

Reg. No.

MANIPAL UNIVERSITY

FIRST YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: BASIC SCIENCES
(SPECIALTY: ADULT CARDIO RESPIRATORY CARE)
(2013 SCHEME)

Tuesday, December 15, 2015

Time: 10:00 – 13:00 Hrs.

Max. Marks: 80

✍ Long notes:

1. Explain in detail the cardiopulmonary events at birth. (16 marks)
2. Describe the innervation of the lung and the thoracic musculature. (16 marks)

3. **Short notes:**

- 3A. Work of breathing
- 3B. Metabolic acidosis
- 3C. Adrenergic bronchodilators
- 3D. Functional anatomy of the vascular system
- 3E. Airway resistance
- 3F. Carbon dioxide transport

(8 marks × 6 = 48 marks)



MANIPAL UNIVERSITY**FIRST YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION – DECEMBER 2015****SUBJECT: ADVANCED RESPIRATORY THERAPY SCIENCE I****(SPECIALIZATION: ADULT CARDIO RESPIRATORY CARE)****(NR - 2013 SCHEME)**

Wednesday, December 16, 2015

Time: 10:00 – 13:00 Hrs.

Max. Marks: 80

✍ Long notes:

1. Explain the effects of mechanical ventilation on ventilation.

(16 marks)

2. What is PEEP and CPAP? What are the indications, contraindication and pulmonary effects of PEEP?

(16 marks)

3. **Short notes:**

3A. Non-invasive ventilation

3B. Volume control ventilation

3C. Methods of weaning

3D. Humidification and inspired gas temperature

3E. Work of breathing

3F. Airway management

(8 marks × 6 = 48 marks)



MANIPAL UNIVERSITY

FIRST YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: CRITICAL CARE MEDICINE – I
(SPECIALTY: ADULT CARDIO RESPIRATORY CARE)
(2013 SCHEME)

Thursday, December 17, 2015

Time: 10:00 – 13:00 Hrs.

Max. Marks: 80

✍ **Long notes:**

1. Describe Aetiology, clinical features, diagnosis and ICU management of tetanus?
(2+4+2+8 = 16 marks)

2. Describe the causes, and current treatment of ARDS. Write a note on berlin definition of ARDS?
(4+8+4 = 16 marks)

3. **Short notes:**
 - 3A. Silicosis
 - 3B. Leptospirosis
 - 3C. Pulmonary Tuberculosis
 - 3D. Management of acute severe asthma
 - 3E. Aspiration syndromes
 - 3F. Metabolic acidosis(8 marks × 6 = 48 marks)

