

# Question Paper

Exam Date & Time: 01-Jun-2022 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION - MAY/JUNE 2022  
SUBJECT: MRES 706.1: ADULT EMERGENCY MEDICAL SERVICES  
(SPECIALIZATION: ADULT RESPIRATORY CARE)  
(2018 scheme)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Define Status Asthmaticus. Write the causes, clinical feature and diagnosis of Status Asthmaticus. (20)  
Explain in detail the management of status asthmatics.  
(2+12+6 = 20 marks)
2. Michael is a 61-year-old Senior Partner in a law firm. While eating breakfast Michael experienced sudden onset of slurring of speech, had facial droop on his left hand side with weakness in left side upper and lower limbs. Michael's wife Mary spotted these sudden onset of symptoms and immediately called for an ambulance, which arrived within 15 minutes.
- 2A) What could be the diagnosis with justification? (4)
- 2B) Write the treatment algorithm for the above case. (16)
- 3A) A 50-year-old male patient was brought to emergency department with complaints of headache and palpitations. On arrival patient was conscious and oriented but hypotensive (BP- 90/60mmHg). ECG of the patient showed bradyarrhythmia. Write the management for this patient. (10)
- 3B) What is shock? Write the causes and management for hypovolemic shock. (10)  
(2+4+4 = 10 marks)
- 3C) As a part of a CODE BLUE team, you receive a call for a 36-week pregnant lady who collapsed on a hospital corridor. On arrival she was unconscious and unresponsive. Explain the steps of management. (10)
- 3D) Write a short note on Lung ultrasound findings in pulmonary edema and pneumothorax. (10)
- 4A) List the chest X-ray features of Tension Pneumothorax. (5)
- 4B) Write in brief the difficult airway management in the Intensive care unit. (5)
- 4C) List all the reversible causes of cardiac arrest. (5)
- 4D) Write the Do's and Don'ts of Bag mask ventilation. (5)

-----End-----

# Question Paper

Exam Date & Time: 01-Jun-2022 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION - MAY/JUNE 2022  
SUBJECT: MRES 706.2: PEDIATRIC AND NEONATAL EMERGENCY MEDICAL SERVICES  
(SPECIALIZATION: NEONATAL AND PAEDIATRIC RESPIRATORY CARE)  
(2018 scheme)

Marks: 100

Duration: 180 mins.

### Answer all the questions.

1. A 9 years old male with history of inhaler use, is brought to the emergency department with respiratory distress, on auscultation bilateral wheezing is present; tachypneic and tachycardiac and SpO<sub>2</sub> 88% on room air.

- 1A) What is the diagnosis? (2)  
1B) Mention the pathophysiology of the same. (6)  
1C) Explain in detail about the management of the case. (12)

2. A 10-year-old child is presented with cervical and upper thoracic injury due to fall from a height. The child was admitted to triage with a BP of 90/50 mmHg, tachycardia, and paradoxical chest movement in right side.

- 2A) What could be the possible diagnosis? (2)  
2B) Explain the physiological mechanism and enlist the clinical features of the diagnosis. (10)  
2C) Write a note on its management. (8)

3A) Define shock. Classify shock based on blood pressure. (10)  
(2+8 = 10 marks)

3B) Write in detail about the goals and general recommendations for assessment and management of respiratory system in immediate Post-cardiac arrest period. (10)  
(4+6 = 10 marks)

3C) Explain the pediatric chain of survival in both out of hospital cardiac arrest and in hospital cardiac arrest separately. Write the five main components of high quality CPR. (10)

3D) Write a short note on neonatal septic shock. (10)  
(4+6 = 10 marks)

4A) Briefly explain the management of status epilepticus in a pediatric patient. (5)

4B) Write the modifications in cardiac arrest algorithm in a pregnant woman. (5)

4C) Explain the guideline while resuscitating a paediatric victim of electrocution. (5)

4D) Enlist the sites for intraosseous access and write a note on the procedure to establish IO access. (5)

-----End-----