



**KENYA MEDICAL TRAINING COLLEGE
FACULTY OF CLINICAL SCIENCES
DEPARTMENT OF CLINICAL MEDICINE**

**FINAL QUALIFYING EXAMINATION
FOR
DIPLOMA IN CLINICAL MEDICINE AND SURGERY**

PAPER: SURGERY

DATE: 28th July, 2021

TIME: 3 HOURS (9:00AM – 12:00 NOON)

INSTRUCTIONS

1. This paper consists of:
 - Section 1 (40 Multiple Choice Questions)
 - Section 2 (8 Short Answer Questions)
 - Section 3 (1 Long Answer Question)
2. Attempt **ALL** Questions
3. Write the **EXAMINATION NUMBER** given on all the answer sheets provided and on the question paper.
4. Ensure that all examination answer scripts are handed in at the end of the examination
5. Ensure you sign the examination register provided

EXAMINATION NUMBER

SURGERY**SECTION 1: MULTIPLE CHOICE QUESTIONS - (40 MARKS)**

1. A reason for documenting patient's full names in clerkship is to:
 - a) make a diagnosis
 - b) maintain records
 - c) formulate treatment plan
 - d) assess economic status
2. In taking a surgical history
 - a) Past medical history is irrelevant
 - b) leading questions are prohibited
 - c) use of medical terms is advocates in history of presenting illness
 - d) occupational history is important
3. The following surgical conditions run in families EXCEPT
 - a) hypertension
 - b) haemorrhoids
 - c) peptic ulcer
 - d) cancer of thyroid gland
4. The best method of palpating the kidney is
 - a) light palpation
 - b) deep palpation
 - c) Bimanual palpation
 - d) Bidigital palpation
5. Definitive investigation in a patient with haematemesis is
 - a) plain abdominal x-ray
 - b) blood for haemoglobin levels
 - c) oesophagogastroduodenoscopy
 - d) barium follow through
6. Which of the following medical condition is associated with increased risk of peri-operative infections
 - a) bronchial asthma
 - b) diabetes mellitus
 - c) hypertension
 - d) epilepsy
7. Surgery performed to correct a non-life threatening condition is referred to as;
 - a) Exploratory surgery
 - b) cosmetic surgery
 - c) elective surgery
 - d) extirpation
8. Which of the following drug is given preoperatively to prevent emesis
 - a) loperanide
 - b) adrenaline

- c) atropine
d) metoclopramide
9. Post-operative management of a diabetic patient entails the following EXCEPT
- frequent monitoring of blood glucose levels
 - immediate removal of urinary catheter
 - continued insulin glucose infusion for at least 24 hours
 - close monitoring of the wound
10. A middle aged man presents with diffuse swelling of the left leg associated with pain following a thorn prick. He has a temperature of 39.0°C. Which is the most likely diagnosis
- abscess
 - erysipelas
 - cellulitis
 - furunculitis
11. Infection of a hair follicle is referred to as
- carbuncle
 - empetigo
 - necrotizing fasciitis
 - furuncle
12. A female patient weighing 60kgs is admitted with 35% burns. Using the Parklands formula, how much fluid should she be infused in the first 8 hours.
- 8400 mls
 - 2100 mls
 - 4200 mls
 - 7200 mls
13. Which of the following statements best describes first degree burns
- involve the epidermis, form blisters and painless ✗
 - painful, massive tissue damage and form blister ✗
 - erythematous, painful and no blister ✓
 - painful, leathery appearance and minimal skin oedema
14. Which of the following is a malignant skin ulcer
- Marjolin ulcer
 - tropical ulcer
 - trophic ulcer
 - venous ulcer
15. A patient with left sided pneumothorax will present with
- dull percussion **note** on the affected side
 - tracheal deviation to the right side
 - reduced chest expansion on the right side
 - normal breath sounds
16. Which one of the following is not an indication for underwater seal drainage
- lung abscess
 - malignant pleural effusion
 - haemothorax

- d) pneumothorax
17. The following is an absolute contraindication of circumcision
- a) penile warts
 - b) sickle cell disease
 - c) prematurity
 - d) hydrocele
18. The following is a form of a dynamic intestinal obstruction
- a) Bezoar
 - b) paralytic ileus
 - c) meconium
 - d) enteroliths
19. About acute appendicitis
- a) nausea and vomiting scores 2 in Alvarado scoring ✓
 - b) does not present with guarding ✗
 - c) IV antibiotics should be stopped ✗
 - d) Early ambulation is encouraged
20. Which one of the following is a characteristic of a direct inguinal hernia
- a) commonly extends to the scrotum
 - b) reduces spontaneously on lying down
 - c) more prone to strangulation
 - d) recurrence after surgery is rare
21. Concerning carcinoma of the pancreas
- a) majority are squamous cell carcinoma
 - b) jaundice is a rare clinical feature ✗
 - c) commonest site is the head
 - d) presents with lower abdominal pains ✗
22. Painless haematuria may be caused by
- a) bladder calculi
 - b) cystitis
 - c) ruptured urethra
 - d) bladder papilloma
23. The following is a chronic complication of the peptic ulcer disease
- a) gastric outlet obstruction
 - b) severe haematemesis
 - c) perforation
 - d) anorexia
24. A head injury patient who opens eyes to pain, utters inappropriate words and has abnormal flexion of the limbs is considered to have a Glasgow coma scale of
- a) 8
 - b) 6
 - c) 9
 - d) 10

25. Definitive treatment of massive epidural haematoma in a patient with head injury is
- evacuation by burr holing
 - intravenous mannitol
 - intravenous antibiotics
 - evacuation via craniotomy
26. About cancer of the prostate
- prostate specific Antigen(PSA) levels of 8ng/ml is diagnostic
 - pelvic pain is symptom of advances disease
 - gland feels soft on digital rectal examination
 - orchidectomy has no role to play in its treatment
27. Fracture occurring due to repeated stress on a bone is referred to as
- fatigue fracture
 - fragility fracture
 - pathological fracture
 - fracture dislocation
28. The following are methods of fracture immobilization by external splintage EXCEPT
- Thomas splint
 - External fixation
 - plaster of paris
 - cervical collar
29. The most appropriate method of treating a severely displaced fracture of the olecranon process is
- tension band wiring ✓
 - external fixation
 - intramedullary nail
 - functional brace
30. The following is an x-ray feature of acute osteomyelitis
- osteophytes- C.A
 - pathological fracture
 - ground glass appearance
 - periosteal reaction ✓
31. About colle's fracture
- distal fragment displaces anteriorly ✗
 - its treated with a belo elbow plaster of paris ✓
 - is common in young people ✓
 - sudeck's osteodystrophy is an early complication
32. Which one of the following is true about fracture neck of femur
- Garden IV fracture is best treated with skin traction
 - is more common on the left side
 - is likely to complicate with avascular necrosis of femoral head
 - Arthodesis is preferred for elderly patients
33. The most preferred method of treating multiple fractures of the metatarsals is
- Boot plaster of paris
 - internal fixation with Kiirschner wires

- e) amputation
d) Application of a crepe bandage
34. The commonest cause of death in a patient with major pelvic fracture is
a) vascular injury
b) rupture of the urethra
c) nerve injury
d) non-union
35. Soap bubble appearance on x-ray is a feature of
a) Ewing's sarcoma
b) chacro sarcoma
c) osteogenic sarcoma
d) giant cell tumour✓
36. The commonest site of skeletal tuberculosis is
a) proximal femur
b) vertebral column
c) ribs
d) distal radius
37. About perthe's disease
a) Affect more females compared to males
b) affects proximal tibia
c) majority are bilateral
d) application of skin traction plays a role in its management
38. Concerning gouty arthritis
a) treatment of choice is intra-articular corticosteroids
b) has no genetic predisposition
c) predisposes to osteoarthritis
d) initial attack affects the 1st metacarpophalangeal joint
39. In muscle power grade 3
a) limb moves with gravity eliminated
b) limb moves against gravity but not resistance✓
c) limb has normal power✓
d) limb has flicker of muscle contraction
40. Fracture of the base of the 1st metacarpal bone extending into the carpometacarpal joint is referred to as.
a) Bennet's fracture
b) smith's fracture✓
c) monteggia fracture✓
d) pilon fracture

SECTION 2: SHORT ANSWER QUESTIONS - (40 MARKS)

1. Rheumatoid arthritis and osteoarthritis are types of joint inflammatory conditions. State five differences between the two conditions (5 marks)
2. A male patient presents to you with dysphagia. Enumerate any five enquiries you would consider to make in history taking (5 marks)
3. List five medical indications of male circumcision (5 marks)
4. A middle aged female patient has sustained severe head injury caused by road traffic accident. State five complications of this injury (5 marks)
5. Outline treatment of a patient with tension pneumothorax (5 marks)
6. State five x-ray features of generalized osteoporosis (5 marks)
7. An adult male patient presents with right mid shaft fracture femur. State five indications of open reduction with internal fixation (ORIF) for this injury. (5 marks)
8. State five complications of malleolar fractures (5 marks)

SECTION 3: LONG ANSWER Questions - (20 MARKS)

1. A 60-year-old male patient presents to you with history of inability to pass urine for the last 8 hours. On examination, he is restless with a tender suprapubic mass.
 - a) What is your diagnosis (2 marks)
 - b) List five causes of this condition (5 marks)
 - c) Outline the management of this condition (13 marks)