



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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

THIRD YEAR, SECOND TRIMESTER EXAMINATION

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN CLINICAL MEDICINE, COMMUNITY HEALTH
AND SURGERY
Upgrading Group**

COURSE CODE: HCM 362

COURSE TITLE: PEADIATRICS II

DATE: Wednesday 7th December 2023

TIME: 8:00-10:00AM

INSTRUCTIONS TO CANDIDATES

1. READ THE INSTRUCTIONS AT THE BEGIN OF EACH SECTION
2. THIS PAPER CONSIST OF:
 - Section A: Multiple Choice Questions Fill in blanks/matching 40 Marks.
 - Section B: Short Answer Questions (SAQ) 40 Marks.
 - Section C: Long Answer Question (LAQ) 20 Marks
3. NO MOBILE PHONE IS ALLOWED IN THE EXAMINATION ROOM

DURATION: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of SIX Printed Pages. Please Turn Over.

SECTION A: MULTIPLE CHOICE SEGMENT.

20 MARKS

1. In embryonic period, all the following are true EXCEPT
 - A. formation of blastocyst by 8 days
 - B. formation of endoderm and ectoderm by 2 weeks
 - C. formation of mesoderm by 6 weeks
 - D. formation of human like embryo by 8 weeks W995
 - E. the crown-rump length is about 3 cm
2. In fetal period, all the following are true EXCEPT
 - A. by 10 weeks the midgut returns to abdomen
 - B. by 12 weeks external genitalia becomes clearly distinguishable
 - C. by 24 weeks surfactant production begun
 - D. by 26 weeks recognizable human face formed
 - E. during third trimester the weight triples
3. All the following are recognizable teratogens EXCEPT
 - A. Ethanol
 - B. antiepileptic medications
 - C. toxoplasmosis
 - D. hypothermia
 - E. mercury
4. Prenatal exposure to cigarette smoke is associated with
 - A. lower birthweight
 - B. shorter length
 - C. changes in neonatal neurodevelopmental status
 - D. neonatal diabetes
 - E. learning problems
5. A 16-year-old mother complaining of reduced milk production and breasts engorgement. She stated that she feels unhappy and scared most of the times. Her husband is a soldier and she is living with his family of the following, the MOST appropriate action is to
 - A. refer her to obstetrician
 - B. explain the appropriate way of milk expression
 - C. advice milk stimulant medications

- D. apply Edinburgh postnatal scale
 - E. stop breastfeeding
6. A mother of a 2week-fullterm baby noted doll's-eye movement of her baby eyes. MOST appropriate next action is to
- A. By informing her that, this is anormal reaction
 - B. Refer the baby to an ophthalmologist
 - C. Takes a detailed history of perinatal period
 - D. Order brain ultrasound
 - E. order brain MRI
7. The age at which the infant achieves early head control with bobbing motion when pulled to sit is
- A. 2 months
 - B. 3 months
 - C. 4 months
 - D. 5 months
 - E. 6 months
8. The age at which the infant can reach an object, grasp it and bring it to mouth and seems exited when see the food is
- A. 4 months
 - B. 5 months
 - C. 6 months
 - D. 7 months
 - E. 8 months
9. By the age of 7 months the infant is able to do all the following EXCEPT
- A. transfer object from hand to hand
 - B. bounces actively
 - C. cruises
 - D. grasp uses radial palm
 - E. roll over

10. You are specialist explaining the developmental implication of a 6-month-old baby Boy who "transfers object hand to hand" to college students. Of the following, the BEST statement describing that is a/an
- A. visuomotor coordination
 - B. voluntary release
 - C. comparison of objects
 - D. ability to explore small objects
 - E. increasing autonomy
11. Building a tower of 6 cubes by a 22-month-old child requires
- A. Visual motor coordination
 - B. ability uses objects in combination
 - C. visual, gross, and fine motor coordination
 - D. able to link actions to solve problems
 - E. symbolic thought
12. A 10-month-old child can do all the following EXCEPT
- A. follows one-step command without gesture
 - B. says "mama" or "dada"
 - C. points to objects
 - D. speaks first real word
 - E. inhibition to "no"
13. You are observing a 15-month-old toddler, he was able to do all the following EXCEPT
- A. walks alone
 - B. makes tower of 3 cubes
 - C. inserts raisin in a bottle
 - D. responds to his/her name
 - E. identifies 1 or more parts of body
14. The age by which the child can make tower of 9 cubes and imitates circular stroke is
- A. 24 months
 - B. 30 months
 - C. 36 months
 - D. 42 months

- E. 48 months
15. The child who continues to search for a hidden subject, has achieved the developmental age of
- A. 7months
 - B. 9months
 - C. 11 months
 - D. 13 months
 - E. 15 months
16. The child who's able to stands momentarily on 1 foot, makes tower of 10 cubes; imitates construction of bridge of 3 cubes; copies circle and imitates cross is
- A. 24 months old
 - B. 30 months old
 - C. 36 months old
 - D. 42 months old
 - E. 48 months old
17. A mother to a 4-year-old child who has pauses and repetitions of initial sounds visited out patient, of the following the MOST appropriate advice is
- A. This is a normal phenomenon affecting about 5% of preschool children
 - B. there is no need for action as 80% of affected children recover by their own
 - C. tries to reduce pressures associated with speaking
 - D. I'll refer him to ENT specialist for further evaluation
 - E. I'll refer him to speech therapist
18. These facts are true regarding the developmental stage of preschool children EXCEPT
- A. handedness is achieved by 3 years of age
 - B. boys are usually later than girls in achieving bladder control
 - C. knowing gender by 4 years
 - D. egocentric thinking
 - E. masturbation
19. A worried mother of a 4-year-old boy describing attacks of inconsolable crying episodes of her child, taking long time, she stated also that he prefers to play alone. Of the following, the MOST appropriate action is to

- A. reassures her that this is a normal phenomenon of temper tantrum
 - B. seek more history regarding other skills and developmental domains
 - C. refer her to pediatric psychiatry
 - D. investigate social issues of the family
 - E. investigate for the child abuse
20. A young couple of a 2-month-old baby girl with excessive crying seeks your medical advice. Mother said that the baby is crying about 3 hours in a day, 2-3 days per week. She is intermittently spitting but she is gaining weight adequately. She is bottle fed baby. Of the following, the LEAST important advice is to
- A. master the situation in relaxed manner
 - B. adhere to pre cry cues
 - C. change milk formula
 - D. avoid sensory overstimulation
 - E. reassure about benign nature of illness

SECTION B: SHORT ANSWER QUESTIONS.

40 MARKS

1. Outline the classification of seizures. **5 marks**
2. Jona is a 5-year-old boy who has presented to the clinic with severe joint pains associated with general body weakness. On exam temperature is 37.C, has Palmer Pallor, Jaundice, joints of both upper and lower limbs tender with no signs of inflammation. His other sibling had a similar episode 2 years ago
 - a) What is Jona suffering from. **1 mark**
 - b) Outline Jona's treatment **4 marks**
3. Toto is a 1-year-old girl brought to the clinic convulsing. On exam Temperature 38.5°C, AV PU is at P.
 - a) What is the most likely diagnosis? **1 mark**
 - b) Outline Toto's immediate treatments. **4 marks**
4. About congenital heart diseases
 - a) Classify congenital heart diseases. **1 mark**
 - b) Give four examples in each category. **4marks**

5. Classify pneumonia and outline a detailed and step wise treatment of any one of the classifications. **5marks**
6. About pediatric poisoning
 - a) List at least 4 common poisons in children. **2marks**
 - b) Outline the general principles of managing poisoning in children. **3marks**
7. Discuss oxygen and its use in a hospital set up under the following
 - a) Method of oxygen administration and amount each method delivers. **2 marks**
 - b) 3 reasons as to why oxygen is given as humidified. **3 marks**
 - c) Explain any 5 complications of oxygen use. **5 marks**

SECTION C: LONG ANSWER QUESTIONS.

40 MARKS

1. Give a detailed description of at least 10 factors affecting growth and development. **20 marks**
2. Discuss malnutrition under the following.
 - a) State welcomes classification of malnutrition. **5 marks**
 - b) Give a stepwise detailed management of severe acute malnutrition. **15 marks**

