

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

[AHS 0122]

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

Sub. Code: 2214

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 onwards)
PAPER IV-NEONATAL AND PAEDIATRIC RESPIRATORY CARE
Q.P. Code : 282214**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Elaborate in detail about weaning criteria and strategies, and various weaning modes in paediatric age group.
2. Elaborate in detail about Oxygen therapy and Oxygen flow devices and its Advantage and Disadvantage in paediatric age group.

II. Write Short Notes on:

(10x6 = 60)

1. Assessment of Oxygenation and Ventilation in neonates.
2. Ventricular septal defect.
3. Cystic Fibrosis.
4. Normal Fetal Development.
5. Indications of mechanical ventilation.
6. Aerosol therapy.
7. Abdominal wall defects.
8. Secretion clearance techniques.
9. Type II Respiratory Failure.
10. Transient Tachypnea of New Born (TTN).

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

[AHS 0522]

MAY 2022

Sub. Code: 2214

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 onwards)
PAPER IV-NEONATAL AND PAEDIATRIC RESPIRATORY CARE
Q.P. Code : 282214**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Indications, Modes, Strategies and goals of mechanical ventilation in paediatric age group.
2. Labour, Delivery and Physiological Changes Following Birth.

II. Write Short Notes on: (10x6 = 60)

1. Congenital Diaphragmatic Hernia.
2. Patent ductus arteriosus.
3. Tetralogy of fallot.
4. Croup.
5. Arterial blood gas analysis (ABG).
6. Hi-flow nasal cannula (HFNC).
7. Meconium Aspiration Syndrome.
8. Secretion clearance techniques.
9. Weaning Strategies in Paediatrics.
10. Sudden infant death syndrome.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2214

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2019-2020 & 2020-2021 onwards)
PAPER IV- NEONATAL / PEDIATRIC RESPIRATORY CARE**

Q.P. Code : 282214

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Anatomy of pediatric airway, its assessment and causes of difficult airway.
2. Modes, strategies and weaning of Mechanical ventilation in Neonates.

II. Write Short Notes on: (10x6 = 60)

1. Physiological Changes Following Birth.
2. Transposition of great arteries.
3. Bronchiolitis.
4. Oxygen therapy devices.
5. Goals of mechanical ventilation in pediatric.
6. Humidification.
7. APGAR score.
8. HFOV.
9. Hyaline membrane disease.
10. Airway clearance technique.

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 2214

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER IV- NEONATAL / PEDIATRIC RESPIRATORY CARE**

Q.P. Code: 282214

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Describe in detail about the embryology of lung development and various stages in development of Human lungs.
2. Discuss with illustrations in detail about various lung volume and capacities.

II. Write Short Notes on: (10x6 = 60)

1. Fetal circulation.
2. APGAR score.
3. Congenital Lobar Emphysema.
4. PEEP (Peak End Expiratory Pressure).
5. Oxygen dissociation curve.
6. Congenital Diaphragmatic Hernia.
7. Sudden Infant Death Syndrome.
8. High frequency ventilation.
9. Pneumonia in Newborn.
10. Patent Ductus Arteriosus.

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 2214

**M.Sc. RESPIRATORY THERAPY
SECOND YEAR (From 2020-2021 onwards)
PAPER IV - NEONATAL / PEDIATRIC RESPIRATORY CARE**

Q.P. Code: 282214

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. How will you categorise the congenital anomalies of lung development? Describe in detail about various malformations in tracheobronchial tree.
2. Discuss in detail about oxygen toxicity.

II. Write Short Notes on:

(10x6 = 60)

1. Lung capacities.
2. ECMO - Extra Corporeal Membrane Oxygenation.
3. CPAP – Continuous Positive Airway Pressure.
4. Liquid Ventilation.
5. Indications of Mechanical Ventilation in Newborn.
6. Pulmonary Surfactant.
7. Neonatal Pulmonary Hemorrhage.
8. Retinopathy of Prematurity.
9. Meconium Aspiration Syndrome.
10. Safe Transport of Ventilated Newborn.
