of its measurement?

3. Write Short notes on : (10 × 5 = 50)
- (1) Lymphatics of the lungs.
 - (2) Oxygen and Carbon dioxide transportation in the blood.
 - (3) Peak Expiratory Flow Rate (PEFR)
 - (4) Sleep Apnoea Syndrome.
 - (5) Hypersensitivity reactions.
 - (6) Finger clubbing.
 - (7) Criteria for normal skiagram chest.
 - (8) Radiological presentation of atypical pleural effusion.
 - (9) Definition and Differential Diagnosis of military shadows on X-ray chest.
 - (10) Fibre Optic Bronchoscopy.

AUGUST 2004

[KL 1540]

Sub. Code : 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES EXAMINATION.**

(New Regulations)

Part I

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

**(1) Describe the anatomy of the mediastinum.
Discuss the posterior mediastinal disorders. (15)**

**(2) Discuss pulmonary and bronchial circulation.
Describe interstitial oedema and pulmonary
oedema. (15)**

II. Write briefly :

(10 × 5 = 50)

- (a) Peak Expiratory Flow Rate**
- (b) HRCT of thorax**
- (c) Cough**
- (d) Pathogenesis of clinical barotrauma**
- (e) Respiratory acidosis**
- (f) Flow volume loops**
- (g) Restriction fragment length polymorphism**
- (h) Long acting Bronchodilators**
- (i) Sleep Apnoea**
- (j) Congenital Bronchiectasis.**

MARCH 2006

[KO 1540]

Sub. Code : 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES EXAMINATION.

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(2 × 15 = 30)

(1) Describe the mucociliary transport and its role in lung defences.

(2) Describe the flow-volume loop ; describe how to make the loop correctly ; discuss its role in respiratory medicine.

II. Write briefly on :

(10 × 5 = 50)

(a) **Respiratory acidosis**

(b) Ziehl-Neelsen staining

(c) **Tuberculous granuloma**

(d) Rapid methods of mycobacterial culture

(e) **Tracheo-oesophageal fistula**

(f) Azygo's lobe

(g) Forced expiratory volume in one second (FEV1)

(h) Immunity in tuberculosis

(i) **Mass Miniature Radiography (MMR)**

(j) **Pyrazinamide.**

SEPTEMBER 2006

[KP 1540]

Sub. Code : 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES EXAMINATION.

**Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Describe the immunopathogenesis of Tuberculosis and discuss the merits and demerits of immunological tests in the diagnosis of Tuberculosis.(20)

(2) Describe the anatomical structure of a bronchopulmonary segment and describe its blood circulation. (15)

(3) Mention the different types of tubercle bacilli which are pathogenic to human beings and describe their characteristics. (15)

11. Short notes :

(6 × 5 = 30)

- (a) Congenital Bronchiectasis
- (b) Restriction Fragment length polymorphism
- (c) Tuberculoma brain
- (d) Transport medium
- (e) Rifabutin
- (f) PCR in Tuberculosis.

MARCH 2007

[KQ 1540]

Sub. Code : 3052

DIPLOMA IN TUBERCULOSIS AND CHEST
DISEASES (D.T.C.D.) EXAMINATION.

Paper I — BASIC SCIENCES AS APPLIED TO
PULMONARY MEDICINE

Common to

Candidates admitted from 1993-94 onwards

and

Candidates admitted from 2004-05 onwards

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Describe congenital conditions associated
with bronchiectasis. (20)

(2) Describe mechanism of atelectasis and
discuss the diagnostic studies and management of
obstructive atelectasis. (15)

(3) Describe development of diaphragm and its
developmental anomalies. (15)

II. Short notes : (6 × 5 = 30)

(a) Staining techniques for acid fast bacilli

(b) Respiratory acid base disorders

(c) Glycopyrrolate

(d) Soft tubercles

(e) Luciferase reporter assay

(f) Dynamic Hyperinflation.

MARCH 2008

[KS 1540]

Sub. Code : 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (D.T.C.D.)
EXAMINATION.

Paper I — BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE

Common to all Regulations

Q.P. Code : 343052

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw diagrams wherever necessary.

I. Essay questions : (2 × 20 = 40)

(1) Describe in detail the anatomy of bronchopulmonary
segments and its clinical importance. (20)

(2) Write in detail about the control of Breathing. (20)

II. Short notes on : (10 × 6 = 60)

(1) Pulmonary Arteriovenous malformations.

(2) Respiratory alkalosis.

(3) Case Control Study.

(4) Development of the diaphragm.

(5) Gene therapy in Respiratory medicine.

(6) Cyclophosphamide.

(7) T Lymphocytes.

(8) Anatomical and physiological dead space.

(9) Cough reflex.

(10) Tumor necrosis factor- α .

September 2008

[KT 1540]

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES
EXAMINATION.**

**Paper I – BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE**

(Common to all Candidates)

Q.P. Code : 343052

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe the current concept of the pathogenesis and medical treatment of chronic obstructive pulmonary disease.
2. Describe the scientific basis of short course chemotherapy and intermittent chemotherapy.

II. Write short notes on :

(10 X 6 = 60)

1. Tuberculoma.
 2. Respiratory acidosis.
 3. Anti-Leucotrienes.
 4. Acid-fast staining techniques.
 5. Sequestration of lung.
 6. Positive end expiratory pressure.
 7. Caprography.
 8. Lady windermere's syndrome.
 9. Macleod syndrome.
 10. Methotrexate.
-

MARCH -2009

[KU 1540]

Sub. Code: 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES

EXAMINATION.

**Paper I – BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE**

(Common to all Candidates)

Q.P. Code : 343052

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : (2 X 20 = 40)

1. Discuss the non respiratory functions of the Lungs.
2. Describe the anatomy of mediastinum. Discuss various mediastinal lesions.

II. Write short notes on : (10 X 6 = 60)

1. Small airway function.
2. Adenyl cyclase.
3. Pulmonary surfactant.
4. Oxygen dissociation curve.
5. Radiology of pulmonary hydatid.
6. Aminorex tragedy.
7. HAART.
8. Berylliosis.
9. Flail chest.
10. Delayed type hypersensitivity.

September - 2009

[KV 1540]

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES
EXAMINATION.**

**Paper I – BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE**

(Common to all Candidates)

Q.P. Code : 343052

Time : Three hours

Maximum : 100 marks

**Draw suitable diagram wherever necessary.
Answer ALL questions.**

I. Essay questions : (2 X 20 = 40)

1. Define drug resistance in mycobacteria. Describe the various mechanisms of drug resistance in mycobacteria. Discuss the DOTS PLUS programme.
2. Describe acinus. Discuss the microanatomy of emphysema.

II. Write short notes on : (10 X 6 = 60)

1. Azygos lobe.
2. Peak flow variability.
3. Apnoea-Hypopnoea Index.
4. Alfa – 1 Antitrypsin.
5. Aerosol therapy.
6. Dumb-bell tumours.
7. BCG.
8. Sail sign.
9. Ghons focus.
10. Silofillers disease.

March 2010

[KW 1540]

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES
EXAMINATION
BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE
(Common to all Candidates)
*Q.P. Code : 343052***

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions :

(2 x 20 = 40)

1. Describe pulmonary metabolism.
2. Describe the contents of normal mediastinum and techniques for obtaining mediastinal tissue.

II. Write short notes on :

(10 x 6 = 60)

1. Hypogenetic lung syndrome.
2. Collateral ventilation.
3. Dumb-bell tumours.
4. Anion gap.
5. Unilateral pulmonary edema.
6. Pulmonary ligament.
7. Complications of pneumonia.
8. BODE index.
9. Accessory fissures of lung.
10. Vincristine.

September 2010

[KX 1540]

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES
EXAMINATION.**

**Part I / Paper I - BASIC SCIENCES AS APPLIED TO PULMONARY
MEDICINE**

(Common to all Candidates)

Q.P. Code : 343052

Time : Three hours

Maximum : 100 marks

**Draw suitable diagram wherever necessary.
Answer ALL questions.**

I. Essay questions :

(2 X 20 = 40)

1. Describe the ultra structure of Cilia in respiratory tract. What are the common developmental defects associated with it? Describe Ciliary kinetic diseases.
2. Discuss regulation of Respiration.

II. Write short notes on :

(10 X 6 = 60)

1. Tests for small airway function.
2. Alveolar Macrophages.
3. Pulmonary surfactant.
4. Oncogenes and Lung Cancer.
5. Respiratory alkalosis.
6. Congenital abnormalities of diaphragm.
7. Anterior Mediastinal mass.
8. Lung compliance.
9. Accessory fissures of lung.
10. Lung Sequestration.

APRIL 2011

[KY 1540]

Sub. Code: 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)

EXAMINATION

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code : 343052

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Describe Defence mechanisms of Respiratory tract and role of Alveolar Macrophages.	11	35	15
2. Describe segmental anatomy of lung and their clinico surgical importance.	11	35	15

II. Write notes on :

1. Anterior mediastinal mass.	4	10	7
2. Development of lung.	4	10	7
3. Phospholipids.	4	10	7
4. IgE.	4	10	7
5. Deflazocort.	4	10	7
6. Primary complex.	4	10	7
7. Formoterol.	4	10	7
8. Lung compliance.	4	10	7
9. Oncogenes and lung cancer.	4	10	7
10. Respiratory alkalosis.	4	10	7

October 2011

[KZ 1540]

Sub. Code: 3052

DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION
BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code : 343052

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
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- | | | | |
|--|----|---------|----|
| 1. Describe the morphology of Acid Fast Bacilli, the staining methods and types of stains. | 11 | 35 min. | 15 |
| 2. Describe in detail the embryology of lung and its development. Discuss the various congenital anomalies of the lung during development. | 11 | 35 min. | 15 |

II. Write notes on :

- | | | | |
|-------------------------------------|---|---------|---|
| 1. Ultra-structure of cilia. | 4 | 10 min. | 7 |
| 2. Slow Vital Capacity. | 4 | 10 min. | 7 |
| 3. Capnography. | 4 | 10 min. | 7 |
| 4. Formeterol. | 4 | 10 min. | 7 |
| 5. Rifabutin. | 4 | 10 min. | 7 |
| 6. Hydatid Cyst. | 4 | 10 min. | 7 |
| 7. Surfactant. | 4 | 10 min. | 7 |
| 8. Oncogenes. | 4 | 10 min. | 7 |
| 9. Alpha-1-Anti Trypsin Deficiency. | 4 | 10 min. | 7 |
| 10. Bio-equivalence. | 4 | 10 min. | 7 |

April 2012

[LA 1540]

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code : 343052

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. How will you evaluate a patient with chronic dyspnoea?	16	35	15
2. Describe oxygen and carbon dioxide exchange and transport.	16	35	15

II. Write notes on :

1. Describe various cough receptors.	4	10	7
2. Describe the method of measurement and clinical significance of diffusing capacity.	4	10	7
3. Describe the drug omalizumab.	4	10	7
4. What is the role of aerosol therapy in various respiratory diseases?	4	10	7
5. Describe the pathogenesis of asthma.	4	10	7
6. What is the role of central respiratory centres?	4	10	7
7. Describe the segmental anatomy of lungs.	4	10	7
8. What is the role of alveolar macrophages in health and disease?	4	10	7
9. Describe the functional anatomy of diaphragm.	4	10	7
10. Describe the pulmonary compliance.	4	10	7

(LC 1540)

APRIL 2013

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Describe in detail about the development of lung and add a note on lung sequestration.
2. Describe in detail about the control of breathing and add a note on Pneumotaxic center.

II. Write notes on:

(10X7=70)

1. Root of lung
2. Forced expiratory volume in one second (FEV1)
3. Role of influenza vaccine
4. Nocardia infection of lung.
5. Oxygen dissociation curve
6. $\alpha 1$ antitrypsins
7. Airway remodeling
8. Thoracic duct
9. D-Dimer
10. Oncogenes

[LG 1540]

APRIL 2015

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS & CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Describe in detail types and patho physiology of respiratory failure.
2. Describe in detail respiratory muscles useful in increasing various diameters of thorax during respiration.

II. Write notes on:

(10 x 7 = 70)

1. Tracheal bronchus.
2. Lung compliance.
3. Mucociliary escalator.
4. Lobar consolidation – pathology.
5. Respiratory quinolones.
6. Pneumocystis jiroveci-microbiological tests.
7. Omalizumab.
8. Mycobacterium growth index tube.
9. Hyperinflation.
10. Granuloma.

[LH 1540]

OCTOBER 2015

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS & CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Describe the anatomy of mediastinum and write briefly on mediastinal lesions.
2. Describe the non respiratory functions of the lung.

II. Write notes on:

(10 x 7 = 70)

1. Rifapentine.
2. Centri Acinar Emphysema.
3. Mutation.
4. Forced Vital Capacity.
5. Cough Reflex.
6. Type - II Pneumocyte.
7. Anion Gap.
8. Anaerobic Infections of Lung.
9. Aging Lung.
10. Structure of Cilia.

(LI 1540)

APRIL 2016

Sub. Code:3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P.Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss in detail cough reflex, patho physiology and mechanism of cough.
2. Describe in detail lymphatic supply and various lymphatic drainage pathways of lung.

II. Write notes on:

(10 x 7 = 70)

1. Corbondioxide dissociation curve.
2. Ghons complex.
3. Indacaterol.
4. Askin tumour.
5. Cryptococcus infection of lung.
6. Tests for small airway function.
7. Rifabutin.
8. Tumour markers.
9. Cardiac notch.
10. A.F.B. staining methods.

(LK 1540)

MAY 2017

Sub. Code:3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P.Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe lymphatic drainage of lung and describe various stations of lymph nodes?
2. Describe lung volumes and capacities? Write briefly on diffusing capacity?

II. Write notes on:

(10 x 7 = 70)

1. Chemoreceptors.
2. Capnography.
3. Cardio Pulmonary Exercise Testing (CPET).
4. Broncho Alveolar Lavage.
5. Peak Flow Variability.
6. Cheyne Stokes Respiration.
7. Type – II Respiratory Failure.
8. Ventilation Perfusion Scan.
9. Congenital Kyphoscoliosis.
10. Development of Diaphragm.

(LM 1540)

MAY 2018

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P.Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the mechanism of atelectasis and discuss the diagnostic studies and Management of obstructive atelectasis.
2. Describe the physiology of pleural fluid formation and pathogenesis of pleural effusion.

II. Write notes on:

(10 x 7 = 70)

1. Pathophysiology and respiratory manifestations of alpha1 Antitrypsin Deficiency.
2. Peak Expiratory Flow Rate.
3. Case Control Study.
4. Pulmonary Ligament.
5. Lung Compliance.
6. Oncogenes.
7. Nocardia.
8. Pneumocystis Jirovecii.
9. Sequestration of lung.
10. Mucociliary escalator.

(LO 1540)

MAY 2019

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

APPLIED BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Classify mediastinal compartment and brief on applied anatomy of mediastinum.
2. Describe the flow volume loop and its importance in airway diseases.

II. Write notes on: **(10 x 7 = 70)**

1. Parietal pleura.
2. Mucociliary layer of respiratory tract.
3. Malignant mesothelioma.
4. Pulmonary nocardiosis.
5. Applied anatomy of diaphragm.
6. Adenosine deaminase.
7. Apnea hypopnea index.
8. Mucormycosis.
9. Tumour necrosis factor.
10. Caseating granuloma.

(LP 1540)

OCTOBER 2019

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe defense mechanisms of respiratory tract and role of alveolar macrophages in respiratory defense.
2. Describe the various microbiological methods used to diagnose pulmonary tuberculosis.

II. Write notes on:

(10 x 7 = 70)

1. Root of lung.
2. Superior vena cava.
3. High altitude pulmonary edema.
4. Pulmonary aspergillosis.
5. Linezolid.
6. Inhaled corticosteroids.
7. Sweat chloride.
8. Entamoeba in lung.
9. Inflammatory mediators in Chronic obstructive pulmonary disease.
10. Respiratory acidosis.

(LQ 1540)

**AUGUST 2020
(MAY 2020 SESSION)**

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the ultra structure of cilia in respiratory tract. What are the common developmental defects associated with it? Describe ciliary kinetic diseases.
2. Describe physiology of pleural fluid formation and causes of recurrent effusion.

II. Write notes on:

(10 x 7 = 70)

1. Cough receptors
2. Collar stud abscess
3. Inhaled antibiotics
4. Fate of a cavity
5. Omalizumab
6. Goblet cell
7. Rapid acetylation in INH
8. Airway remodelling
9. H1N1
10. Oxygen toxicity

(DTCD 0721)

**JULY 2021
(MAY 2021 SESSION)**

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Lymph nodes stations and the lymphatic drainage of the lungs.
2. Pulmonary function testing.

II. Write notes on: (10 x 7 = 70)

1. QTc prolongation.
2. Paraneoplastic syndromes.
3. AFB staining methods.
4. Newer bronchodilators.
5. Anterior mediastinal tumours.
6. Medical thoracoscopy
7. Agents used for Pleurodesis.
8. Hepatopulmonary syndrome.
9. Post operative respiratory failure.
10. Granuloma.

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[DTCD 1121]

**NOVEMBER 2021
(OCTOBER 2021 SESSION)**

Sub. Code: 3052

**DIPLOMA IN TUBERCULOSIS AND CHEST DISEASES (DTCD)
EXAMINATION**

BASIC SCIENCES AS APPLIED TO PULMONARY MEDICINE

Q.P. Code: 343052

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the anatomy of the diaphragm and enumerate its developmental anomalies.
2. Describe Broncho pulmonary segments and discuss the role of Fibre optic Bronchoscopy.

II. Write notes on: **(10 x 7 = 70)**

1. Applied anatomy of Angle of Louis.
2. Hypercapnia.
3. Anti oxidants.
4. Bedaquiline.
5. Loeffler's syndrome.
6. Pathological changes in COPD.
7. Haldane effect & Bohr effect.
8. CRP (C- Reactive Protein).
9. Respiratory syncytial virus.
10. Role of steroids in Respiratory Medicine.
