



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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

THID YEAR, FIRST TRIMESTER EXAMINATION

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

COURSE CODE: HCM 363

COURSE TITLE: PEADIATRICS THREE

DATE: Wednesday 7th December 2023

TIME: 2:00-4(☺)pm

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 QUESTIONS

[20 MARKS]

Of the following defects, which is associated with fallot tetralogy?

Patent ductus arteriosus

Atrial Septal Defect

Right Ventricular Hypertrophy

Transposition of great vessels

The most common obstructive lesion of left side of the heart

Aortic Stenosis.

Coarctation of aorta

Mitral stenosis.

Accessory chordae tendinea

Of the following, which is not considered a major Jones criterion for rheumatic fever.

Carditis

Arthralgia

Erythema Marginatum

Subcutaneous Nodules

Of the following, which can be seen in both bacterial endocarditis and acute rheumatic fever.

Congestive Heart Failure

Subcutaneous Nodules

Petechiae

Erythema Marginatum

A patient comes into your office in severe respiratory distress with a deep barking cough and stridor. You diagnose the child with croup and decide to admit the child. Along with securing an airway what are other treatment options?

Steroids

Amoxicillin

Diazepam

Ibuprofen

The number one trigger for asthma is?

Smoke

Allergies

Viral infections

Exercise

A possible cause of short stature is?

Acute infection

Infant of a diabetic mother

Acute renal failure

Congenital heart diseases

Possible causes of respiratory failure include?

Diabetes Keto Acidosis

Acute bronchitis

Drug intoxication

Cerebral palsy

Acute congestive heart failure is not common in?

Tetralogy of fallot

Acute renal failure

Severe tachycardia

Ventral Septal Defect

One of the following is correct about croup

Causes a soft musical sound

Mostly viral infection

Females are more affected than males

Aggravated by cold air

Which of the following is not a feature of right sided heart failure

Ascites

Hepatomegaly

Edema

Pulmonary edema

Which of the following is a likely cause of afterload heart failure.

Systemic hypertension

Rheumatic myocarditis

Severe tachycardia

Myocardial infarction

Common finding in infants with Congestive Cardiac Failure include the following except?

Tachycardia

Tachypnea

Diaphoresis

Splenomegaly

In patent ductus arteriosus (PDA), which of the following is false?

A machinery murmur is heard

Is induced to close by high levels of prostaglandins

Causes left to right shunting

Eisenmenger syndrome is a late complication.

Which of the following is true about Eisenmenger syndrome?

Pulmonary hypertension is not always present

It's usually a primary congenital heart disease

Considered a high indication for surgery for patients with congenital heart disease

Represents a serious complication of acyanotic heart disease

Important complication of VSD include?

Pulmonary hypertension

Hyper cyanotic spells

Cardiac failure at birth

Intellectual impairment

Transposition of great arteries

Develops cyanosis after first month of life

Usually presents with pan systolic murmur

Means there are 2 parallel circulations

Usually presents with hyper cyanotic spells

A new born infant with marked congenital cyanotic heart defect has decreased pulmonary vascularity.

They should be treated with?

Dopamine

Prostaglandin E1

Digoxin

Indomethacin

The following are causes of pediatric hypertension except?

Aortic stenosis

Renal artery stenosis

Coarctation of aorta

Cushing syndrome

Which of the following is correct about otitis media

Oral penicillin V should be given to all patient

Rarely seen in below first year of life

Haemophilus influenza is one of the most important causative agent

Young children are more prone due to their long Eustachian tube

SECTION B: SHORT ANSWER QUESTIONS

[40 MARKS]

Discuss hepatitis under the following

Classification of hepatitis. [1 mark]

Pathogenesis of hepatitis B. [5 marks]

Complications of hepatitis. [4 marks]

A 1-year-old has history of tachypnea, tiredness and frequent episode of respiratory infections. On examination, the second heart sound in the second left intercostal space is accentuated and there is a diastolic-systolic murmur that is "machinery" in the same intercostal space. What is your diagnosis and why do you think that the patient has recurrent infections?
[7 marks]

Outline the pathophysiology of Eisenmenger syndrome

[8 marks]

Evaluate 8-year-old boy presenting with signs and symptoms of pulmonary TB

[5 marks]

A 5-year-old boy presents with barking cough, difficulty in breathing and fever. On examination, you hear an inspiratory stridor. What is your diagnosis and how would you manage?
[5 marks]

Outline the Duke's classification for the diagnosis of infective endocarditis [5 marks]

SECTION C: LONG ESSAY QUESTION

[40 MARKS]

A 3-year-old boy presents with history of cough, difficulty in breathing, difficulty and excessive sweating when playing. His mother reports that she noticed that he assumes a squatting position when he plays. On examination, he is cyanotic. Auscultation of the chest reveals a single S2 and an ejection systolic murmur on the left sternal border.

What is your probable diagnosis [2 mark]

Which lesions are involved in the above condition [2 marks]

What investigations would you carry out in this patient to confirm to confirm your diagnosis
[3 marks]

Outline the management of this patient [9 marks]

What complications would you expect in this patient [4 marks]

Discuss DKA under the following

Pathophysiology of DKA. [7 marks]

6 distinct clinical features of DKA. [3 marks]

Management of DKA. [10 marks]

