

KENYA MEDICAL TRAINING COLLEGE



FACULTY OF CLINICAL SCIENCES

DEPARTMENT OF CLINICAL MEDICINE

2016/2017 ACADEMIC YEAR

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Final Qualifying Examinations for the Award of Diploma in Clinical Medicine and Surgery

JUNE 2017

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**STREAM:** Diploma  
**MODULE:** REPRODUCTIVE HEALTH PAPER I  
**TIME ALLOWED:** 3 Hours  
**SESSION:** Morning (09.00 – 12.00 hours)  
**DATE:** 28<sup>TH</sup> JUNE 2017

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**GENERAL INSTRUCTIONS**

- 1) Write your examination number in the spaces provided on the answer booklet
- 2) Read instructions on answer booklet KMTC/QP-08/EAB and question paper carefully
- 3) Paper I accounts for 40% of the examination scores

**SECTION A – SHORT ESSAY/STRUCTURED QUESTIONS – 60 marks**

- This section contains **SIX** questions
- **ATTEMPT** all questions

**SECTION B – LONG ESSAY QUESTIONS – 40 MARKS**

- This section contains **THREE** questions
- Attempt any **TWO** questions

## **SECTION A**

### **SHORT ESSAY/STRUCTURED QUESTIONS**

1. a) List five causes of obstructed labor. (5Marks)  
b) Outline five clinical signs of obstructed labor (5Marks)
  
2. a) list five male and five female causes of infertility (5Marks)  
b) Outline five investigations for each partner in a couple with infertility. (5marks)
  
3. a) Classify the various types of abortion (5Marks)  
b) Outline the components of post abortal care (5Marks)
  
4. Outline the components of a partograph (10marks)
  
5. a) Define fetal distress(2marks)  
b) State 8 predisposing factors for fetal distress(8marks)
  
6. a) What is postpartum hemorrhage (2kms)  
b) Outline the causes of postpartum hemorrhage (8marks)

## SECTION B

### LONG ESSAY QUESTION

#### SELECT ANY TWO QUESTIONS

1. Rehema a 36 years old lady presents to GOPC with history of abnormal per vaginal discharge, dyspareunia, with occasional post coital bleeding, on speculum examination you notice she has cervical erosion,
  - i. List 3 differential diagnosis of Jane's case (3Marks)
  - ii. Outline four methods that you can use to screen Carcinoma of the cervix (4Marks)
  - iii. List the various modes of treatment of carcinoma of the cervix (6 Marks)
  - iv. Outline the preventive measures for carcinoma of the cervix (4Marks)
  - v. List the complications for carcinoma of the cervix (3Marks)
  
2. Maria a 28-year-old para 4+0G5 presents to the ANC clinic at 32 weeks' gestation with history of gush of fluid 2hours ago, the fluid was much that it soaked her beddings.
  - i. What is your most likely diagnosis (2 Marks)
  - ii. Outline five predisposing factors for above condition (5 Marks)
  - iii. Outline the management for this patient (10 Marks)
  - iv. List three maternal complications (3 Marks)
  
3. Nafula, a 17-year-old primi-gravida at 34 weeks of gestation age, presents to antenatal ward with history of persistent headache, facial puffiness, and severe epigastric pains, on examination she has bilateral pitting tender edema and a BP 180/115mmhg.
  - i. What is your diagnosis (2 Marks)
  - ii. Outline five relevant investigations for this patient. (5 Marks)
  - iii. Explain the principles of management of this patient (10 Marks)
  - iv. List 6 maternal complications that may occur in this patient (3 Marks)



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Medicine and Surgery

JUNE 2017

**STREAM:** Diploma  
**MODULE:** REPERODUCTIVE HEALTH PAPER II  
**TIME ALLOWED:** 3 Hours  
**SESSION:** Afternoon (14.00 – 17.00 hours)  
**DATE:** 28<sup>TH</sup> JUNE 2017

**GENERAL INSTRUCTIONS**

- 1) Write you examination number in the spaces provided on the answer sheet provided
- 2) Read instructions on the question paper carefully
- 3) All cancellations must be clean and complete
- 4) Do not use a pencil
- 5) **ATTEMPT** all questions
- 6) Paper II accounts for 60% of the examination score in this module
- 7) The paper has two sections - A (MCQs) and B (T-F)

**SECTION A - MULTIPLE CHOICE QUESTIONS (MCQs) - 30%**

- This section contains **thirty (30) questions**
- Each question has four options



## SECTION A

1. The following is not useful in the diagnosis of premature rupture of membranes

- a) Leakage of fluid per vagina
- b) Positive fern test
- c) Demonstration of amniotic fluid on speculum examination.
- d) Positive methylene blue test

2. Which of the following is true about lochia

R SA

- a) Lochia loss can mimic post-partum hemorrhage
- b) Alba is red in colour
- c) Rubra occur up to the 10<sup>th</sup> day
- d) Is assign of infection

3. One of the following is not a sign of placental separation

- a) Umbilical cord lengthens
- b) The uterine fundus rises up
- c) The umbilical cord shortens
- d) There is fresh flow of blood per vagina

4. During second stage of labour the cervical dilatation is:

- a) 10 cm
- b) 2cm
- c) <4cm
- d) >4cm

5. Diabetes in pregnancy is associated with an increased risk of the following except;

- a) Caesarian section
- b) Shoulder dystocia
- c) Intrauterine growth restriction
- d) Fetal macrosomia

**6. Anaemia in pregnancy is mostly due to**

- a) A) iron deficiency
- b) Folate deficiency
- c) Sickle cell disease
- d) Hemolytic disease

**7. Immunological test for diagnosis of pregnancy**

- a) Trans-vaginal ultra sound
- ~~b) History of amenorrhea~~
- ~~c) Serum HCG~~
- d) Full haemogram

**8. About augmentation of labour**

- a) Cytotec is used ✓
- b) Oxytocin is given as an IV bolus ✗
- ~~c) Oxytocin is the drug of choice titrated against the contraction~~
- d) Ergometrine can used safely ✗

**9. The following are signs of fetal distress except**

- a) Fetal blood PH is 7.4
- b) Meconium stained liquor ✓
- c) Maternal exhaustion
- d) Maternal hypoxia

**10. The following is a positive manifestation of pregnancy:**

- ~~a) Heggar's sign~~
- b) Nausea and vomiting
- c) Amenorrhea
- ~~d) Auscultation of fetal heart sounds~~

**11. Common cause of uti in pregnancy is:**

- ~~a) Candida albican~~
- b) Mycobacterium tuberculi

- Escherichia coli
- d) Staph aureus

12. Biophysical profile constitute the following.

- a) Motor response of the fetus
- b) Placenta state
- Fetal presentation-
- d) Cord blood flow

13. The following are complication for multiple pregnancy:

- a) Prolonged gestation
- b) Macrosomic babies
- c) Cord prolapsed
- Oligohydramnios

14. Regarding cervical incompetence in pregnancy:

- a) Patterns of abortion are in ascending manner
- b) Present with acute painful per vaginal bleeding
- c) Sex is not a contraindication -
- Mc Donald suture (cervical cerclage) is best performed at 14weeks

15. Concerning vaginal birth after caesarian section delivery?

- a) Induction of labor is possible -
- b) Indicated in a woman with two previous scars
- Possible in a mother with one previous scar due to fetal distress
- d) Possible in a mother with contracted pelvis -

16. July a 32-year-old para 3+0g4 presents with drainage of liquor at 34 weeks' gestation.

What is the danger sign for this mother?

- Leakage of liquor
- b) Increased pulse rate
- c) False labor
- d) Show



- Escherichia coli
- d) Staph aureus

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- a) Motor response of the fetus
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**17. Complication of prolonged rupture of membrane include**

- a) Abruptio placentae
- b) Amniotic fluid embolism
- c) Rapture of gravid uterus
- d) Chorioamnionitis

**18. Mother diagnosed with cardiac disease in pregnancy.**

- a) Stage 1 are often admitted and treated in the ward. ✗
- b) The patient should be put on routine antibiotic cover. ✗
- c) Dysnoea at rest is stage 2 ✗
- d) Always delivered by caesarian section. ✗

**19. pelvic inflammatory disease is associated with;**

- a) Acute lower back pains
- b) Cervical motion or adnexial tenderness
- c) Pelvic abscess is not a complication
- d) Fertility

**20. The following describes follicular cysts except**

- a) Are the commonest benign ovarian tumours
- b) They rarely reach a diameter of 10cm
- c) They result from the non-rupture of the corpus luteum
- d) Require intervention if they become symptomatic

**21. Cervical cancer screening is best done by use of:**

- a) Throat swabs
- b) Visual inspection by use of acidic acid
- c) By colposcopy
- d) Histology

**22. The following is true concerning the carcinoma of the ovary**

- a) Has a good prognosis if the capsule of the ovary has been penetrated

- b) Is classified as stage II if it has spread to the pelvic peritoneum ✓
- c) 1<sup>st</sup> stage typically spreads across the peritoneal cavity
- ~~d) Is aggravated by oestrogens~~

**23. Bartholin's cyst**

- a) Should always be excised to prevent recurrences
- b) Are usually bilateral
- ~~c) May be easily confused with bathorlins abscess~~
- d) Are usually very painfull.

**24. The following is true about bacterial vaginosis**

- a) Is the commonest cause of vaginal discharge?
- b) Is commoner in women with an IUCD in situ
- c) Causative organism is candida albicans
- ~~d) Is diagnosed by HVS for culture~~

**25. The best method for family planning in <sup>HIV</sup> hvi mother is**

- a) IUCD
- b) BTL
- ~~c) Dual method~~
- d) Implanon

**26. Stress incontinence of urine has the following characteristic;**

- a) Urine dripping on rest
- ~~b) Urine dripping with urge~~
- c) Is more common in multiparous patients
- d) Controlled by use of antidepressant

**27. The following is contained in the MVA kit;**

- a) Gauge 16 folleys catheter.
- ~~b) MVA plunger~~
- c) 20cc syringe
- d) Needle holder



**28. Concerning dysmenorrhea**

- a) Cervical stenosis is may be an etiology.✗
- b) Lifestyle changes like low fat diet may improve it.
- c) Always occurs in menarche.✗
- d) Its defined as absence of menstruation.✗

**29. About imperforate hymen**

- a) Common in multipara.✗
- b) Cyclic, periodic abdominal pains are suggestive.
- c) Is managed by examination under anesthesia.
- d) Perforation

**30. Genital prolapse**

- a) It is defined as a protrusion of a pelvic organ or structure beyond its normal anatomical boundaries.
- b) Is caused by PID.✗
- c) Enterocele occur in the anterior wall of the vagina,
- d) Can be prevented by use of contraception.✗

**SECTION B**  
1. Joan a 35-year-old para 5 +0g 6 presented with ruptured membranes and pulsating cord prolapse in the health center. How will you manage Joan until, she arrives in the level 4 facility?

- a) Grouping and cross matching  $\tau$
- b) Knee- chest position  $\times$
- c) Place her in exaggerated lithotomy position
- d) Complete bed rest  $\tau$
- e) Prepare her for caesarean section if the cord has stopped pulsating  $\tau$

2. the following are indications of elective caesarean section

- a) Transverse lie  $\tau$
- b) Two previous scar  $\bar{\tau}$
- c) Popp **POPP**
- d) Breech presentation in 2<sup>nd</sup> stage of labour  $\tau$
- e) Known cephalopelvic disproportion mother  $\checkmark$

3. Concerning malaria in pregnancy;

- a) Is severe in non pregnant than in the pregnant mothers  $\times$
- b) Can cause IUFD  $\checkmark$
- c) First line treatment is by use of AL
- d) Is associated IUGR  $\checkmark$
- e) Use of long term insecticides treated nets ~~is~~ not advised  $\times$

4. Observation charted on a partograph include;

- a) Moulding  $\checkmark$
- b) Fetal lie  $\star$
- c) cervical dilatation  $\checkmark$
- d) Intensity of uterine contractions  $\checkmark$
- e) Fetal heart rate  $\checkmark$

5. The following are characteristics of the placenta at term:

- a. Is 3 cm thick  $\checkmark$
- b. Weighs 1/6<sup>th</sup> of the fetal weight  $\checkmark$

- c. The fetal surface has 15-20 cotyledon ✓
- d. Maternal surface is covered by the amnion
- e. Has an average volume of 500 mls. ✓

**6. In regard to eclampsia**

- a) Is prevalent in extreme of ages i.e. below 18 and above 35 years. ✓
- b) Presents with convulsions ✓
- c) Occurs in uncontrolled pre-eclampsia ✓
- d) Delivery can be delayed until term. ✓
- e) Phenobarbitone is the drug of choice ✗

**7. Concerning obstructed labour;**

- a) Contractions are strong but the presenting part remains high ✓
- b) Maternal distress is present ✓
- c) Fetal distress may be observed ✓
- d) VVF is a complication ✓
- e) Bandle's ring is observed in late stage ✓

**8. Intra-uterine fetal demise**

- a) macerated fetus occurs within the first 12 hours of delivery
- b) Delivery is by caesarian section
- c) Presents with spalding sign ✗
- d) Fetal spine shows hyper flexion on X-ray fetal spine ✓
- e) Leads to coagulation disorders when delivery is delayed

**9. Post partum haemorrhage**

- a) Is a loss of more than 500mls in vaginal delivery and 1000mls in caesarian delivery? ✓
- b) Retained placenta is a cause ✓
- c) May cause infertility ✓
- d) Active management of third stage of labour is a cause ✓
- e) The main cause is unrepaired episiotomy and tears ✗



10. A mother who is a known diabetic is pregnant and presents to your clinic at 30 weeks gestation what forms part of your management;

- a) Blood for oral glucose tolerance test ✓
- b) Urine analysis for proteinuria ✓
- c) Estimation of fetal weight ✓
- d) Should be managed as normal pregnancy since she is a known diabetic ✓
- e) Mother should wait for spontaneous onset of labour at term ✗

11. The common maternal indications for induction of labor include:

- a) Pre-eclampsia at 37 completed weeks ✓
- b) Chorioamnionitis ✓
- c) Intrauterine growth restriction at 34 weeks ✗
- d) Placental insufficiency at term
- e) Diabetes mellitus at 20 weeks ✗

12. Prolonged term rupture of membrane

- a) Is considered premature if not followed by labor within 24 hrs ✓
- b) B) conservative management is indicated ✗
- c) Meconium staining may be a sign of fetal distress ✓
- d) Urinary tract infection is the commonest complication of prom ✓
- e) Emergency caesarean section is indicated ✗

13. The following are etiology of fetal distress

- a) Placenta insufficiency ✓
- b) Cord accidents ✓
- c) Good cord blood flow ✗
- d) Maternal anemia ✓
- e) Maternal hyperglycemia. ✓

14. Concerning management of uterine atony

- a) IV oxytocin is administered ✓
- b) Rectal cytotec may be used
- c) Uterine massage has a role in its management

- d) Hysterectomy is the main stay of its management. ✓
- e) Uterine compression can be done ✓

**15. The following are types of cord accidents.**

- a) Cord knotting ✓
- b) Loops of cord around the neck ✓
- c) Abnormally short cord ✓
- d) Cord presentation ✓
- e) Free cord in the amniotic sac. ✗

**16. Individual birth plan will involve;**

- a) Arrange for birth partner ✓
- b) Baby mother kit preparation ✓
- c) Plan for when the mother in-law is present ✗
- d) Arrange for transport ✓
- e) Establish a budget ✓

**17. the following contributes to Kenyan maternal mortality**

- a) Maternal sepsis ✓
- b) Hemorrhage ✓
- c) Hypertensive diseases in pregnancy ✓
- d) Normal labour ✗

**18. The following are sites for the uterine fibroid**

- a) Subserosal fibroids ✓
- b) Tubal fibroids ✗
- c) Submucous fibroids ✓
- d) Intramural fibroids ✓
- e) Cervical fibroids ✓

**19. concerning heavy menstrual bleeding**

- a) Its defined as blood loss of greater than 180mls per period ✓
- b) It is also called metrorrhagia ✓

- c) May presents with signs of anaemia ✓
- d) Medical treatment comprises COC pills and other NSIDs ✓
- e) IUCDs are rarely a cause ✓

20. **The following comprise the benign conditions affecting the vulva and vagina.**

- a) Genital herpes simplex
- b) Cervical stenosis
- c) Vaginal cancer
- d) lichen sclerosis
- e) Bartholin cyst

21. **Concerning cancer of the cervix**

- a) Its commonest type of cancer
- b) It presents with painless per vaginal bleeding symptoms early
- c) Dysparunia is a presenting symptom
- d) Surgery is the treatment of choice
- e) HPV is the causative organism

T  
w  
c  
e

22. **Which of the following is an absolute contraindication to the use of combined oral contraceptive pills?**

- a) Varicose veins
- b) Tension headache
- c) Seizure disorders
- d) Women who are over 35yrs and smoke.
- e) DVT ✓

23. **Types the following are possible cause of female fistulae**

- a) Obstructed labour ✓
- b) Radiotherapy
- c) Surgical procedures ✓
- d) TB ✓
- e) Syphilis



**24. Sexual postmenopausal symptoms include:**

- a) Vaginal dryness ✓
- b) Dyspareunia ✓
- c) Increased libido
- d) Vulval itchiness ✓
- e) Promiscuity

**25. Symptoms of ectopic pregnancy include the following:**

- a) Excessive abdominal distension. ✓
- b) Per vaginal bleeding. ✓
- c) Adnexal mass. ✓
- d) Abdominal tenderness. ✓
- e) Shock.

**26. About Bartholin's glands**

- a) Duct blockage leads to Bartholin cyst. ✓
- b) Marsupialization is the treatment of choice if there is an abscess. ✓
- c) Is located at 12 o'clock within the introitus. ✓
- d) Incision and drainage can be done in the abscess. ✓
- e) The commonest cause of abscess is gonococcus.

**27. The following organisms are implicated in tubal blockage**

- a) Pseudomonas aeruginosa ✓
- b) Neisseria gonorrhoea
- c) Candida albicans
- d) Mycobacterium tuberculosis ✓
- e) E. coli

**28. Concerning the sexual differentiation**

- a) Some normal fetuses have undifferentiated gonads at early stages
- b) Testis are activated by testosterone
- c) Testosterone stimulates the development of the scrotum
- d) The sex chromosome is no 23

e) Differentiation of fertilized embryo into male/female fetuses is y chromosome gene

29. The following are common causes of un-engaged fetal head at term in a prim gravida

- a) Deflexion of the head
- b) fully flexed fetal head
- c) Cephalopelvic disproportion ✓
- d) Placenta abruption ✓
- e) Full urinary bladder ✓

30. In Rhesus iso-immunization

- a) Paternal blood group is essential ✓
- b) Direct coombs test is done on the baby ✓
- c) Amniocentesis is indicated for bilirubin assay ✓
- d) Routine anti d- is indicated to all mothers with rhesus -negative within 72 hours after delivery or abortion ✓
- e) Steroids plays no role in the management during pregnancy ✗

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**DEPARTMENT OF CLINICAL MEDICINE**

**2016/2017 ACADEMIC YEAR**

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**Final Qualifying Examinations for the Award of Diploma in Clinical Medicine and Surgery**

**JUNE 2017**

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**STREAM:** Diploma

**MODULE:** HEALTH SERVICES MANAGEMENT PAPER I

**TIME ALLOWED:** 3 Hours

**SESSION:** Morning (09.00 – 12.00 hours)

**DATE:** 30<sup>TH</sup> JUNE 2017

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**GENERAL INSTRUCTIONS**

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**SECTION A – SHORT ESSAY/STRUCTURED QUESTIONS – 60 marks**

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- This section contains **THREE** questions
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## SECTION A

1. State the following terms as used in logistics management

- a. Lead time (2marks)
- b. FIFO (2marks)
- c. Buffer stock (2marks)
- d. Maximum stock level - (2marks)
- e. Work ticket - *document used by the driver to carry details concerning vehicle movements* (2marks)

2. a. Explain the following terms as used in finance management

- i. Cost sharing - *Divided up the cash generated to purchase an item between the buyers* (2marks)
- ii. Waiver system - (2marks)

b. Highlight six (6) different groups of clients who are eligible for fee exemptions in our healthcare system (6marks)

*- Children < 5 yrs*

3. a. Explain five (5) sources/bases of power for a leader (5marks)

b. State any five (5) qualities of a good leader according to Stogdil (5marks)

*- Motivate  
- Good listener*

4. State the assumptions about the behavior of employees made by the managers according to

McGregor's Theory X and Y

(10marks)

*- ~~take work naturally~~  
- Need decisions to be made for them*

5. Explain any five (5) categories of leaves

(10marks)

*- Paternal - Family leave  
- Maternal - Sports leave  
- Sick leave - Annual leave*

6. Health Management Information Systems (HMIS) is an important aspect of the healthcare system

a. State four functions of health management information systems (4marks)

b. Explain three (3) measures that can be used to ensure the security of HMIS data and information (6marks)

**SECTION B**

1. Explain the roles of the following entities in healthcare service provision in Kenya
  - i. County Government (5marks)
  - ii. Non- Governmental Organizations (5marks)
  - iii. Faith Based Organizations (5marks)
  - iv. Ministry of Health (5marks)

*Co in charge of health services administration*

2. a. Outline the members of the Health Center Management Team (HCMT) (5marks)

- b. Explain the functions of the Health Center Management Team (15marks)

*- Approving and development plans & projects  
- Relative to other partners of other government agencies  
- Conduct audit of H.C. units  
- Planing*

3. Decision making is an integral part of Health Service Management

- a. Define decision making (2marks)

- b. Outline the steps in decision making (14marks)

- c. Explain any two (2) types of decisions (4marks)

*Defining problem  
- collection of data  
- Identifying alternatives  
- Assess consequence  
- best course of action  
- implementing  
- measuring results*

*Decision making  
- Identify the decision to be made.  
- Develop alternatives.  
- Evaluate the alternatives.  
- Select the best alternative  
- Make the decision  
- Implement & evaluate.*

*Types:  
- Programmed  
- Non-programmed*

## SECTION B

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- iii. Faith Based Organizations (5marks)
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- Handwritten notes:*
- Defining problem
  - collection of data
  - Developing alternatives
  - Assess consequence
  - best course of action
  - implementing
  - measuring results
- Decision making steps:*
- Identify the decision to be made.
  - Develop alternatives.
  - Evaluate the alternatives.
  - Select the best alternative
  - Make the decision
  - Implement & evaluate.

- Types:*
- Programmed
  - Non-programmed

*Co-ordinator  
Finance  
Administration  
Secretary*



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2016/2017 ACADEMIC YEAR

Final Qualifying Examinations for the Award of Diploma in Clinical Medicine and  
Surgery

JUNE 2017

**STREAM:** Diploma

**MODULE:** COMMUNITY HEALTH PAPER I

**TIME ALLOWED:** 3 Hours

**SESSION:** Morning (09.00 – 12.00 hours)

**DATE:** 29<sup>TH</sup> JUNE 2017

**GENERAL INSTRUCTIONS**

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**SECTION A**  
**SHORT/STRUCTURED ESSAY QUESTIONS**

1. a. Define infection prevention and control (2 Marks)  
B. Discuss the standard /universal precautions for infection prevention and control and the application (8Marks)  
c) Discuss the classification of health care waste giving the colour codes of each category 10 Marks
2. Outline the advantages and disadvantages of using questionnaires as data collection tools (10 Marks)
3. Outline five (5) advantages of community participation in health related matters (10 Marks)
4. STIs are common communicable diseases of Public Health significance: -
  - a. State four risk factors of STIs (2 Marks)
  - b. Outline the holistic management of STIs (4 Marks)
  - c. State the control measures for STIs (4 Marks)
5. Outline the risk factors associated with Cancer (10 Marks)
6. Substance abuse is increasingly becoming a major public health problem globally more so in Kenya
  - a. Define substance abuse (2 Marks)
  - b. What are the factors contributing or predisposing to substance abuse? (8 Marks)



**SECTION B**  
**LONG ESSAY QUESTIONS**

1. A nutritionist at a local hospital is following up under five-year-old children who are on nutritional schedule after suffering malnutrition obtained the following body weight (in kgs).

Array data:    4.7,   5.4,   6.5,   6.7,   6.7,   7.8,   8.3,   8.4,  
                  8.8,   8.8,   9.1,   9.2,   9.5,   12.9,   13.6,

- Determine the range (2 Marks)
- Determine the measures of central tendency of the children (12 marks)
- How does this data vary from the mean? (6 marks)

2. The Ottawa Charter defines HEALTH PROMOTION as 'the process of enabling people to increase control over, and to improve, their health.

- Mention the Health promotion priority action identified in the Ottawa Charter. write brief notes under each action. (12 marks)
- Mention eight childhood immunisable diseases in Kenya. (8 marks)

3. Rehema, a five-year-old, is brought to the clinic where you practice. She has a history of vomiting a pink looking worm., has brown-looking hair and a big abdomen. On examination you find the followings; slight pallor, no oedema, jaundice nor cyanosis. Has no organomegally. Mother says she eats a lot but does not add weight. She weighs 16.5 kg.

- What is the likely diagnosis? (2marks)
- State the preventive and control measures of the above condition. (6marks)
- Mention two drugs that can be used to treat the above condition. (2marks)
- With help of a flow chart/diagram, outline the life cycle of the causative agent of the above condition. (10marks)



## KENYA MEDICAL TRAINING COLLEGE



## FACULTY OF CLINICAL SCIENCES

## DEPARTMENT OF CLINICAL MEDICINE

2016/2017 ACADEMIC YEAR

Final Qualifying Examinations for the Award of Diploma in Clinical  
Medicine and Surgery

JUNE 2017

STREAM: Diploma  
MODULE: COMMUNITY HEALTH PAPER II  
TIME ALLOWED: 3 Hours  
SESSION: Afternoon (14.00 – 17.00 hours)  
DATE: 29<sup>TH</sup> JUNE 2017

**GENERAL INSTRUCTIONS**

- 1) Write your examination number in the spaces provided on the answer sheet provided
- 2) Read instructions on the question paper carefully
- 3) All cancellations must be clean and complete
- 4) Do not use a pencil
- 5) **ATTEMPT** all questions
- 6) Paper II accounts for 60% of the examination score in this module
- 7) The paper has two sections - A (MCQs) and B (T-F)

**SECTION A - MULTIPLE CHOICE QUESTIONS (MCQs) - 30%**

- This section contains **thirty (30) questions**
- Each question has four options

## SECTION A

- 1) Best definition of disaster preparedness is:
  - a) Identification and mitigation of various risks
  - b) Coordination and organization of governmental and non-governmental relief agencies *Response*
  - c) Development and implementation of an overall plan
  - d) Hiring and training emergency personnel
  
- 2) Regarding poliomyelitis
  - a) Outbreaks would be greatly reduced if majority of individuals in a community attain herd immunity
  - b) The polio vaccine should be given to adults ✗
  - c) Other vaccines can be administered together with the polio vaccine during outbreaks ✗
  - d) Physiotherapy and occupational therapy are effective during the acute phase ✗
  
- 3) On demography
  - a) Wider perspective of the definition fully describes the fertility, mortality and migration only ✗
  - b) Natural increase in population is the sum of birth, fertility and deaths only ✗
  - c) Level of education, occupation, nationality and religious beliefs are critical in the wider definition
  - d) Involves only population parameters
  
- 4) Road carnage is a national socio-economic problem in Kenya; which of the following risk factors that influences post-crash outcome
  - a) Presence of alcohol and other drugs and difficulty in rescuing and extracting people from vehicles ✗
  - b) Seat-belts and child restraints not used and crash-helmets not worn by users of two-wheeled vehicles; -
  - c) Human tolerance factors and inappropriate or excessive speed; ✗
  - d) Roadside objects, non-crash-protective and insufficient vehicle crash protection for occupants and for those hit by vehicles ✓
  
- 5) Advantages of implementing the occupational health and safety management system include:
  - a) Safe working environment with increased costs ✗
  - b) Safe work place, motivation and reduced cost of doing business ✓



- c) Enhanced stakeholder's confidence with costly early retirement  $\checkmark$
- d) High insurance premiums due to work relate accident and diseases  $\times$

6) On a bar chart

- a) Frequency is always represented on the y-axis  $\times$
- b) Distance between bars is greater than the breath of the bars
- c) There is no space between adjacent bars
- d) Variables are depicted as bars of equal breath

7) The following are described as stimulants

- a) Cocaine, tobacco, cannabis and heroin
- b) Alcohol, tobacco, steroids and cannabis
- c) Hashish, alcohol, codeine and barbiturates
- d) Pethidine, morphine, barbiturates and LSD

8) In a stable situation

- a) Incidence = Prevalence + Duration
- b) Incidence = Prevalence x Duration
- c) Prevalence = Incidence + Duration
- d) Prevalence = Incidence x Duration

9) The following disease give lifelong immunity after an attack:  $\checkmark$

- a) Diphtheria
- b) Mumps  $\times$
- c) Tetanus
- d) Typhoid  $\times$

10) The STOP principle of protecting workers from harmful substances stands for

- a) Substitution-Technical Measures-Organizational Measures-Personal protective measures
- b) Substitution-Technical Measures-Oversight-Participation
- c) Substitution-Training-Organizational Measures-Participation  $\checkmark$
- d) Substitution-Training-Organizational Measures-Punishment



11) With regard to jiggers (*Tunga penetrans*)

- a) Eggs are encysted while in the environment and are excysted releasing the larva
- b) Females have specialized burrowing organs and die after a 2-week period of laying eggs
- c) Infective stage involves eggs shed by the female into the environment
- d) Mated adult female burrow into the stratum granulosum leaving its posterior portion exposed

12) A disease is endemic when it

- a. Is constantly present at low rates in a specified geographical area
- b. Occurs in a frequency more than expected in a specified geographical area
- c. Occurs in more than one geographical area ~~x~~
- d. Occurs in more than one season ~~x~~

13) Prevalence of a disease

- a. Can only be determined by a Cohort study ~~x~~
- b. Describes the balance between incidence, mortality and recovery
- c. Is the best measure of disease frequency in etiological studies? —
- d. Is the number of new cases in a defined population? ~~x~~ — Incidence

$\frac{\text{Incidence} \times \text{Total pop.}}{1000}$

14) Which of the following is true about the use of antiretroviral treatment in HIV/AIDS treatment?

- a. Incidence will decrease
- b. Incidence will increase
- c. Prevalence will decrease
- d. Prevalence will increase

15) Measures of dispersion or variability include

- a. Chi-square value, standard deviation and median ~~x~~
- b. Mean, mode and median ~~x~~
- c. Range, correlation coefficient and median ~~x~~
- d. Range, standard deviation and fractiles

16) Water washed diseases include

- a. Cholera, typhoid and dysenteries
- b. Malaria, cholera and filariasis

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$$\frac{\text{Incidence} \times \text{Time}}{100}$$

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- a. Cholera, typhoid and dysenteries
- b. Malaria, cholera and filariasis



- c. Skin infections, trachoma and schistosomiasis
- d. Trachoma, malaria and typhoid

17) On child feeding

- a. Artificial feeding involves bottle feeding, partial; breastfeeding and infant formula
- b. Bottle feeding cannot be part of exclusive breastfeeding
- c. Full breast feeding involves exclusive, partial and predominant breast feeding
- d. In exclusive breastfeeding, the infant receives only breast milk

18) The social pillar in the Vision 2030 for Kenya entails

- a. Education and training, health sector improvement, water and sanitation
- b. Education and training, tourism, health sector improvement and agriculture
- c. Housing, rule of law and constitutionalism, education and training
- d. Security, peace building, conflict management and health sector improvement

19) General services in PHC include

- a. Geriatric health services
- b. Health education
- c. Maternal and child health services
- d. Scholl health services

20) The most common cause of maternal death in Kenya is

- a. Haemorrhage
- b. Obstructed labour
- c. Sepsis/infections
- d. Unsafe abortions

21) The vaccine most sensitive to heat is

- a. BCG
- b. Measles
- c. OPV
- d. Tetanus



22) Clinical features of kwashiorkor include

- a. Oedema, dehydration, old man's face and microcytic anaemia
- b. Oedema, hepatomegaly, monkey-like face and microcytic anaemia
- c. Oedema, moon-face cheeks, brownish sparse hair and flaky paint dermatitis
- d. Oedema, moon-face cheeks, muscle wasting and a ferocious appetite

23) The following are both pillars and principles of PHC

- a. Appropriate technology, intersectoral collaboration and preventive health care
- b. Appropriate technology, intersectoral collaboration and social justice
- c. Community participation, appropriate technology and sustainability
- d. Community participation, intersectoral collaboration and appropriate technology

24) With regard to growth and development

- a. Development is a continuous internal non-indicative qualitative progress
- b. Growth is a cognitive process whereas development is a physical one ✖
- c. Growth is an indicative increase with qualitative progress ✖
- d. Growth is an internal cognitive process ✖

25) Pillars of safe motherhood include

- a. Community participation, health management information and male involvement
- b. Community participation, partnerships and male involvement
- c. Family planning, focused antenatal care and post abortion care
- d. Family planning, focused antenatal care and use of skilled attendants

26) Regarding hospital waste management

- a. Clinical wastes such as used gloves and bandages are stored in yellow liner bags
- b. Clinical wastes such as used needles and dressing materials are stored in purple liner bags ✖
- c. General wastes including food <sup>white</sup> remains and left overs are stored in black bags ✖
- d. Sharps and clinical wastes such as bandages are stored in boxes or jerry cans ✖

27) With regard to measurement of fertility

- a. Fecundity is the potential reproductive capacity of a female
- b. Fertility is measured using indirect methods

- c. Fertility is the physiological ability to conceive
- d. Fertility is the potential reproductive capacity of a female

28) Drug and substance dependence will constitute the following occurring within a 12-month period

- a) Tolerance and withdrawal
- b) Tolerance, withdrawal and persistent desire to control usage
- c) An individual gives up significant social and occupational activities
- d) Recurrent use and tolerance

29) In cholera;

- a. tetracycline has no role in its management ✗
- b. can be cured appropriately by hydration
- c. suspected cases should be referred immediately ✓
- d. rarely cause shock ✗

30) On lifestyle diseases;

- a. primary prevention is the only step to undertake ✗
- b. primordial intervention is not important ✗
- c. diabetes and tuberculosis are the commonest
- d. Primordial intervention is very important.

SECTION B

1) In an outbreak of cholera in a village of 2000 people, 20 cases have occurred and 5 died. The attack rate is

- a) 1%
- b) 0.25%
- c) 5%
- d) 25%
- e) 0.02%

2) The following are preventive measures against tuberculosis

- a) Health education on good nutrition
- b) BCG immunization of all persons
- c) Routine immunization of pregnant mothers
- d) Immunization of all new-borns with BCG vaccines
- e) Education of traditional birth attendants on aseptic techniques on delivery

3) Cross-sectional study;

- a) Is cheap
- b) Is a snap short study
- c) Is used for rare diseases
- d) Is used for Communicable diseases only
- e) Uses only one cohort

4) Various elements which may influence social behaviour include

- a) environment
- b) date of birth
- c) Education
- d) Number of sibling
- e) Occupation

5) The following is true about the incidence of a disease

- a) Includes old and new cases of disease
- b) It includes new cases of health influencing factors only

20  
2000

10  
20  
0.05  
20/100



- c) It is measured at a point in time
- d) It determines the number and type of health personnel required
- e) It can be used to evaluate the effectiveness of a primary prevention programme

6) control measure for sexually transmitted infections include;

- a) using cold water to shower after having unprotected sex
- b) taking antibiotics before having unprotected sex with strangers
- c) requesting victims to bring their partners
- d) integrating STIs management in the mainstream clinics
- e) Rounding up the prostitutes in that locality and charging them in court

7) The following are advantages of pit latrine

- a) It uses locally available material
- b) It can be used as manure
- c) It Controls flies
- d) Can be constructed next to a water source
- e) It Has more light

8) Concerning BCG vaccine;

- a) given to all HIV positive children
- b) do not give it to HIV positive children
- c) a booster dose should be given at 6 month
- d) should be given to those who have clinical AIDS
- e) is contra-indicated to those who have clinical AIDS

9) The following influences population dynamics;

- a) Marriage
- b) Abortion
- c) Divorce
- d) Birth
- e) Death

10) The following is true about migration;

- a) In migration may interfere with health services offering
- b) Outmigration increases crime rate in a country
- c) Net migration is the balance between out and in migration
- d) Both affects the economic growth of a country
- e) Rural to urban migration is common among the youths

11) El Niño is associated with excess rainfall and flooding. This can lead to pond formation in human settlement areas. The following diseases can be as a result of this;

- a) Trypanosomiasis
- b) Chistosomiasis
- c) Trachoma
- d) Scabies
- e) Ascariasis

12) Currently there is indiscriminate disposal of refuse in our urban centres. What problems can arise from this?

- a) Can cause water pollution
- b) Can create employment to street families
- c) Can cause fire
- d) Can attract insects and vermin
- e) Create rich environment for flowers

13) The following is true about home based care services

- a) offered by trained personnel
- b) offered at a nearby facility
- c) useful in terminally ill patients
- d) good for infectious diseases
- e) trained healthcare workers have no roles

14) Betty a twenty-five years old female at 28 weeks of pregnancy present to your facility for the first time. On taking history you realise she has never attended antenatal clinic and this is her first pregnancy. Among the issues you will discuss with her concerning her birth plan include;



- a) Support during/after birth
- b) Breast feeding
- c) Place of birth
- d) Nutritional counselling
- e) Potential blood donors in case of emergency

15) Communicable diseases are diseases that can be passed from one organism to the other, either directly or indirectly. For effective control of these diseases the following are necessary; attacking the source of the disease, interrupting transmission and protecting the susceptible host. the following are useful in attacking the source of the agent

- a) Environmental hygiene
- b) Immunization
- c) Isolation
- d) Treatment of cases and carriers
- e) Notification

16) Health promotion puts emphasis on wellbeing:

- a) Physically
- b) Socially
- c) Mentally
- d) Spiritually
- e) Genetically

17) Screening entails

- a) history taking
- b) treatment
- c) referrals
- d) examination
- e) laboratory test

18) about vitamin A

- a) it is fat soluble vitamin
- b) it is water soluble vitamin



- c) its deficiency result in blindness
- d) it is synthesised from the body only
- e) Its sources are plants only.

19) As a new clinical officer posted to a health centre, your first engagement is to plan for health education on the various prevailing health issues. Functionally a health education programme should aim at bringing about changes in the following;

- a) Behaviour
- b) Dressing
- c) Investing
- d) Habit
- e) Customs

20) In health education, the following approaches apply; regulatory, service, educational and primary health care. In Kenya service approach include;

- a) Provision of treated mosquito net
- b) Establishment of exclusive smoking zones
- c) Distribution of free condoms
- d) Enactment of "Mututho rule"
- e) Passage of information through mass media

21) Rain water;

- a) physically clear
- b) high in mineral content
- c) it is hard water
- d) it is soft water
- e) does not contain any mineral

22) factors associated with emerging and re-emerging diseases include;

- a) economic development and land use
- b) common in developed countries
- c) common in non-developed countries
- d) human demographics and behaviour

7 e) breakdown in health sector

23) Among the aims of antenatal care are;

- 7 a) To advice the couple on sexuality
- 7 b) To monitor progress of pregnancy
- 7 c) To prepare the woman for delivery and breastfeeding
- 7 d) To advice the couple on the number of babies they can have
- 7 e) To confirm pregnancy

24) Principles of focussed antenatal care(FANC);

- a) Cultural appropriateness
- b) Household to hospital continuum care
- c) Inclusivity
- d) Individualised care
- e) Integration of services

25) The following vaccines are administered in three doses:

- 7 a) Rota virus
- b) PCV
- 7 c) Pentavalent 6, 10, 14
- 7 d) BCG
- e) IPV

26) Services offered at the MCH clinic include

- 7 a) ANC
- 7 b) Child care
- 7 c) Delivery care
- 7 d) Family planning
- \* 7 e) Post-natal care

27) Primary prevention activities/strategies include

- 7 a. Health education
- 7 b. Marriage (genetic) counseling

- c. Genetic screening
- d. Good nutrition
- e. Provision of appropriate housing

28) Predisposing factors to child abuse include: -

- a. Cultural practices
- b. Loss of parents
- c. Poverty
- d. Drug and substance abuse
- e. Boarding school

29) About observation research: -

- a. The observer can seek clarification or explanations on a certain phenomenon under study
- b. The observer controls or manipulates the subjects in participant observation
- c. Participant observation gives valid information
- d. Simulation observation allows the observer to observe required behavior
- e. involves intensive secondary data collection

30) A good questionnaire should

- a. Be short and simple
- b. Have questions in a logical sequence
- c. Have a variety of questions
- d. Have many technical terms
- e. contain personal and intimate questions



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2016/2017 ACADEMIC YEAR

Final Qualifying Examinations for the Award of Diploma in Clinical Medicine and Surgery

JUNE 2017

**STREAM:** Diploma  
**MODULE:** PAEDIATRICS & CHILD HEALTH PAPER I  
**TIME ALLOWED:** 3 Hours  
**SESSION:** Morning (09.00 – 12.00 hours)  
**DATE:** 26<sup>TH</sup> JUNE 2017

**GENERAL INSTRUCTIONS**

- 1) Write your examination number in the spaces provided on the answer booklet
- 2) Read instructions on answer booklet KMTC/QP-08/EAB and question paper carefully
- 3) Paper I accounts for 40% of the examination scores

**SECTION A – SHORT ESSAY/STRUCTURED QUESTIONS – 60 marks**

- This section contains **SIX** questions
- **ATTEMPT** all questions

**SECTION B – LONG ESSAY QUESTIONS – 40 MARKS**

- This section contains **THREE** questions
- Attempt any **TWO** questions

## SECTION A - SHORT ANSWER ESSAY QUESTIONS

1. A six day old baby who was born at home is brought to you with a history of fever, failure to breastfeed and irritability. On examination, the baby has a temperature of 37.9° C. There is an inflamed umbilical stump with a visibly discharging umbilicus.
  - a) What is your diagnosis? (2 marks)
  - b) Give four important investigations that you should do. (4 marks)
  - c) Give the specific antibiotic management (4 marks)
  
2. Breastfeeding is an important part of paediatric nutrition.
  - a) List eight advantages of breastfeeding (4 marks)
  - b) Briefly explain proper breastfeeding technique in terms of the following
    - I. Positioning (3 marks)
    - II. Attachment (3 marks)
  
3. A four-year-old presents with fever, acidotic breathing and is prostrated. The child had gone to Kisumu for a family visit.
  - a) What is the most probable diagnosis? (2 marks)
  - b) List three important investigations that you will do. (3 marks)
  - c) Give the specific intravenous management with correctly calculated dosages (5 marks)
  
4. A two-year-old presents with a cough, difficulty in breathing and fever for three days. She is grunting and is unable to breastfeed. On examination there is lower chest wall in-drawing.
  - a) What is the most likely diagnosis? (2 marks)
  - b) What other three clinical features would suggest respiratory distress (3 marks)
  - c) Outline the specific management as would appear on your treatment sheet (5 marks)

5. A mother presents to hospital carrying one three year old baby with a two days history of diarrhea. On examination the child has sunken eyeballs, sunken anterior fontanel and is drinking poorly.
- What is the most likely diagnosis? (2 marks)
  - Outline your management (5 marks)
  - List three possible complications (3 marks)
6. A two-year-old presents with generalized tonic clonic convulsions. There is fever of  $39^{\circ}\text{C}$  and no loss of consciousness. This is the fourth episode and the child was admitted with the same seven months ago. There is no history of travel to a malaria endemic zone.
- What is the most likely diagnosis? (2 marks)
  - List four investigations that you would carry out (4 marks)
  - Outline the management of this child



## SECTION B – LONG ANSWER QUESTIONS

1. A ten year old boy presents with painful knee, ankle and elbow joints. He has easy fatiguability and on several occasions has a had uncoordinated jerky convulsion-like movements. Further examination reveals a low grade fever and macular rashes on the trunk.
  - a) What is the most likely diagnosis (2 marks)
  - b) Outline the criteria for diagnosis of the above condition (15 marks)
  - c) List the two most common complications of the above condition (3 marks)
  
2. Peter is a twelve-year-old child weighing 30 kgs and has had several transfusions over the past few years. He presents with pallor, fever, severe pain on his hands and feet and shortness of breath. Further examination reveals splenomegaly.
  - a) Following dehydration, stress or an infection, outline the possible outcomes of the above condition (10 marks)
  - b) Peter presents with severe pain in his joints making movement unbearable. Write a treatment sheet for Peter. (10 marks)
  
3. A five-year-old girl presents with headache, history of puffiness of the face that is worse in the morning. She has passage of straw colored urine that is reduced in volume. Three weeks ago she had been treated for a sore throat at the local health centre. She is anxious with a blood pressure of 140/100 mmHg.
  - a) Give your diagnosis and two possible differentials? (4 marks)
  - b) During your management of the above patient, give specific drug dosages (16 marks)

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2016/2017 ACADEMIC YEAR

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Final Qualifying Examinations for the Award of Diploma in Clinical  
Medicine and Surgery

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JUNE 2017

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**STREAM:** Diploma

**MODULE:** PAEDIATRICS & CHILD HEALTH PAPER II

**TIME ALLOWED:** 3 Hours

**SESSION:** Afternoon (14.00 – 17.00 hours)

**DATE:** 26<sup>TH</sup> JUNE 2017

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**GENERAL INSTRUCTIONS**

- 1) Write your examination number in the spaces provided on the answer sheet provided
- 2) Read instructions on the question paper carefully
- 3) All cancellations must be clean and complete
- 4) Do not use a pencil
- 5) **ATTEMPT** all questions
- 6) Paper II accounts for 60% of the examination score in this module
- 7) The paper has two sections - A (MCQs) and B (T-F)

## SECTION A

1. Rickets can present with the following features except.
- Widening of the wrist joints ✓
  - Pigeon chest deformity
  - Diarrhea ✓
  - Geno valgum ✓
2. One of the following is not a pre-renal cause of the acute kidney failure.
- Burns ✓
  - AGN ✓
  - Shock ✓
  - Hemorrhage ✓
3. True in regards to hemophilia
- Haemophilia A is due to deficiency of christmas factor
  - All daughters of hemophilia's are carriers ✓
  - Haemophilia B is the most common subtype
  - All sons of hemophilias are carriers
4. The following will prevent neonatal infections except
- Keeping the child warm
  - Hand washing ✓
  - Antenatal care
  - Daily cord cleaning with saliva ✓
5. Which of the following measures is NOT used in the management of Cyanotic spells in a patient with TOF.
- Knee chest position ✓
  - High flow oxygen ✓
  - Morphine should never be used since it may cause respiratory deterioration
  - Propranal (anti hypertensive) ✓
6. One of the following is not a Complication of meningitis.
- Mental retardation
  - Hydrocephalous
  - Tuberculosis ✓
  - Cerebral abscess
7. Which statement is true concerning HIV exposed infants
- They should never be breastfed.
  - Nevirapine has no role in its management.
  - Positive antibody test after 18 months defines if the child is HIV positive. ✓
  - They do not require treatment with ARVS.



- X 8. The following are predisposing factors of PTB except
- a. Sharing utensils
  - b.  Diabetes mellitus
  - c. HIV / AIDS. ✓
  - d. Malnutrition. ✓

9. One of the following is a feature of severe malaria.
- a. Hypothermia.
  - b. Sweating.
  - c. Increased appetite.
  - d. Convulsions. ✓

10. All are complications of long term use of steroids therapy except.
- a. Skin atrophy. ✓
  - b. Decreased immune response
  - c.  Hypersensitivity reaction.
  - d. Growth retardation. ✓

- ✓ 11. Which of the following is NOT a feature of hyperthyroidism.
- a. Excessive sweating.
  - b. Weight gain. ✓
  - c. Tachycardia.
  - d. Irritability / anxiety.
- hypothyroidism*  
*sweating*

12. Concerning Burkitts lymphoma

- a. Abdomen is the commonest site.
- b. It is a slow growing tumor
- c. Occurs commonly in children of more than 10yrs
- d. Epstein bar virus are highly related ✗

13. Insulin therapy is indicated in all of the following cases except

- a. All types of diabetes ✓
- b. Diabetic patients undergoing surgery
- c. Diabetic patients with infections
- d. Diabetic foot

14. The following feature is found in a patient with diarrhea and shock

- a. Pulse of normal character
- b. Capillary refill of more than 3seconds ✓

- c. Warm extremities
- d. AVPU equals to A

15. In IMCI danger signs includes the following except

- a. Convulsing now
- b. Vomiting everything
- c. Inability to feed
- d. Hyperpyrexia ✓ (symptoms)

16. Which among the following is a normal developmental milestone?

- a) Smile at 12 weeks
- b) Sitting with support at 9 months
- c) Grip by 7 months
- d) First words by 12 months ✓

17. One of the most important cause of neonatal jaundice is

- a) Sickle cell disease
- b) Prematurity ✓
- c) Intrauterine growth retardation
- d) Congenital heart disease

18. Measles vaccine

- a) Is a toxoid
- b) May lead to constipation
- c) Is a live attenuated ✓
- d) Contraindicated in malnutrition

19. The least likely cause of death in severe marasmic kwashiorkor is

- a) Hypothermia
- b) Hypoglycaemia
- c) Flacky skin dermatitis ✓
- d) Dehydration

20. In the management of blood transfusion reaction, the following should be done except:

- a) Slow the transfusion
- b) Give chlorampheniramine at 0.1mg/kg intramuscular
- c) If symptoms persist stop the transfusion
- d) Stop blood transfusion in all types of reactions ✓

✓ 21. Which of the following is not a cause of haematuria in children

- a) Beverages
- b) Acute glomerulonephritis
- c) Trauma
- d) Blood disorders ✓

22. which one of the following is NOT true in poliomyelitis

- a) Flaccid paralysis occurs
- b) Sensation is lost in affected limbs ✓
- c) Paralysis is asymmetrical in majority of cases
- d) prevention is by live attenuated vaccine

23. A six-year-old child with circumscribed hair loss, scaling and itching on the scalp

- a) Has worm infestation and deworming is necessary
- b) Is a common childhood phenomenon requiring no attention
- c) Will benefit from Griseofulvin for several weeks ✓
- d) Has tinea corporis

24. The following condition does not present with stridor

- a) Retropharyngeal abscess
- b) Pneumonia ✓
- c) Diphtheria
- d) Foreign body inhalation

25. One of these is not a feature in infective endocarditis

- a. Splenomegally
- b. Petechiae
- c. New murmurs
- d. Atopy ✓

26. The following are features of WHO <sup>HN</sup> paediatric clinical stage 3 except

- a) Persistent generalised lymphadenopathy (PGL) ✓
- b) Pulmonary tuberculosis
- c) Oral hairy leukoplakia
- d) Periodontitis

27. Which of the following is an absolute contraindication to immunisation

- a) Atopic dermatitis
- b) Symptomatic HIV infection
- c) Diarrhoea without dehydration
- d) Fever

Relative  
absolute

28. The following represents a feature of stage 4 fulminant hepatic failure

- a) Minimal fibrosis
- b) Periportal fibrosis
- c) No fibrosis
- d) Cirrhotic changes ✓

110  
20  
5  
130 x 60  
3  
43  
20



29. The initial F-75 as in the management of the malnourished child stands for

- a) Feeding the child 75 times a day ✗
- b) Food with 75 grams of protein
- c) Formulae feeds with 75 Kcal
- d) Formulae milk manufactured in 1975 ✗

30. Which statement is incorrect concerning intravenous gentamycin injection

- a) Gentamycin is given at 3 mg/kg in an infant less than 2 kg
- b) Gentamycin is given at 5 mg/kg in an infant more than 2 kg
- c) Gentamycin is given at 7.5 mg/kg in a neonate ✓
- d) Gentamycin is given at 7.5 mg/kg in a 5-year-old child

12m  
7 days  
3mg/kg > 2kg  
20kg 20+9  
12x7  
2x3 = 12mm  
2x

## SECTION B - TRUE/FALSE QUESTIONS

1. In pyogenic meningitis, cerebral spinal fluid (CSF) has the following characteristics
- a) Cloudy in color
  - b) Protein is  $< 0.4 \text{ gm/l}$
  - c) Sugar is  $> 2.5 \text{ mmol/l}$
  - d) Polymorphs are in hundreds to thousands
  - e) Protein is high
2. The following are causes of finger clubbing
- a) Empyema thoracis
  - b) Pulmonary tuberculosis
  - c) Acute leukemia
  - d) Cyanotic congenital heart diseases
  - e) Acyanotic congenital heart diseases
3. When admitting a child with severe acute malnutrition, the key clinical features for admission are:
- a) Oedema of both feet
  - b) Weight and height
  - c) Visible severe wasting
  - d) MUAC
  - e) Flaky paint dermatoses
4. In the prevention of diarrhoeal diseases:
- a) Proper sanitation must be ensured
  - b) Good hygiene must be observed only when preparing the food
  - c) Good hygiene must be observed only when storing the food
  - d) Proper disposal of faeces is a must
  - e) Clean utensils must be used to store the food
5. The 1<sup>st</sup> line treatment for HIV/AIDS regimens for children below three years are:
- a) Abacavir/Lamivudine/Lopinavir/ritonavir
  - b) Zidovudine/lamivudine/ Lopinavir/ritonavir
  - c) Abacavir/lamivudine/nevirapine
  - d) Abacavir/lamivudine/efavirenz
  - e) Zidovudine/lamivudine/nevirapine
6. Which of the following features below is /are suggestive of neonatal sepsis?
- a) No spontaneous movement
  - b) Good ability to feed
  - c) Convulsions
  - d) Apnoea
  - e) Abnormal movements

7. Clinical features of sickle cell disease include
- a) The disease starts at the age of 6 years
  - b) Foot and mouth syndrome
  - c) Impaired growth and development
  - d) Acute chest syndrome
  - e) Stroke
8. Children are susceptible to acute poisoning
- a) Emesis is indicated in hydrocarbon poisoning
  - b) Activated charcoal may be useful in the management
  - c) Hepatotoxicity may follow paracetamol poisoning
  - d) Nephrotoxicity may follow iron poisoning
  - e) Aspirin poisoning may result in haematemesis
9. Factors affecting growth and development (pre-natal environment)
- a) Nutritional deficiencies
  - b) Diabetic mother
  - c) Exposure to radiation
  - d) Infection with German measles
  - e) Smoking
10. Breast feeding
- a) Should start as soon after birth as possible, preferably within 30 minutes of birth
  - b) Pre-lacteal feeds are recommended soon after birth as the mother has no breast milk
  - c) Babies should not breast feed on demand to avoid exhausting the mother
  - d) Glucose water should be offered in between feeding in hot weather
  - e) Giving infants expressed breast milk should never be done as the milk is of lower quality
11. As concerns Vitamin A
- a) Deficiencies causes increased rate of infection
  - b) Night blindness is a late sign of deficiency
  - c) Corneal scarring and rapture is an early sign of deficiency
  - d) Bitot's spots are white areas on the sclera
  - e) Pumpkins are a source of vitamin A
12. As concerns a child with a wheeze
- a. Oral salbutamol is preferred treatment than the use of an inhaler
  - b. Steroids have a role early in treatment
  - c. bronchiolitis is a differential
  - d. Antibiotics should be given in all cases
  - e. Adrenaline must always be used as first line treatment
13. Clinical features of Congenital heart diseases in children include;
- a. Easy fatigability



- b. Difficulty breathing
- c. fast growth rate
- d. Sweating during breastfeeding
- e. Frequent respiratory infections

14. Features of UTI in a neonate include

- a. Failure to thrive
- b. Jaundice
- c. Diarrhoea
- d. Fever
- e. Increased WBCs in urine

15. Cerebral palsy

- a. Is a non-progressive motor deficit disorder?
- b. Hypoxic ischaemic encephalopathy (HIE) is a cause
- c. Is associated with hyperactivity
- d. Children with cerebral palsy have a normal IQ
- e. Diagnosis is by a CT scan

16. The following are important in management of paraffin poisoning

- a. Rehydration
- b. Gastric lavage
- c. Continued feeding
- d. Induction of emesis (vomiting)
- e. Broad spectrum antibiotics immediately.

17. The following drugs are used in prevention of pneumocystic jiroveci pneumonia

- a. Cotrimoxazole
- b. Dapsone
- c. Amoxicillin
- d. Clarithromycin
- e. Clindamycin

18. The following are clinical features of haemorrhagic disease of the newborn

- a) Haematuria
- b) Cephalohaematoma
- c) Bleeding umbilical cord
- d) Bleeding injection sites
- e) Disseminated intravascular bleeding

19. Congenital malformations can be prevented by ensuring the following measures

- a) Malaria prophylaxis in pregnancy
- b) Copious alcohol intake during first trimester
- c) Vaccinations
- d) Supplements

- (e) Avoiding exercise in the second trimester
20. Lawrence is a two-year-old child admitted with bacterial pneumonia. He should be treated with
- a) Parenteral gentamycin alone
  - b) Crystalline penicillin alone
  - c) Intramuscular streptomycin
  - d) Parenteral gentamycin and crystalline penicillin
  - e) Intramuscular procaine penicillin
21. About intestinal atresia
- a) Triple bubble sign is seen in duodenal atresia
  - b) Vomiting is non-bilious
  - c) Double bubble sign is seen in jejunal atresia
  - d) Abdominal distension starts after a week
  - e) Surgery involves end to end anastomosis
22. Contraindication of performing lumbar puncture in children include
- a) Signs of increased intracranial pressure
  - b) Child who requires CPR
  - c) Crying child
  - d) Bleeding disorders
  - e) Infection on the LP site
23. The following statements are true regarding intraosseous lines
- a) It can only be used to administer fluids alone
  - b) Can safely be left insitu for 5 days
  - c) Osteomyelitis can be a complication
  - d) It can be used to give drugs
  - e) It should only be fixed by an experienced consultant paediatrician
24. Predisposing factors of child abuse includes
- a) Prematurity
  - b) Low socio-economic status
  - c) Alcoholic parents
  - d) Child of a single parent
  - e) Child with mental retardation
25. A child with attention deficit hyperactivity disorder will present with
- a) Less active child
  - b) Lack of attention
  - c) Impulsive behaviour
  - d) Lack of concentration
  - e) Extremely calm child

26. Common symptoms of congestive heart failure in infants include

- HAWPAST
- ✓ a) Peripheral oedema
  - ✓ b) Tachycardia
  - c) Tachypnea
  - ✓ d) Enlarged liver
  - e) Fever

27. Clinical features of hydrocephalus include

- a) Hypotonia of the lower extremities
- b) Microcephaly
- c) Increased appetite
- d) Excessive rate of head growth
- e) Irritability

28. About leukemias

- ✓ a) Acute myelogenous leukemia (AML) is more common in boys than girls
- b) ALL has peak incidence in children between 2 – 4 years and early teenagehood
- ✓ c) A complete blood count is a helpful investigation
- ✓ d) Bone marrow transplant is mandatory in all cases
- ✓ e) Vincristine is of use in chemotherapy

29. In paediatric history taking, the following headings are of importance

- ✓ a) Antenatal history
- ✓ b) Dietary history
- ✓ c) Birth history
- d) Occupation history
- ✓ e) Review of systems

30. About epilepsy

- a) Can be diagnosed in a three-month-old child
- b) Absence seizures can be a manifestation
- ✓ c) Carbamazepine has no role in its management
- d) Is more common in female than male children
- ✓ e) EEG is helpful in diagnosis





FACULTY OF CLINICAL SCIENCES

DEPARTMENT OF CLINICAL MEDICINE

2016/2017 ACADEMIC YEAR

Final Qualifying Examinations for the Award of Diploma in Clinical Medicine and  
Surgery

JUNE 2017

**STREAM:** Diploma

**MODULE:** SURGERY PAPER I

**TIME ALLOWED:** 3 Hours

**SESSION:** Morning (09.00 – 12.00 hours)

**DATE:** 27<sup>TH</sup> JUNE 2017

**GENERAL INSTRUCTIONS**

- 1) Write you examination number in the spaces provided on the answer booklet
- 2) Read instructions on answer booklet KMTC/QP-08/EAB and question paper carefully
- 3) Paper I accounts for 40% of the examination scores

**SECTION A – SHORT ESSAY/STRUCTURED QUESTIONS – 60 marks**

- This section contains **SIX** questions
- **ATTEMPT** all questions

**SECTION B – LONG ESSAY QUESTIONS – 40 MARKS**

- This section contains **THREE** questions
- Attempt any **TWO** questions

## SHORT ESSAY/STRUCTURED QUESTIONS

1. Discuss the following on Osteogenic sarcoma.  
a) List down **Four** clinical features 4 marks  
b) Outline the expected X-ray findings 6marks
2. Thyroid swellings are a common condition in surgical out-patient clinics:  
(a) Enumerate **Five** causes of thyroid enlargement 5marks  
(b) State five indications of thyroidectomy 5marks
3. An 18 year old male patient weighing 50kg presents with history burns from spillage of boiling water examination the burns are estimated to be 2<sup>nd</sup> degree, 30% burns.  
(a) Using Parkland s formula, calculate the required amount of fluids and describe how it should be administered. 6 marks  
(b) Enumerate **Four** early complications of burns. 4marks
4. Posterior hip dislocation is commonly caused by road traffic accidents  
(a) List down **Four** clinical features of posterior hip dislocation 4marks  
(b) Describe the management of posterior hip dislocation 6 marks
5. Describe the Glasgow coma scale used in assessment of severity of head injury. 10mks
6. Explain the procedure of catheterizing a male patient with acute urinary retention. 10mks



## LONG ESSAYS

1. A 70-year-old man was brought to outpatient department complaining of itching of skin, urinating brownish dark urine and yellowish eyes which has been progressive over the last two weeks.

On examining the man, you find scratch marks over his whole skin and a deeply yellowish sclera. The abdomen is unremarkable.

- a) What is your diagnosis? 2mks
- b) List FOUR possible causes of this condition 8mks
- c) Outline the diagnostic investigative modalities in this patient 10mks

2. A female patient in her early thirties was brought to your casualty department semiconscious.

The relatives said she had vomited blood twice at night. On examination you find that she is very pale and her pulse is thready and blood pressure is not recordable.

- a) What is your diagnosis? 2mks
- b) List the possible causes of this condition 8mks
- c) What is your approach to the management of this patient? 10mks

3. A 10-year-old boy is brought to the hospital with a 4 days' history of pain and swelling of left knee joint.

On examination, he is sick looking with a temperature of 39 degrees Celsius. The joint is swollen, hot, fluctuant and very tender.

- a) What is the most likely diagnosis? 2mks
- b) Outline three investigative modalities for this case and expected findings. 6mks
- c) List down two differential diagnoses in this case 2mks
- d) Describe the treatment of this condition 10mks