



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCE  
DEPARTMENT OF REHABILITATION MEDICINE  
BACHELOR OF SCIENCE IN PHYSIOTHERAPY  
END OF SEPT-DECEMBER 2024 TRIMESTER EXAMINATIONS**

**UNIT CODE: PHT 333                      UNIT NAME: Paediatric physiotherapy (Special paper)**  
**DATE:                      Day/ Date/ AUGUST**  
**TIME:                      TWO HOURS**  
**START:                      0:00                      STOP : 0:00**

**INSTRUCTIONS (physical exams)**

- 1. Do not write on this question paper**  
(Marks and questions distribution as per program curriculum.)

**INSTRUCTIONS (Online examinations)**

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This online exam shall take 2 Hours
4. Late submission of the answers will not be accepted
5. Ensure your web-camera is on at all times during the examination period
6. No movement is allowed during the examination
7. Idling of your machine for 5 min or more will lead to lock out from the exam
8. The Learning Management System (LMS) has inbuilt integrity checks to detect cheating
9. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam
10. In case you have any questions call the invigilator for this exam on Tel. 0705833434 and or the Head of Department on Tel 0720491032
11. For adverse incidences please write an email to: [amiu.examinations@amref.ac.ke](mailto:amiu.examinations@amref.ac.ke)

**Section A: Multiple Choice Question. Answer all the condition (30 Marks).**

1. The role of a paediatric physiotherapist is to?
  - A. To promote active participation in home, school, and community environments.
  - B. To apply clinical reasoning through the process of examination, evaluation, diagnosis, and intervention.
  - C. To promote health and wellness
  - D. All of the above
2. While you were assessing a term infant at two months, you noticed that the child was not able to illicit any response whenever you gently stroked the infant from the lips to the cheek. What was the most probable reason?
  - A. The child was not hungry
  - B. The child could be having a central nervous system problem
  - C. The child could be having a peripheral nervous disease.
  - D. All of the above
3. An infant who is able to recognize the gentle touch from parents or caregivers has?
  - A. Good cognitive development
  - B. Good social development
  - C. Good motor development
  - D. Good sensory development
4. Infants learn to manipulate the environment from the age of:
  - A. 4 to 5 years
  - B. 4 to 5 months
  - C. 2 to 3 months
  - D. 2 to 3 years
5. Children who engage in activities of role playing for example, boys acting the role of a Father like walking with sticks and girls cooking in the kitchen are termed to have?
  - A. Good cognitive development
  - B. Good social development
  - C. Good language development
  - D. Good motor development
6. Weak sucking in a two months old baby is an indication of?

- A. Cardiovascular disease
  - B. Endocrine disease
  - C. Neurological disease
  - D. Respiratory disease
7. While you were assessing an infant, you moved an object to the side of the head and the infant was able to follow the object to the side smoothly. What were you testing for?
- A. Symmetrical Tonic Neck Reflex
  - B. Asymmetrical Tonic Neck Reflex
  - C. Rooting reflex
  - D. Flexor reflex
8. Cerebral palsy disease in paediatrics is a type of?
- A. Infectious disease
  - B. Communicable disease
  - C. Non communicable disease
  - D. New emerging disease.
9. Poor balance in sitting will be classified under which component of the ICF model?
- A. Activity
  - B. Body functions
  - C. Participation
  - D. Static balance
10. The paediatric physiotherapy treatment pillars entail the following except?
- A. Prevention
  - B. Dispensing drugs
  - C. Rehabilitation
  - D. Health promotion
11. A mother of 4 year child with spina bifida reports that the child has not started going to school because of weak lower extremity muscles. What will be your advice to the mother?
- A. The child should not go to school until he achieves a full muscle power
  - B. The child should begin school on a wheelchair as they work on the muscle power
  - C. Children with neurological conditions should not go to school
  - D. The child may develop more complications if taken to school.

12. Which of the following is not a standardized outcome measure for infants with neurological conditions?
- A. Alberta infant motor scale
  - B. BOT-2
  - C. PDMS
  - D. Stroke specific quality of life scale
13. Which system of the human body does the bacteria that causes tetanus attack?
- A. The respiratory system
  - B. The endocrine system
  - C. The nervous system
  - D. The cardiorespiratory system
14. What is the difference between the rashes in chickenpox and the ones in measles?
- A. Rashes in measles start with a flat red rash on the face that spreads downward.
  - B. Rashes in chickenpox start with a flat red rash on the face then spreads downward.
  - C. Rashes in measles start from the trunk.
  - D. Rashes in chickenpox start from the face
15. The following common infectious diseases among children are caused by a bacteria
- A. Chickenpox
  - B. Measles
  - C. Diphtheria
  - D. Malaria
16. At which age is the first dose of measles given to the infants?
- A. At birth
  - B. At 6 months
  - C. At 9 months
  - D. At 12 months
17. The primary goal of administering vaccines for infectious diseases is?
- A. To prevent death
  - B. To prevent diseases
  - C. To prevent spread of diseases
  - D. To act as a security to individuals

18. How does vaccines work in a human body?
- A. They stimulate the body to produce antibodies
  - B. They deactivate the pathogens in the body immunity
  - C. They stimulate innate immunity
  - D. They cure the diseases
19. On assessment of a child with a heart condition, the mother gave the history of the child having a sore throat in more than one month without treatment. Which heart disease could the child be suffering from?
- A. Diphtheria
  - B. Angina
  - C. Rheumatic heart disease
  - D. Pulmonary TB.
20. The primary risk factor of cystic fibrosis in children is.
- A. Genetics
  - B. Cold climates
  - C. Hot climates
  - D. Smoking
21. On assessing a four year old infant, you noticed that the sternocleidomastoid muscle was stiff and the baby's head was slightly flexed towards the side that has a stiff muscle. What is the probable medical diagnoses for the infant?
- A. Meningitis
  - B. Cerebral palsy
  - A. Congenital torticollis
  - B. Erbs palsy
22. The appropriate test to determine the level of inflammation in children with juvenile arthritis is?
- A. Erythrocyte sedimentation rate (ESR)
  - B. Antinuclear antibody
  - C. Total blood county
  - D. CT scan
23. In spina bifida, the defect is due to?

- A. Brain infact,
  - B. Incomplete closure of the spinal meninges
  - C. Incomplete closure of the neural tube
  - D. Incomplete closure of ventricles
24. In order to achieve good muscles strength and flexibility in children with juvenile arthritis, which is the best treatment that can be offered?
- A. Heat therapy
  - B. Stimulation therapy
  - C. Cardiac rehabilitation exercises
  - D. Strengthening and stretching exercises
25. In order for the infants to achieve appropriate milestones;
- A. Postural control must be achieved
  - B. Stepping reflex must be achieved
  - C. Cognitive development must be achieved
  - D. Motor development must be achieved
26. Physiologic flexion in infants;
- A. It's a flexor recoil that is observed when infants are in prone and supine positions
  - B. It's a flexor recoil that is observed when infants are in prone positions only
  - C. It's a flexor recoil that is observed when infants are in supine positions only
  - D. It's an extensor recoil that is observed when infants are in prone and supine positions
27. Human papillomavirus vaccine is administer to which category of people?
- A. Women of age 40 years and above
  - B. Girls of age 18-20 years and above
  - C. Girls of age 11-12 years
  - D. Women of age 30-32 years
28. Children who throw tantrums are classified under which component of the ICF model?
- A. Personal factors
  - B. Environmental factors
  - C. Activity limitation
  - D. Participation restriction

29. Which functional exercises will you give to a ten year old boy with muscle power of grade 4 of the right quadriceps?
- A. Walking for one hour
  - B. Kicking a ball
  - C. Jogging
  - D. Jumping
30. Children with ataxic cerebral palsy have lesions at which part of the brain?
- A. Cerebrum
  - B. Pons
  - C. Medulla oblongata
  - D. Cerebellum

**SECTION B: Short Answer questions (20 marks)**

- 1. List 5 Clinical features of malaria in children 5 marks
- 2. List 5 characteristics of fine motor in 6- month's old infants.
- 3. Briefly outline the types of spina-bifida 5 marks
- 4. Briefly outline the management of Erbs palsy. 5 marks

**SECTION C: Long essay questions. Choose any of the two questions (20 Marks)**

1. John a 24 months old baby was diagnosed of delayed gross motor and fine motor 2 weeks ago and referred to you for further management. As the child walked into the department, you noticed that he had a knee jump gait and he could not walk without support. On further observation, you noticed that the child was drooling and the right shoulder was high and the left one low. The mother reported that the child has always a congested chest and he is on antibiotics regularly. The mother's goal was to see her son walk normally like other children.
- a) What is the medical diagnosis? 1 mark
  - b) State your physiotherapy impression? 1 mark
  - c) List all the impairments, classify these impairments according to the International Classification of Functioning, Disability, and Health (WHO, 2001). 4 marks
  - d) Give a comprehensive physiotherapy intervention. 4 marks

2. 12 month-old child was referred to the physiotherapy department for a neurological assessment. Describe how you will go about. Key neurological assessment components (10 Marks)
3. Discuss the Pathophysiology, symptoms and vaccination of measles. 10 marks

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