



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

SCHOOL OF NURSING MIDWIFERY AND PARAMEDICAL SCIENCES

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN
PARAMEDIC SCIENCE**

COURSE CODE: NPP 324

COURSE TITLE: PAEDIATRIC EMERGENCIES

DATE: 19TH APRIL 2022

TIME: 3:00 – 6:00 PM

INSTRUCTIONS TO CANDIDATES

All questions in the three sections (A, B and C) are compulsory

DURATION: 3 Hours

Answer all questions on the booklet provided

MMUST observes ZERO tolerance to examination cheating

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NPP 324: PAEDIATRIC EMERGENCIES

SECTION A: MULTIPLE CHOICE QUESTIONS

(20 Marks)

Choose the most appropriate answer

1. When assessing for adequate breathing in children, it is standard practice to look for:
 - A. Cyanosis, nausea, numbness, angina
 - B. pneumonia, agonal respirations, wheezing, retractions
 - C. Rate, rhythm, quality
 - D. Rate, auscultation, stridor, pneumothorax
2. What is considered the single most important thing an EMT can do when treating a 14 year child in cardiac arrest?
 - A. Thump the chest to stimulate the heart.
 - B. Begin CPR immediately.
 - C. Administer early defibrillation in the field.
 - D. Administer oxygen via non-re-breather mask
3. What is meant when a child has respiratory distress?
 - A. The body gets too much oxygen, which creates a hypoxic drive.
 - B. An increase in breathing effort, accompanying a feeling of being short of breath.
 - C. Breathing decreases to a point of where the body cannot get enough oxygen.
 - D. The child's breathing completely stops.
4. An oropharyngeal airway is used for:
 - A. As a small rubber device inserted into a patients nose and down into the throat in order to maintain an open airway.
 - B. As a convenient way to maintain an open airway in an unconscious patient.
 - C. As a one size fits all piece of curved plastic inserted into the throat and designed to maintain an open airway.
 - D. As a simple way to provide oxygen to the body via oxygen tubing and a non rebreather mask.
5. A partial thickness burn has what characteristics?
 - A. Exposed muscle – but not bone, long lasting scars, little to no pain.
 - B. Blisters, redness, swelling, intense pain, and damage to the dermis.
 - C. Blackened charred appearance, with painful damage to the dermis.
 - D. Redness, moderate pain, may be bleeding, leaves long lasting scars
6. You encounter a child with one fully circumferential leg burn. Using the Rule of Nine, calculate victim's score?
 - A. 18
 - B. 16
 - C. 12

- D. 14
7. Which test is appropriate to evaluate the effectiveness of oxygen therapy in a 2-year-old child?
 - A. Pulse Oximetry
 - B. Chest radiography
 - C. Arterial blood gas
 - D. Pulmonary function test
 8. Which technique by a paramedic is appropriate while conducting respiratory assessment on a 2-year-old child?
 - A. Stand at the side of the child to palpate the chest.
 - B. Count respirations by observing chest movement
 - C. Auscultate posterior lungs while child is crying
 - D. Place the child on an exam table for percussion.
 9. Which one of the following is a priority management of a child with seizures?
 - A. Position in recovery position
 - B. Nebulize
 - C. Administer anticonvulsant
 - D. Remove any dangers
 10. Which one of the following is true of a paediatric patient with severe haemorrhage
 - A. Decreasing heart rate
 - B. Falling blood pressure
 - C. Increasing urine output
 - D. Capillary refill less.
 11. The normal capillary refill time in children is-----seconds?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
 12. Which one of the following is a sign of compensatory shock?
 - A. Tachycardia
 - B. Hypotension
 - C. Altered mental status
 - D. Increased lactic acidosis
 13. The following are causes of seizures in children?
 - A. Infections
 - B. Metabolic disorders
 - C. Bleeding inside the brain
 - D. All of the above
 14. Which one of the following is true of a paediatric patient with severe haemorrhage?
 - A. Decreasing heart rate

- B. Falling blood pressure
 - C. Increasing urine output
 - D. Capillary refill less.
15. An 8 year old boy has been struck by a bull. Witnesses say he was thrown into the air, over a fence and onto pavement. When you arrive on scene, the child has no obvious signs of trauma and is sitting on the ground with multiple bystanders comforting him. What should you suspect before you even begin your assessment?
- A. Internal injuries
 - B. Both internal injuries and limb fractures
 - C. Head injury
 - D. All of the above
16. You are called upon in community to receive an infant who is in mild respiratory distress. You notice that he is having difficulty breathing through his nose. What is the most appropriate action to take?
- A. Hyper-extend the neck to open airway.
 - B. Suction the nose with a bulb syringe
 - C. Begin CPR and transport
 - D. Ensure that the oral-pharyngeal airway is clear so the baby can breathe
17. You encounter a 2 year old baby after an emergency call who is not breathing, has no pulse and is cool to the touch. The parents are very distraught and are looking to you for help. What would you do next?
- A. Console the parents and explain to them that their baby has most likely died and that it's not their fault.
 - B. Ask parents if there were any signs leading to the infant's death.
 - C. Begin CPR and initiate rapid transport to hospital.
 - D. Call the police and report suspected child abuse.
18. What might lead you most to suspect an infant may be dehydrated?
- A. The baby feels warm to the touch, and has oedematous limbs.
 - B. Mother reports that baby has been wanting more milk than usual.
 - C. The fontanel appears sunken and there is a recent history of diarrhoea
 - D. The baby's vital signs are Temp. 36.1, Pulse: 120b/m, Resp: 32b/m, OxySat: 97
19. Which one of the following statements is true about breathing in children?
- A. is difficult to see, because of decreased lung volume
 - B. is assessed using the ear to chest method to avoid frightening the child
 - C. is easy to see because they have larger lungs and airways than adults
 - D. Is assessed using a stethoscope
20. Gastric lavage is indicated in children presenting with Organophosphate poisoning within how many hours after ingestion?
- A. within 1 hour
 - B. within 2 hours

- C. within 3 hours
- D. within 4 hours

SECTION B: SHORT ANSWER QUESTIONS

(40 Marks)

Answer all Questions

1. Describe **four** anatomical features that predispose children to emergencies unlike adults. 8 marks
2. Describe four pre hospital emergency interventions of a one year old infant with severe burns caused by boiling water on both arms and legs. 8marks
3. Describe **four** pre hospital interventions of a 7 year old boy with hypoglycaemia. 8marks
4. Describe **four** contraindications of non- invasive continuous positive pressure ventilation. 8marks
5. Describe 4 ethical issues in Paediatric resuscitation.

SECTION C: LONG ANSWER QUESTIONS

(40 Marks)

Answer all Questions

1. Master T 6 year old boy is brought by the mother to the emergency department and a diagnosis of cardiac arrest is made.
 - A. State **four** ways of diagnosing cardiac arrest in children 4 marks
 - B. Explain **four** causes of cardiac arrest in children 4 marks
 - C. Explain immediate management of Master T in emergency department. 12 marks
2. Paramedics are called upon to transport a 4 year old child from their home who is unconscious. On arrival, the child is in shock. From history the child has not been feeding well for the last two days, vomits everything and is lethargic and severely dehydrated.
 - A. Name the type of shock that the child is presenting with? 1mark
 - B. Describe the emergency management that will be provided to the child. 14 marks

C. State 5 complications of shock in children.

5marks

END