

Question Paper

Exam Date & Time: 18-Feb-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - FEBRUARY 2019
SUBJECT: BRES 301 - MECHANICAL VENTILATION I
(2016 SCHEME)
Monday, February 18, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Section A: Long answer question. Draw diagrams as necessary.

- 1) List out the Indications and Contraindications of flexible bronchoscopy. Describe the role of flexible bronchoscopy during mechanical ventilation (10)
- 2) Define Compliance and Resistance with their normal values. Explain in detail on Time constant (10)

Section B: Short Notes

- 3A) What are the physiological measurements observed while ventilating a patient with Acute respiratory failure? (5)
- 3B) Describe Synchronized intermittent mandatory mode of mechanical ventilation (5)
- 3C) Initiation and weaning of PEEP therapy in patients with ARDS (5)
- 3D) Noninvasive measurement of blood gases (5)

Sectonm - C: Very Shot Notes

- 4A) Draw the flow volume loop for air trapping and air leak. (2)
- 4B) Write down the formula for the calculation of Static and Dynamic compliance (2)
- 4C) List the ventilator related factors which affect the aerosol delivery during mechanical ventilation (2)
- 4D) Differentiate over distension and Hyperinflation (2)
- 4E) Write down four indications to use closed suction in mechanically ventilated patients (2)

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Question Paper

Exam Date & Time: 21-Feb-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - FEBRUARY 2019
SUBJECT: BRES 305 - NEONATAL RESPIRATORY CARE
(2016 SCHEME)

Thursday, February 21, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Long answer questions:

- 1) Explain in detail the pathophysiology of MAS. Also mention what are types of MAS. (10)
(7+3 = 10 marks)
- 2) Enlist the stages of lung development. (10)

3) Short notes:

- 3A) Discuss the pathophysiology of RDS. (5)
- 3B) Discuss the management of congenital diaphragmatic hernia. (5)
- 3C) What is CDH? How can one diagnose in bedside? (5)
(2+3 = 5 marks)
- 3D) On the day of birth a 28 week baby on 4th hour of ventilation post surfactant appears to have saturation drop to 60% and bradycardia of 90/min. How will you intervene this situation and troubleshoot the problem. (5)

4) Very short notes:

- 4A) Define NTZ. (2)
- 4B) Define AOP. (2)
- 4C) List causes of PPHN. (2)
- 4D) Enlist two complications of Oxygen in neonates. (2)
- 4E) Calculate the dose of neosurf for a 1.5 kg neonate. (2)

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