

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2203

**M.Sc. RESPIRATORY THERAPY
FIRST YEAR (Candidates admitted from 2019-2020 & 2020-2021 onwards)
PAPER III – APPLIED ASPECTS OF PHARMACOLOGY, MICROBIOLOGY
AND PATHOLOGY
Q.P. Code : 282203**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is Sterilization? Elaborate different types of sterilization methods. Write notes on plasma sterilization with examples. Write notes on personal protective equipment.
2. Write notes on mycobacterium tuberculosis. Elaborate the pathological changes, clinical features, investigation to be carried out in case of pulmonary tuberculosis. Discuss in detail about the drugs used and their side effect.

II. Write Short Notes on:

(10x6 = 60)

1. Mast cell stabilizer.
2. Anti retroviral drugs.
3. Side effects of Rifampicin and INH.
4. Mucolytics.
5. Pulse oximeter.
6. Local Anaesthetics.
7. Drugs used in H1N1 infection.
8. Notes on acute and chronic inflammatory changes.
9. Inhalational corticosteroids.
10. Difference between reversible and irreversible cell injury.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1023]

OCTOBER 2023

Sub. Code: 2203

**M.Sc. RESPIRATORY THERAPY
FIRST YEAR (From 2020-2021 onwards)
PAPER III – APPLIED ASPECTS OF PHARMACOLOGY, MICROBIOLOGY
AND PATHOLOGY**

Q.P. Code: 282203

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe the clinical presentation, lab diagnosis and management of Influenza. Add a note on antigenic shift and drift.
2. What is Ventilator Associated Pneumonia (VAP)? Describe in detail the risk factors, diagnosis and management of VAP. Add a note on prevention of VAP.

II. Write Short Notes on:

(10x6 = 60)

1. Congenital anomalies of the lung.
2. Describe the principle, advantages and disadvantages of ETO sterilization.
3. Emphysema.
4. Treatment of pneumonia.
5. Management of carcinoma lung.
6. Anti tubercular drugs.
7. Spirometry.
8. Apoptosis.
9. Mucolytics.
10. Pericardial effusion Tamponade.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0524]

MAY 2024

Sub. Code: 2203

**M.Sc. RESPIRATORY THERAPY
FIRST YEAR (From 2020-2021 onwards)
PAPER III – APPLIED ASPECTS OF PHARMACOLOGY, MICROBIOLOGY
AND PATHOLOGY**

Q.P. Code: 282203

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define Sterilization. Classify various sterilization Techniques. Describe in detail moist heat sterilization.
2. Describe the pathogenesis, clinical features and lab diagnosis of bacillus anthracis. Add a note on bioterrorism.

II. Write Short Notes on:

(10x6 = 60)

1. Airborne isolation precaution.
2. Anti-retroviral drugs.
3. Side effects of antituberculosis drugs.
4. Benign lung lesions.
5. Adrenergic bronchodilators.
6. Cellular adaptation.
7. Drugs used in SARS CoV-2 infection.
8. Pericardial effusion tamponade.
9. Inhalational therapy.
10. Vascular changes in pulmonary hypertension.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1024]

OCTOBER 2024

Sub. Code: 2203

**M.Sc. RESPIRATORY THERAPY
FIRST YEAR (From 2020-2021 onwards)
PAPER III – APPLIED ASPECTS OF PHARMACOLOGY, MICROBIOLOGY
AND PATHOLOGY**

Q.P. Code: 282203

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe in detail respiratory antibiotics. Add a note on aerosolized antibiotic administration.
2. Describe the Morphology, Pathogenesis, clinical presentation and lab diagnosis of H1N1 virus. Add a note on its prophylaxis.

II. Write Short Notes on:

(10x6 = 60)

1. Congenital anomalies of lung.
2. Anti-Cholinergic bronchodilators.
3. Mast cell stabilizing agents.
4. ETO sterilization.
5. Pleural effusion.
6. Pericardial effusion tamponade.
7. Mucolytics.
8. Lung malignancies.
9. Pathological Effects of lung following fire accidents.
10. How to collect various respiratory samples for microbiological examinations?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1025]

OCTOBER 2025

Sub. Code: 2203

**M.Sc. RESPIRATORY THERAPY
FIRST YEAR (From 2020-2021 onwards)
PAPER III – APPLIED ASPECTS OF PHARMACOLOGY, MICROBIOLOGY
AND PATHOLOGY**

Q.P. Code: 282203

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe the mechanism of action, side effects and clinical applications of anticholinergic drugs in COPD.
2. Describe ventilator-associated pneumonia (VAP), risk factors, diagnosis and management. Add a note on its prevention.

II. Write Short Notes on:

(10x6 = 60)

1. Drugs used in pulmonary hypertension.
2. Irreversible cell injury.
3. Primary Atypical pneumonia.
4. Standard precautions to prevent Health care associated infections.
5. Corticosteroids in ARDS.
6. Benign Lung lesions.
7. Describe the pathology of pulmonary tuberculosis.
8. Bronchiectasis.
9. Cellular adaptations.
10. Clinical presentation & lab diagnosis of h1n1 infections.
