

UNIVERSITY OF GHANA MEDICAL SCHOOL  
DEPARTMENT OF CHILD HEALTH  
JUNIOR CLERKSHIP EXAMS  
GROUP A - CLASS OF 2013

3<sup>rd</sup> January 2012

Time: **1.5 hours for Sections A & B**

**Section A**

A two years old child presents with history of several episodes of vomiting and diarrhoea in the last three days.

- a. Discuss your clinical assessment of this child 9 marks
- b. Discuss preventive measures against future episodes for this child 6 marks

**Mark Scheme**

- a.
  - i. Resuscitation: .....**2 marks**
    - a) ABCDE (1)
    - b) Initiate Fluid resuscitation (1)
  - ii. : History & physical examination.....**7 marks**
    - a) Relevant history to determine severity and identify cause/predisposing family and socioeconomic factors (4)
    - b) Relevant physical examination incl assessment of hydration status (3)
- b.
  - iii. Prevention of future episodes: .....**5 marks**
    - a) Counselling on hygienic practices at home (2)
    - b) Use of home ORS (2)
    - c) Other (1)
- c. Style.....**1 mark**

UNIVERSITY OF GHANA MEDICAL SCHOOL  
DEPARTMENT OF CHILD HEALTH  
SENIOR CLERKSHIP EXAMS  
GROUP B - CLASS OF 2013

3<sup>rd</sup> July 2012

Time: 2hours (9-11am)

**Answer all questions.**

**Answer each major question on a separate sheet of paper**

1. Write short notes on each of the following (**do not exceed 1 page for each; other pages will not be marked**):
  - a. List five points in clinical history useful in deciding on the management of a jaundiced neonate. 5 marks
  - b. *Haemophilus influenzae b* 5 marks
  - c. Breast milk substitutes 5 marks

**15 marks**
  
2. The mother of a 5 year old child travels without him for 2 weeks and returns to find he is limping.
  - a. List 3 possible causes 3marks
  - b. Discuss the relevant history, physical examination findings and investigation of any 2 of the conditions listed. 12 marks

**15 marks**
  
3. Write short notes on each of the following in paediatric practice (**not exceeding 1 page on each; other pages will not be marked**):
  - a. Care of the normal umbilical cord. 5 marks
  - b. Ceftriaxone 5 marks
  - c. Weight measurement 5 marks

**15 marks**
  
4. Malaria continues to be an important cause of morbidity and mortality for children in Ghana. What steps are being taken to address this? **15 marks**

**MARK SCHEME (Class 2013, Senior Clerkship Group B, 3<sup>rd</sup> July 2012)**

**1.a. Maximum 5 marks – 1 mark per point**

1. Age of the baby
2. Age of onset of the jaundice
3. Jaundice worsening or clearing
4. Stool colour
5. Any other symptoms of ill health – temperature, feeding, etc
6. Features of bilirubin encephalopathy
7. Family history of severe neonatal jaundice
8. Mother's blood group
9. Antenatal and birth history
10. Other relevant point

**b. Maximum 5 marks**

1. Gram-negative coccobacillus ½
2. Droplet spread ½
3. Diseases caused- meningitis, pneumonia, epiglottitis, septic arthritis, cellulitis, otitis media, purulent pericarditis, osteomyelitis ½ each for any 4 (total 2)
4. Treatment- IV 3<sup>rd</sup> generation cephalosporin 1
5. Prevention – vaccine, Ghana schedule ½ each (total 1)
6. Other relevant point ½ each

**c. Maximum 5 marks**

1. When necessary to use 1
2. Examples of breast milk substitutes ( must include infant formula) 1
3. Comment on preparation (e.g. per instructions for formula) 1
4. Feeding utensils, cup & spoon preferred for hygienic reasons ½ each (total 1)
5. 1 disadvantage 1
6. Other relevant point ½

**15 marks**

**2. a. Maximum 3 marks (1 mark each for any 3)**

Traumatic lesion-fracture, sprain or dislocation; transient synovitis; Infection- septic arthritis of any of lower limb joints, osteomyelitis of any of lower limb bones; Perthes disease; malignant disease e.g. leukemia; other relevant condition

**b. Maximum 12 marks (6 marks for each condition)**

Each condition-history 2marks, examination 2marks, investigations 2 marks

**3. a. Maximum 5 marks**

Clamp/tie to prevent bleeding-1, keep dry & open-1,  
leave alone or clean with methylated spirit or chlorhexidine-1 for any,  
educate about avoidance of harmful dressings-2

**b. Maximum 5 marks**

Class of drug, indications for use, routes of administration, important side effects.

**c. Maximum 5 marks**

Instrument used (infants, older child)-1; extent of clothing (infants, older child)-1;

Clinical uses -growth monitoring in conjunction with growth charts-1;

Diagnosis of state of hydration-1;

Calculation of dosages-1; other relevant point-1

**4. Maximum 15 marks**

- Introductory paragraph indicating large health/socioeconomic burden of malaria -1
- National Malaria Control Programme established to coordinate malaria control activities. -1
- Roll Back Malaria Initiative adopted -1
- Goal - reduce malaria specific morbidity and mortality -1 by 50% by 2010, 75% by 2015 cf 1999 figures. -½

Key RBM strategies which have been used:

- Promotion of multiple prevention methods -1
  - promotion of insecticide treated bed nets usage -1
  - sulphadoxine-pyrimethamine in pregnancy -1
- Improvement of malaria case management at all levels(from household to health facility) -1
  - Artemisinin based combination therapy (ACT) for uncomplicated malaria -1
  - IV/rectal artesunate, IM/IV quinine for severe malaria -1
  - 
  - ACT cost highly subsidised
  - Training of various categories healthworkers
  - Improvement of diagnostic facilities-rapid tests, microscopy, training of technicians
  - Improved logistic management to ensure availability of antimalarials
  - Other relevant point
  -
- Health education stepped up -1
  - caregivers, children; use of media, celebration of world malaria day etc
- Research -½
  - Operational to improve implementation of strategies and outcomes e.g.monitoring drug sensitivity, ITN use etc
  - Participation in vaccine research
- Improvement of partnership within health sector, with health related agencies and corporate bodies to help achieve goals -½
- Format and legibility -1

½ for any up to max 2 marks

UNIVERSITY OF GHANA MEDICAL SCHOOL  
DEPARTMENT OF CHILD HEALTH  
SENIOR CLERKSHIP EXAMS  
GROUP A - CLASS OF 2013

27<sup>th</sup> August 2012

Time: 2 hours

**Answer all questions.**

**Answer each main question on a separate sheet of paper**

**Failure to obey instructions and illegible writing will result in loss of marks.**

1. Write short notes on each of the following (**do not exceed 1 page for each; extra pages will not be marked**):
  - a. List five laboratory investigations useful in deciding on the management of a jaundiced West African neonate and indicate why they are useful. *5 marks*
  - b. *Ascaris lumbricoides* *5 marks*
  - c. Cataracts in young children *5 marks*

**Total 15 marks**
  
2. A 9 month old girl recently diagnosed with Haemoglobin S disease is rushed into to the Emergency Room with severe pallor.
  - a. Briefly discuss 3 likely differential diagnoses that could account for this acute presentation (pathophysiology, key clinical features). *9 marks*
  - b. Outline your immediate management of this patient. *6 marks*

**Total 15 marks**
  
3. Write short notes on each of the following in paediatric practice (**not exceeding 1 page on each; extra pages will not be marked**):
  - a. Endemic Burkitt's lymphoma *5 marks*
  - b. Isoniazid *5 marks*
  - c. Normal pubertal development *5 marks*

**Total 15 marks**
  
4. The inappropriate use of alcohol by adults in the family can have deleterious effects on the well-being of children.
  - a. List 3 effects. *3 marks*
  - b. Briefly discuss **one** of the listed effects (how it comes about and/or is recognized, consequences). *4 marks*
  - c. Outline how the effects of inappropriate use of alcohol by adults on children be prevented. *8 marks*

**Total 15 marks**

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GROUP A - CLASS OF 2013

27<sup>th</sup> August 2012

Time: 2 hours

**MARK SCHEME**

**Please study scheme carefully before you start marking. The student does not have to make the points in the same order as in the scheme to be awarded the mark. Part of indicated mark can be awarded if examiner thinks it appropriate. Marks should not be awarded twice for the same point restated in another way.**

**1. Max 15marks**

a. *Max 5 marks* Laboratory investigations for neonatal jaundice

1. Bilirubin level – total & differential
2. Hb, wbc , platelets
3. Blood groups-mum&baby
4. Coombs test-direct&baby
5. G6PD status
6. Appropriate cultures
7. Other relevant test

} Any 5. ½mark for each listed,  
½ mark for each explanation

b. *Max 5 marks* *Ascaris lumbricoides*

*1mark* nematode, life cycle in man

*1mark for 2 or more* Features: mostly asymptomatic, nausea, abd pain, other

*1mark for 2 or more* Complications: respiratory/Loeffler

Obstruction of bowel, biliary or pancreatic ducts

Contributes to malnutrition

Lab diagnosis: characteristic eggs in stool -*1mark*, eosinophilia *½mark*

*1mark* Treatment: Albendazole or mebendazole; periodic mass treatment of schoolchildren in high prevalence areas

*1mark* Prevention

c. *Max 5 marks* *Cataracts in young*

*2 marks* ( for 3 or more) Causes: Idiopathic, Genetic, chromosomal eg Down's, intrauterine infections-rubella, toxoplasmosis, CMV, chicken pox; metabolic-galactosaemia, diabetes mellitus (long term); trauma

*1mark* Eye exam –leucokoria, red fundus reflex absent

*1mark* Treatment-surgical plus relevant treatment for underlying cause

*1mark* Prevention- of underlying cause eg. Rubella, early detection by eye exam

2. **Max 15 marks** Child recently diagnosed with Hb S disease is rushed into to the ER.
- Max 9 marks.** Acute splenic sequestration(3), Aplastic crisis(3), Hyperhaemolytic crisis(3) (brief pathophysiology, key clinical features of each)
  - Max 6 marks:** ABC, Oxygen(1); Urgent GXM, FBC + retics (1); Transfusion(1); Monitor vitals, spleen size(1); treat any associated infections(1); serial urine (if haemolysing) (½), other relevant(½)
3. **Max 15 marks**
- 5 marks Endemic Burkitt's lymphoma**  
 1½ marks Commonest tumour in Ghanaian children(½) ; peak age(½); association with EBV and malaria(½)  
 2 marks Clinical presentation- jaw, abdomen, chest, CNS, bone marrow  
 1 mark Pathology  
 ½ mark Treatment- chemotherapy (details of drugs not necessary)
  - 5 marks Isoniazid**  
 1 mark Indication: key component of 1<sup>st</sup> line regimen for TB  
 1 mark Used throughout 6 months short course for TB  
 ½ mark longer duration for meningitis etc  
 side – effects: 1 mark -liver toxicity, 1 mark –peripheral neuritis ½ mark – other side-effects
  - Max 5 marks. Normal pubertal development.**  
 ½ mark Definition  
 1½ marks. If incomplete or order wrong deduct ½ mark. Girls- age onset, usual 1<sup>st</sup> sign breast development, pubic hair, growth spurt, menarche.  
 1½ marks. If incomplete or order wrong deduct ½ mark. Boys- age onset, 1<sup>st</sup> sign testicular enlargement, pubic hair, growth spurt.  
 ½ mark Differences in growth spurt between sexes –later and higher in boys  
 ½ mark Tanner staging mentioned, ½ mark any correct details of Tanner e.g. 5 stages
4. **Max 15 marks. Inappropriate use of alcohol by adults**
- Max 3 marks** -1 mark each for any 3: Foetal alcohol syndrome, child abuse (domestic violence), alcohol poisoning, alcohol addiction, poverty, other relevant.
  - Max 4 marks.** Full marks if any one discussed as indicated. Maximum of 2 marks if relevant points but only listed.
  - Max 8 marks. Prevention**  
 ½ mark Introduction  
 4 marks. Education: target both adults and children(1); give some specifics of content e.g. effects of alcohol, appropriate storage, children not to be sent to purchase etc.(2); media used (1)  
 1½ marks. Legislation on sale to minors to be enforced  
 1 mark. Rehabilitation for alcoholics  
 1 mark. Other relevant  
 Legibility deduct 1 mark for untidy/ illegible work

UNIVERSITY OF GHANA MEDICAL SCHOOL



MBChB FINAL PART 1 EXAMINATION  
CLASS OF 2013  
CHILD HEALTH THEORY

20<sup>th</sup> September 2012

Time: **3hours for sections A&B**

**SECTION A**

**Answer all questions.**

**Answer each main question in a separate booklet.**

**Failure to obey instructions and illegible writing will result in loss of marks.**

1. Write short notes on each of the following (**not exceeding 1 page on each; extra pages will not be marked**):
  - a. Cholera 5 marks
  - b. Microcephaly 5 marks
  - c. Problems that may occur in relation to the umbilical cord. 5 marks

**Total 15 marks**
  
2. A 5- day old infant is brought to the clinic with the following complaints: fever, poor feeding, dehydration and jaundice.
  - a. List 3 disease conditions which could give rise to the above features. 3marks
  - b. Outline the management of the baby. 12 marks

**Total 15 marks**
  
3. Write short notes on each of the following in paediatric practice (**not exceeding 1 page on each; extra pages will not be marked**):
  - a. Stool microscopy 5 marks
  - b. Rifampicin- indications, regimen, 3 side effects 5 marks
  - c. Ghana Child Health Record booklet-5 features 5 marks

**Total 15 marks**
  
4. Immunisation is said to be one of the most effective and economic public health measures for protecting the health of children. For this reason since 2002 Ghana has added new vaccines to its childhood immunization program.
  - a. **List** these vaccines. 4marks
  - b. Discuss the basis for the addition of any two of the vaccines. 11marks

**(only the first two discussed will be marked) Total 15marks**



UNIVERSITY OF GHANA MEDICAL SCHOOL



MBCbB FINAL PART 1 EXAMINATION  
CLASS OF 2013  
CHILD HEALTH THEORY

20<sup>th</sup> September 2012

Time: **3hours for sections A&B**

**SECTION A**

**MARK SCHEME**

**Please study scheme carefully before you start marking. The student does not have to make the points in the same order as in the scheme to be awarded the mark. Part of indicated mark can be awarded if examiner thinks it appropriate. Marks should not be awarded twice for the same point restated in another way. Examiner may award mark for other relevant information if thought appropriate**

**1. Maximum 15 marks**

- a. *Max 5marks Cholera*
  - ½mark*-Causative micro-organism & mode transmission
  - 2marks*- Clinical presentation- profuse diarrhoea with rice water stool, severe dehydration
  - 1mark*- push iv fluids (cholera replacement) fast to correct dehydration & maintain normalized hydration state
  - ½ mark*-Antibiotic *e.g.* ciprofloxacin
  - 1mark*-Prevention
  - ½ or 1mark*- other relevant
  
- b. *Max 5marks Microcephaly*
  - 1mark*-Definition: head circumference below 2<sup>nd</sup> centile
  - 2marks*- for 4 causes: congenital (intrauterine infection, autosomal recessive); postnatal (meningitis, hypoxic ischaemic encephalopathy, hypoglycaemia)
  - 1mark*-Complications-developmental delay, seizures
  - 1mark*- other relevant-investigation, management
  
- c. *Max 5marks Umbilical cord problems*
  - 2 marks* Infection – risk factors, clinical features, iv antibiotics, may require dressing
  - 2 marks* Bleeding – not tied well, vit K deficiency; arrest bleeding- reclamp, vit K, transfuse blood if shock or severe anaemia

*1mark* Exomphalus – describe, often associated with other congenital anomalies, risk of rupture and infection, management- surgical, conservative for minor ones

*½ or 1mark-* other relevant

## 2. Maximum 15 marks

5 day old infant ...poor feeding etc.

a. *Max 3 marks*-1 mark each for any 3 relevant conditions

b. *Max 2marks*-History with 2 or 3 relevant details

*Max 2marks*-Examine for source of infection with 1 or 2 examples.

*Max 2marks*-Investigations: FBC, serum bilirubin, blood culture, urine c/s, csf Examination, other relevant.

*1mark*-Start intravenous fluids

*1mark*-Start intravenous ampicillin with gentamicin or cefotaxime

*1mark*-Start phototherapy

*2marks*-Review after a few hours, clinically and with serum bilirubin

*1mark*-Prepare for possible exchange transfusion

*½ or 1mark-* other relevant

*1mark-* format/legibility

## 3. Maximum 15 marks

a. *Max 5marks* Stool microscopy

*2 marks* for 2 indications- suspicion of intestinal parasites, chronic diarrhoea, anaemia, other relevant

*1mark* Fresh sample

*1mark* Do 3 times to confirm negative for parasites, ova, cysts.

*1mark* Presence of white blood cells indicate inflammation due to infection or inflammatory bowel disease

*½ or 1mark-* other relevant

b. *Max 5marks* Rifampicin

*1 mark* Indications: key component of 1<sup>st</sup> line regimen for TB

*½ mark for one or multiple* Leprosy or brucellosis or MRSA or meningococcal prophylaxis

*1mark* Used throughout 6 months short course for TB

*½ mark* longer duration for meningitis etc

side – effects:

*1mark* -liver toxicity, *½ mark each-* any 2 other side-effects

*½ or 1mark-* other relevant

c. *Max 5marks* Child Health Record booklet

Any 5

*½ mark* for mention & another *½ mark* for brief relevant comment on it

Demographic information

Immunisations/vitA record

Growth chart

Developmental milestones

Feeding recommendation

ORT

Danger signs  
Insecticide treated net  
Sick visit record  
etc

**4. Maximum 15 marks**

New vaccines in Ghana

a. *Max 4marks.* Haemophilus influenzae b, Hepatitis B, Pneumococcus, Rotavirus – 1mark each ( $\frac{1}{2}$  if abbreviation used).

b. *Max 11marks.*

*Max 5marks for each vaccine.* For each of the 2 vaccines discussed marks to be awarded (i-iv) as indicated below

i) *1mark* Some indication of public health importance of diseases caused by micro-organism targeted by the vaccine-

ii) *2 marks* Acute clinical conditions caused by organism: (Haemophilus-must mention any 2 of meningitis, pneumonia, epiglottitis; Pneumococcus-must mention meningitis, pneumonia.

iii) *2 marks* Complications of the disease conditions-acute and long term (where applicable).

iv)  $\frac{1}{2}$  or *1mark*- other relevant

*1 mark* Overall format/legibility for the whole question- (add, subtract or give zero as fit)

UNIVERSITY OF GHANA MEDICAL SCHOOL



MBChB FINAL PART 1 SUPPLEMENTARY EXAMINATION  
CLASS OF 2013  
CHILD HEALTH THEORY

19<sup>th</sup> November 2012

Time: **3hours for sections A&B**

**SECTION A**

**Answer all questions.**

**Answer each main question in a separate booklet.**

**Failure to obey instructions and illegible writing will result in loss of marks.**

1. Write short notes on each of the following (**not exceeding 1 page on each; extra pages will not be marked**):
  - a. Uncomplicated malaria 5 marks
  - b. Examination of the newborn 5 marks
  - c. G6PD deficiency 5 marks

**Total 15 marks**
  
2. A 3 year old girl is brought to the emergency room with a 2-day history of fever. Briefly discuss three differential diagnoses with respect to relevant history, physical examination findings and confirmatory diagnostic investigations.

**Total 15 marks**
  
3. Write short notes on each of the following in paediatric practice (**not exceeding 1 page on each; extra pages will not be marked**):
  - a. Phenobarbitone (indications, routes of administration, 3 side effects) 5 marks
  - b. Urethral catheter 5 marks
  - c. Oral thrush 5 marks

**Total 15 marks**
  
4. People living with HIV/AIDS are subject to possible HIV/AIDS-related stigmatization.
  - a. Discuss four effects of HIV/AIDS-related stigma on children. 8 marks
  - b. What strategies might help reduce HIV/AIDS-related stigmatisation in Ghana? 7 marks

**Total 15 marks**



MBCbB FINAL PART 1 SUPPLEMENTARY EXAMINATION  
CLASS OF 2013  
CHILD HEALTH THEORY

19<sup>th</sup> November 2012

Time: **3hours** for sections A&B

**SECTION A**

**MARK SCHEME**

**Please study scheme carefully before you start marking. The student does not have to make the points in the same order as in the scheme to be awarded the mark. Part of indicated mark can be awarded if examiner thinks it appropriate. Marks should not be awarded twice for the same point restated in another way. Examiner may award mark for other relevant information if thought appropriate**

**1. Maximum 15 marks**

- a. **Max 5marks** Uncomplicated malaria
  - ½mark* Definition
  - 1mark* Symptoms
  - 1mark* Signs
  - 1mark* Treatment-artemisinin based combination, give 2 examples
  - ½mark* Risk of severe malaria when treatment delayed
  - 1mark* prevention-ITN and one or more other methods
  
- b. **Max 5marks** Examination of the newborn
  - 1mark* All babies, within 24 hours
  - 1mark* Opportunity to reassure/explain things to Mother, early detection of abnormalities
  - ½mark* Head to toe exam,
  - 1mark* 2 or more specific examples of things to note
  - 1½mark* plan for care if any abnormalities; discuss feeding, immunisations etc; answer mother's questions .
  
- c. **Max 5marks** G6PD deficiency
  - ½ mark* X-linked recessive –
  - ½ mark* triggers of haemolysis
  - 1 mark* Clinical presentation–
  - 1 mark* Relevant Lab tests – G6PD status, Hb, Group & Xmatch renal function
  - 1 mark* Treatment (supportive care) –
  - 1 mark* Counselling (e.g. drugs to avoid, malaria prevention) –

**2. Maximum 15 marks** 3 year old girl with a 2-day history of fever

For **each** diagnosis mentioned:

*½mark* for appropriate diagnosis

*3 marks* for relevant history and physical examination findings

*1 mark* for relevant **confirmatory** investigation(s).

**No marks for management**

**Overall approach for the whole question:**

*1 mark* if discussion highlights features which help to distinguish the three diseases chosen

*½mark* for clarity/style

**3. Maximum 15 marks**

a. **Max 5marks** Phenobarbitone :

*1 mark* for 2 indications- all types of epilepsy, status epilepticus, other;

*1 mark* for 2 routes-Oral, IM, slow IV;

*3 marks* for 3 side effects- drowsiness, behavior disturbance, hyperactivity, impaired learning, depression etc

b. **Max 5marks** Urethral catheter

*1 mark* for 2 indications

*2 marks* for description of procedure for catheterisation

*1 mark* for 2 complications

c. **Max 5marks** Oral thrush

*½mark* for organism

*1 mark* for risk factors

*1½ marks* for clinical presentation

*½ mark* for distinguishing from milk curds

*1 mark* for treatment

*½mark-* other relevant

**4. Maximum 15 marks**

a. **Max 8 marks** Four effects of HIV/AIDS-related stigma on children

*1mark* for each of 4 effects **mentioned** plus

*1mark* for each of the 4 effects **discussed**.

b. **Max 7 marks** Strategies to reduce stigmatization in Ghana

Any of points below not exceeding 7 marks

*2 marks* Education(1mark), one or two examples of content of message (1mark)

*1mark* Improved access to diagnosis and treatment

*1mark* Government legislation to prevent discrimination

*1mark* Policies within healthcare settings e.g. universal precautions

*1mark* Support groups/systems

*1mark* Other relevant

*1mark* Style/grammar