

Question Paper

Exam Date & Time: 12-Dec-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - DECEMBER 2019

SUBJECT: BRES 301 - MECHANICAL VENTILATION I

(2016 SCHEME)

Thursday, December 12, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Write the definition, pathophysiology and ventilator management of acute respiratory distress (10) syndrome.
(2+3+5 = 10 marks)

- 2) Write the indications, working principles and mechanism of transcutaneous monitoring and end tidal (10) carbon dioxide monitoring.
(3+2+5 = 10 marks)

- 3) **Write short essay on:**
 - 3A) Time constant (5)
 - 3B) Pressure support ventilation (5)
 - 3C) Ventilator alarms (5)
 - 3D) Initial ventilator settings for ARDS patients with appropriate reasons. (5)

- 4) **Write short notes on:**
 - 4A) Equal Pressure Point (2)
 - 4B) Spontaneous breath with P-V loop (2)
 - 4C) Sensitivity setting during mechanical ventilation (2)
 - 4D) What is plateau pressure? Write the normal value. (2)
 - 4E) Draw a static pressure-time graph and label it. (2)

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Question Paper

Exam Date & Time: 13-Dec-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - DECEMBER 2019

SUBJECT: BRES 303 - HEALTHCARE MANAGEMENT AND LAW

(2016 SCHEME)

Friday, December 13, 2019 (14.00 - 16.00)

Answer all questions.

Marks: 50

Duration: 120 mins.

Long Essay Questions:

- 1) Describe the judiciary system in India. Discuss on a medico-legal case, duties to be performed by doctor in documentation of it. (10)
- 2) Discuss on profit and loss accounts and balance sheet. Describe the terminology of Assets and Liabilities & discuss their relevance in financial statements of an organisation. (10)

3) Short Answer Questions:

- 3A) Explain Mc Clelland's theory of motivation with its importance. (5)
- 3B) Discuss five hospital bed utilisation statistics used by managers of a hospital. (5)
- 3C) Discuss the five design features of Neonatal Intensive care units. (5)
- 3D) Describe the three advantages of accreditation of a hospital to top management of hospital, to Doctors of the hospital, to the Patients of that hospital. (5)

4) Short Questions:

- 4A) Mention two important features in Waiting Area measurements of Out-patient Departments. (2)
- 4B) Mention four important specific skills of a Management Professional. (2)
- 4C) Classify three types of Organisations. (2)
- 4D) Mention two important points related to dumb chutes in transport system of a hospital. (2)
- 4E) Name four domains of Quality Management in Healthcare. (2)

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Question Paper

Exam Date & Time: 14-Dec-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - DECEMBER 2019

SUBJECT: BRES 305 - NEONATAL RESPIRATORY CARE

(2016 SCHEME)

Saturday, December 14, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Long Answer Question:

- 1) Discuss in detail the fetal circulation. (10)
- 2) Define the various mechanism of heat loss in neonates with examples. Define cold stress. (8+2 = 10 marks) (10)
- 3) **Short notes:**
- 3A) Define AOP. List the types. (2+3 =5 marks) (5)
- 3B) Discuss about the management of MAS. (5)
- 3C) An outborn case received to NICU. The baby has severe respiratory distress and the abdomen looks scaphoid. What is the likely diagnosis and discuss the management of the same? (5)
- 3D) Discuss the types of tracheoesophageal fistula. (5)
- 4) **Very short notes:**
- 4A) What is oxygenation index? (2)
- 4B) What is hyperoxia test? (2)
- 4C) Enlist two advantages of T piece resuscitator over the Ambu bag. (2)
- 4D) Two examples of congenital heart diseases. (2)
- 4E) Causes of pulmonary haemorrhage (2)

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Question Paper

Exam Date & Time: 16-Dec-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER B.Sc. RESPIRATORY THERAPY DEGREE EXAMINATION - DECEMBER 2019

SUBJECT: BRES 307 - CRITICAL CARE MONITORING AND MANAGEMENT

(2016 SCHEME)

Monday, December 16, 2019 (14.00 - 16.00)

Marks: 50

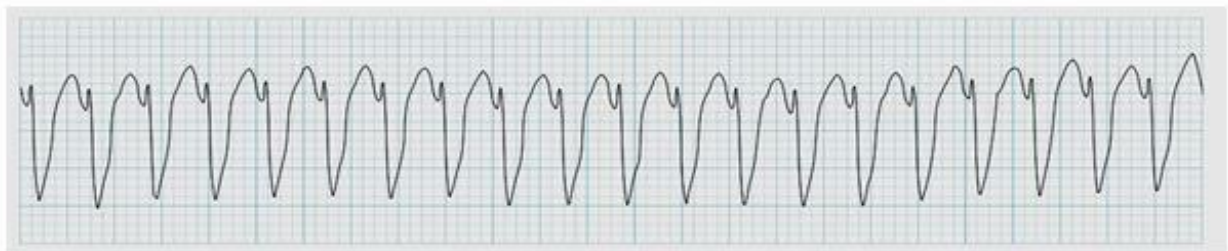
Duration: 120 mins.

Answer all the questions.

Long answer question. Draw diagrams as necessary.

1) Define stroke. Write the risk factors and types of stroke. Explain the management of stroke victims. (10)
(1+2+2+5 = 10 marks)

2) A 50 year- old man with history of IHD, presents to emergency room with complaints of severe chest pain and profuse sweating. His vitals are blood pressure: 90/60 mm Hg, HR: 180 beats and respiratory rate: 30 breaths per minute. The ECG monitor reveals this pattern shown below. (10)



a) Interpret this ECG
b) Write the causes and management of the same.
(1+3+6 = 10 marks)

- 3) **Short notes:**
- 3A) Write a note on swan's catheter and its indications. (5)
- 3B) Explain pendelluft movement in flail chest. (5)
- 3C) Discuss on management of hypovolemic shock. (5)
- 3D) Write a note on chest tubes and its insertion. (5)

4) **Very short notes:**

- 4A) What are the types of dialysis? (2)
- 4B) Mention indications for cardiac pacing. (2)
- 4C) Mention types of hemorrhagic shock. (2)
- 4D) Name two shockable cardiac arrhythmias. (2)
- 4E) Define synchronized cardioversion. (2)