



# UNIVERSITY OF NAIROBI

SPECIAL/SUPPLEMENTARY EXAMINATIONS 2017/2018

FIFTH YEAR EXAMINATIONS FOR THE DEGREE OF BACHELOR OF  
MEDICINE AND BACHELOR OF SURGERY

IIMS 500 : SURGERY MCQ PAPER

DATE: AUGUST 3, 2018

TIME: 2.00 P.M. - 5.00 P.M.

## INSTRUCTIONS

1. Attempt all questions.
2. Pick the BEST answer for each question.
3. There is no negative marking for wrong answers.
4. Answer on the answer sheet provided. Shade using a pen: Pencil shading is NOT ALLOWED.
5. Use the answer sheet with your Registration number ONLY.

prab sehmi

1. Acute arterial occlusion

- a. Should be treated conservatively if the site of the occlusion is above the inguinal ligament
- b. Demands the urgent use of vasodilator drugs
- c. Of a limb is usually painless due to the anoxia damage produced in the peripheral nerves
- d. May produce irreversible muscle necrosis after 6 hours
- e. None of the above

Crohn's disease

- a. Has infective Etiology
- b. Is limited to the bowel
- c. Does not produce mucosal ulceration
- d. Is characterised by the absence of fibrous tissue in the affected inf bowel
- e. Is highest among young adults

Carcinoma of the prostate on examination feels

- a. Soft
- b. Cystic
- c. Firm
- d. Hard and nodular
- e. Smooth and around

\* 4. Urethral stricture can be realized on examination as

- a. A swelling
- b. An induration
- c. Smooth area along the urethra
- d. A fibrous cord along the urethra
- e. A string like feel along the urethra

5. Which of the following features best distinguish a malignant ulcer from a chronic non-healing ulcer

- a. Pus discharge from the ulcer
- b. Red granulation tissue
- c. Raised rolled out edge
- d. Undermined edge
- e. Punched out edge

6. A woman presents with chronic cough, swelling in the armpit and breast. She also had pus discharge from the armpit and breast swelling. Examination shows masses in the axilla, induration in the breast and discharging sinuses in both. The most likely diagnosis is?

- a. Carcinoma of the breast with metastasis to the axilla and lungs
- b. Tuberculosis of the breast secondary to pulmonary tuberculosis
- c. Axillary lymphadenopathy
- d. Fibroadenosis
- e. Paget's disease of the breast

7. Hydrocele

- a. Is always a scrotal swelling
- b. The cause is always filariasis
- c. May communicate directly with the peritoneal cavity
- d. Is never congenital
- e. All of the above are false

*(smoothly enlarged & bluish)  
surgical interstia until 18 months - there can be spontaneous resolution*

8. A patient present with an inguino-scrotal swelling which is painful tender and tense. The skin over it is stretched and shiny; which of the following should be considered as the diagnosis?

- a. Epydidimo-orchitis
- b. Tortion of the testis
- c. Strangulated hernia
- d. Paniculitis
- e. All of the above

9. The following is not true about inguinal hernia

- a. If cough impulse is absent the diagnosis is ruled out
- b. Cough impulse and reducibility strongly suggests hernia
- c. The patient can usually reduce hernia more easily than the doctor
- d. A direct and indirect hernia may coexist on the same side
- e. The indirect hernia is more commonly complicated than the direct hernia

10. A patient with thyrotoxicosis presents with all of the following except?

- a. Exophthalmos
- b. Enophthalmos
- c. Tachycardia
- d. Tremors
- e. Menstrual irregularities

11. The management of carcinoma of the esophagus

- a. Surgical excision of the tumor is possible in majority of the patients
- b. Radiotherapy is mainly used
- c. Chemotherapy is of particular value in squamous cell carcinoma
- d. Gastrostomy provides good palliation for the patients with complete dysphagia
- e. All of the above

12. In peripheral arterial disease which statement is true

- a. ABI  $< 0.4$  is associated with tissue loss
- b. ABI  $\geq 0.7$  is normal
- c. ABI 1-1.3 is normal (0.9-1.3)
- d. ABI  $> 1.3$  is associated with claudication  $\rightarrow$  1.3 Calcification/non compressible vessels/ vessel hardening
- e. None of the above

13. All of the following are true of benign prostatic hypertrophy except

- a. Is the result of hyperplasia of the fibromuscular capsule of the gland
- b. Results in diminished flow of urination ✓
- c. Results in terminal dribbling of urine ✓
- d. May present with haematuria ✓
- e. Is most effectively treated by surgery

14. All of the following are true of uncomplicated benign gastric ulcers except

- a. Occurs most commonly on the greater curvature of the stomach
- b. Should initially be treated medically
- c. Commonly recur after medical treatment
- d. Should receive surgical management if healing has not occurred after 4-6 weeks of medical therapy
- e. Produce epigastric pain after eating

✓ Gastric ulcers usually affect the lesser

15. Rectal cancer: choose the incorrect statement
- a. Is usually squamous cell in origin *Adenocarcinoma ✓*
  - b. Usually characterised by lymphatic spread
  - c. Frequently presents with tenesmus
  - d. Frequently requires colonoscopy for accurate diagnosis
  - e. All of the above are true
16. An obstructed inguinal hernia is one which is usually
- a. Reduced in size
  - b. Excessively large
  - c. Associated with a hydrocele
  - d. Associated with bilious vomiting
  - e. Associated with non-bilious vomiting
17. A reducible direct inguinal hernia is one which can be palpated digitally at the
- a. Inguinal ligament? *Indirect enters the scrotum (patent T. vaginalis)*
  - b. External inguinal ring
  - c. Internal inguinal ring
  - d. Scrotal neck
  - e. Pubic symphysis
18. Causes of perianal pain include all of the following except
- a. Ischioirectal abscess
  - b. Fissure in ano
  - c. Fistula in ano
  - d. Thrombosed haemorrhoid
  - e. Psoas abscess
19. Concerning monteeggia fractures which of the following is correct?
- a. Closed reduction and immobilization with an above elbow POP is the treatment of choice
  - b. Surgery is indicated only when closed reduction fails
  - c. ORIF is the only appropriate treatment
  - d. B and C are correct
  - e. None of the above
20. 60-year-old lady presents with a minimally displaced pertrochanteric fracture. Which of the following is correct
- a. Due to high risk of avascular necrosis of the femoral head hemiarthroplasty should be performed
  - b. Treatment of choice is skin traction for 6 weeks followed by mobilization of the patient
  - c. Since the fracture is extracapsular and is minimally displaced bed rest and early mobilization is preferred
  - d. ORIF with dynamic hip screw should be performed
  - e. None of the above

- Regarding anterior dislocation of the shoulder joint which one is false
- "Bankart lesion" denotes radiological evidence of fragments from anterior rim of the glenoid process
  - "Hill Sachs lesion" denotes rupture of the anterior part of the glenoid capsule of the shoulder joint
  - "Hill Sachs lesion" denotes a depression fracture of the humeral head
  - Kocher's method is the method of choice in reducing this
  - None of the above
22. In examination of the knee joint which one is correct
- Mc Murray test tests the integrity of the cruciate ligament
  - Lachmann test tests the integrity of the anterior and posterior cruciate ligaments
  - Varus stress test checks the integrity of the medial collateral ligament
  - All of the above are correct
  - None of the above are correct
23. A tibial fracture denotes
- A comminuted fracture of the proximal tibia
  - A depressed intra-articular fracture of the distal tibia
  - An undisplaced fracture involving the distal articulating surface of the tibia
  - Fracture dislocation of the ankle joint
  - None of the above
24. Concerning supracondylar fractures in children
- The flexion type is sustained when one falls with the arm outstretched
  - Brachial vessels are never injured
  - Volkman's ischaemic contracture can occur as a complication
  - Open reduction and K-Wire fixation is the treatment of choice
  - None of the above
25. In fractures of the neck of femur which is correct
- Extent of the fragments does not predict the prognosis but the age of the patient does
  - The Gardners classification is only useful to show the angle of the fracture
  - The Pujel classification defines the extent of the displacement of the fragments
  - The anatomical classification is more widely used compared to the other two classifications
  - None of the above
26. In major fractures of the pelvis
- Mortality can reach 20% even in major trauma centers
  - One can loose only 2 litres of blood

- c. The common cause of haemorrhagic shock is rupture of a major vessel  
 d. A and B  
 e. None of the above
27. Which of the following is **not true** about acute dislocation of the knee  
 a. It is a true orthopaedic emergency and thus best treated by immediate ORIF  
 b. Can be satisfactorily treated by closed reduction and immobilization with a cast  
 c. Associated incidence of vascular injuries is higher when compared to dislocations at other joints  
 d. Complete dislocation is associated with tear of both cruciate ligaments  
 e. All of the above
28. 65 year old lady presents with an impacted fracture of the surgical neck of the humerus of 3 days duration. Choose the correct management strategy.  
 a. Closed reduction then apply a simple arm sling  
 b. Open reduction and internal fixation  
 c. Apply a triangular arm sling then start pendulum exercises after a week  
 d. A & C  
 e. None to the above
29. In Allis method of closed reduction of the posterior dislocation of the Hip joint which is false  
 a. Patient is placed in supine position with the lower limb of affected side in extension, reduction is done by traction in long axis of femur  
 b. Together with the surgeon, there must be atleast 2 assistants  
 c. It is important to give adequate analgesia and a mild muscle relaxant  
 d. Traction of the lowerlimb is done with the hip and knee joints flexed in 40% flexion  
 e. B and D are correct
30. Regarding management of chronic osteomyelitis  
 a. Antibiotic therapy should be started as soon as possible as the diagnosis is made  
 b. Antibiotic therapy should only be initiated after surgery  
 c. After sequestrectomy and saucerization the wound must be closed  
 d. Wound is left open after sequestrectomy  
 e. B and D are correct
31. In the management of pelvic fractures which statement is false  
 a. In tile A fractures bed rest, analgesics are early mobilization is the treatment choice  
 b. In some Tile type A ORIF may be used  
 c. Symphysiolysis of whatever severity must be reduced and internally to reduce instability

- d. In a major pelvic fracture external fixation may assist to control haemorrhage  
e. All are true
32. 60 year old lady presents with a grossly displaced transcervical fracture of the neck of femur, the best treatment option  
a. ORIF with cancellous screws  
b. Closed reduction and percutaneous fixation with cancellous screws  
c. Skin traction for 5 weeks  
d. ORIF and K-wire  
e. None of the above (ORIF with dynamic hip screws/hemi-/total arthroplasty)
33. In the management of subtrochanteric fractures of the femur  
a. Simple plating with a DCP would be the best option  
b. Even when displaced conservative treatment is the treatment of choice  
c. The cranial and lateral displacement of the proximal fragment is due to the abductors of the hip joint  
d. The proximal fragment is usually adducted and cranially displaced  
e. None of the above
34. In primary assessment of a multiply injured patient  
a. If chest movements are observed then "breathing" is normal  
b. Airway patency can be checked by examination of the oral cavity and oropharynx alone  
c. To ensure patent airway maximum "jaw thrust" must immediately be done irrespective of other possible injuries  
d. Priority is to ensure the patient is breathing by inspecting the chest movements  
e. None of the above
35. One of the following is not a spinal cord syndrome  
a. Low back pain syndrome (Lumbago)  
b. Brown sequard syndrome  
c. Conus medularis syndrome  
d. Anterior cord syndrome  
e. Central cord syndrome
36. Paraplegia resulting from trauma  
a. May be due to cord transection  
b. Will be of spastic type if the injury is at L2 or below  
c. Is always of flaccid type  
d. Is surgically curable irrespective of the kind of injury  
e. Never presents with a sensory level

37. Hydrocephalus in infants may occur as a result of
- Chiari type of malformation
  - Neonatal or postnatal infection
  - Spina bifida occulta
  - None of the above
  - A and B are correct
38. Brain tumours can present with the following except
- First time seizures
  - Visual impairment
  - Focal motor deficits
  - Meningitis
  - Speech abnormalities
39. With regard to brain tumours
- Meningiomas are more common than gliomas
  - Gliomas are more common than meningiomas
  - Meningiomas have the worst prognosis of all brain tumours
  - Surgical excision of meningiomas offer no advantage to the patient
  - Gliomas of all grades are eminently amendable to surgical cure
40. In degenerative spinal disc disease
- Back pain is never a feature ✗
  - The patient may present with leg pain due to disc prolapse
  - Disc protrusion cannot be diagnosed by myelography
  - Without the MRI it is impossible to determine what causes leg pain
  - Surgery rarely ever helps relieve the leg pain
41. In a typical acute epidural hematoma the CT-scan shows the following
- A concave lesion which is hypodense to the cortex
  - A concave lesion with isodense to the cortex with ventricular effacement
  - A convex lentiform lesion which is hyperdense to the cortex
  - Non-specific features which are rarely diagnostic
  - None of the above
42. Which of the following clinical test is useful to determine the integrity of the abductor mechanism of the hip joint
- Trendelenburgs test
  - Thomas Hugh Owen test
  - Straight leg raising test
  - The Nelaton's line
  - The apparent and real leg discrepancy measurement



43. Which of the following hip joint affections commonly involve the male at adolescent age
- Posttraumatic osteoarthritis of the HIP joint
  - Tuberculosis of the hip joint
  - Slipped femoral capital epiphysis
  - Leg calves Perthes disease
  - Avascular necrosis of the femoral head
44. Two hours after application of the plaster cast for supracondylar fracture of the humerus, a patient comes back to the emergency room complaining of severe pain in the hand associated with swelling of fingers. The appropriate treatment would be to
- Elevate the limb and close observation
  - Immediately call an orthopaedic specialist for his option
  - Split the entire case immediately
  - Administer vasodialators and analgesics
  - None of the above
45. Which is false with regards to fracture of the distal 1/3 third of the tibia
- Delayed union occurs often
  - External fixator is ideal for grade 3 open fractures
  - Open fracture are very common
  - Indirect violence force results into spiral or oblique fracture line
  - Open comminuted fracture are usually treated by early open reduction and internal fixation
46. Correct about management of open fractures
- Are treated by surgical debridement and depending on the grade the wound is either closed primarily or secondarily
  - Depending on the site of the fracture, the wound is either closed primarily or secondarily
  - Are treated by surgical debridement and wound closed primarily if the injury is less than 6 hours old
  - Are treated by surgical debridement and the wound left open to heal secondarily
  - All of the above are correct
47. Which of the following statement is not true regarding osteosarcoma
- Metastasis commonly occurs through the hematogenous route
  - The commonest site is the metaphyseal region of long bones
  - Is most frequently seen in 10-25 years age groups
  - May arise secondarily from paget's disease of the bone
  - The radiological feature is "onion-peel" appearance

48. Mark the false statement with regards to fracture of the pelvis
- a. May present with scrotal swelling as the only sign in an unconscious patient
  - b. Is often accompanied with features of acute abdomen
  - c. May be associated with extra-peritoneal urine extravasation
  - d. Isolated fracture of the ischial or pubic rami are treated by early mobilisation
  - e. Malgaigne injury denotes fracture of both pubic rami
49. Hyperventilation to  $P_{CO_2}$  of 20-25 mmHG
- a. Should routinely be recommended for ICP management
  - b. Does not reduce cerebral blood flow
  - c. Causes cerebral vasodilatation
  - d. Reduces ICP
  - e. None the above
50. Which of the following statements is true?
- a. Cranial osteomyelitis most frequently arises from the spread of bacteria through the blood stream from an infection elsewhere in the body.
  - b. Subdural empyema is ordinarily treated by administration of antibiotics without the need for surgical drainage.
  - c. A bacterial brain abscess commonly presents as a mass lesion of the brain, without systemic signs of infection such as fever or leukocytosis.
  - d. Bacterial brain abscesses are difficult to visualize by CT.
  - e. None of the above
51. Subdural hematomas are frequently due to
- a. Rupture of an intracranial aneurysm
  - b. Rupture of cerebral aneurysm
  - c. Injury to cortical veins
  - d. Hemophilia
  - e. None of the above
52. Which is not a sign in base of skull fracture
- a. Battle's sign
  - b. Subconjunctival hemorrhage
  - c. Raccoon eyes
  - d. CSF otorrhea
  - e. None of the above

53. Which of the following lesions is not one of the cutaneous stigmata of occult spinal dysraphism?
- a. Midline lumbar capillary hemangioma
  - b. Focal hairy patch in the thoracolumbar region
  - c. Café au lait spot over thoracolumbar region
  - d. Dermal sinus located over the mid sacrum
  - e. Midline subcutaneous lipoma
54. Myelomeningoceles are congenital lesions of the spine. Which of the following findings are not commonly associated?
- a. Hydrocephalus ✓
  - b. Chiari II malformation ✓
  - c. A midline dorsal mass seen at birth
  - d. Mandatory urinary incontinence
  - e. Skin, bone and dural defects superficial to the neural placode
55. Which of the following signs does Horner's syndrome include
- a. Miosis
  - b. Facial hyperhidrosis
  - c. Exophthalmos
  - d. Mydriasis
  - e. None of the above
56. Which of the following statements concerning head injury is not true?
- a. Increased ICP contributes to secondary brain injury by reducing cerebral perfusion and producing cerebral ischemia ✓
  - b. Intracranial hypertension is one of the most important factors influencing outcome in traumatic brain injury
  - c. In using the GCS, the lower the score, the poorer the outcome
  - d. Comatose patients who require emergent surgery for other injuries would have their ICP monitored
  - e. Corticosteroids are first line management for elevated ICP
57. Which of the following is true of tuberculous meningitis?
- a. Headache is usually absent.
  - b. If untreated, the clinical course is self-limited.
  - c. The inflammatory exudate is confined to the subarachnoid space.
  - d. The inflammatory exudate is found mainly at the convexities.
  - e. The protein content of the cerebrospinal fluid (CSF) is almost always elevated.

58. Weakness of the deltoid muscle is caused by injury to the
- a. axillary nerve
  - b. dorsal scapular nerve
  - c. musculocutaneous nerve
  - d. suprascapular nerve
  - e. thoracodorsal nerve

59. The 72-year-old patient had prior elective aortic aneurysm resection but returned to a surgeon with the unusual complaint that both lower legs fell asleep when he had been kneeling on a church bench. Physical examination reveals tense pulsatile masses in the flexor space behind both knees

The MOST likely diagnosis is:

- a. Baker cysts
  - b. Popliteal aneurysms
  - c. Bursitis
  - d. Osteoarthritis
  - e. Lesser saphenous thrombophlebitis
60. A 70-year-old woman comes to the office because she has had claudication in her left hip and buttock during the past eight months. She says the symptoms occur after she walks approximately one block. Medical history includes type 2 diabetes mellitus, hypertension, and hyperlipidemia. Daily medications include amlodipine, atenolol, metformin, glyburide, and rosuvastatin. The patient has a 40-pack-year history of cigarette smoking. Physical examination shows diminished left femoral pulse and absent left popliteal pulse. Right femoral and popliteal pulses are intact. Which of the following is the most likely site of arterial stenosis in this patient?
- a. Abdominal aorta
  - b. Left common iliac artery
  - c. Left deep femoral artery
  - d. Left popliteal artery
  - e. Left superficial femoral artery
61. A 72-year-old man is referred to the clinic after his first physical examination since 50 years of age. At that time, hypertension was diagnosed but the patient refused drug therapy. Medical history includes no known illnesses or surgical procedures. The patient has smoked two packs of cigarettes daily since 20 years of age. Review of systems shows dyspnea on exertion, tightness of the calves after walking up three or four flights of stairs, and forgetfulness. Screening for which of the following conditions is the most appropriate next step?
- a. Abdominal aortic aneurysm

- b. Chronic obstructive pulmonary disease
- c. Coronary artery disease
- d. Major neurocognitive disorder (dementia)
- e. Peripheral vascular disease

62. A 57-year-old man comes to the medical clinic because he has had fatigue and unintentional weight loss of 20 lb during the past month. He also has had inability to swallow solid foods for the past two weeks. He has a 30-pack-year history of cigarette smoking. Medical history includes Barrett esophagus, achalasia, alcohol use disorder (alcohol abuse), and ingestion of lye at 15 years of age. Esophagogastroduodenoscopy confirms the suspected diagnosis of adenocarcinoma of the distal esophagus. Which of the following findings in this patient's history is his greatest risk factor for this condition?
- a. Achalasia
  - b. Alcohol use disorder (alcohol abuse)
  - c. Barrett esophagus
  - d. Cigarette smoking
  - e. Ingestion of lye
63. A 72-year-old woman is referred to the thoracic surgery office by her primary care provider because she has had worsening cough over the past six weeks as well as recent onset of wheezing, shortness of breath, night sweats, and unintentional weight loss. Medical history includes hypertension that is managed with hydrochlorothiazide and hyperlipidemia that is managed with atorvastatin. The patient smokes one pack of cigarettes daily. Chest x-ray studies show a mass in the lower lobe of the left lung as well as pleural effusion on the left. Which of the following is the most appropriate next step?
- a. Chemotherapy
  - b. Closed pleural biopsy
  - c. Surgical resection of the mass
  - d. Surgical thoracoscopy
  - e. Thoracentesis with cytology
64. An 18-year-old man is brought to the trauma center by ambulance after he sustained a gunshot wound to the chest. Physical examination shows narrow pulse pressure, jugular venous distension, muffled heart sounds, and pulsus paradoxus. Which of the following is the most likely diagnosis?
- a. Cardiac tamponade
  - b. Cardiogenic shock
  - c. Perforation of the left ventricle
  - d. Pneumothorax
  - e. Rupture of the aorta

65. A 40-year-old man is brought to the emergency department by his wife one hour after he had sudden onset of shortness of breath. Medical history includes chronic obstructive pulmonary disease and prior spontaneous right pneumothorax. The patient has an 80-pack-year history of cigarette smoking. Temperature is 37.1°C (98.7°F), pulse rate is 95/min, respirations are 28/min, and blood pressure is 140/100 mmHg. Oxygen saturation is 87% on 2 L of oxygen via nasal cannula. On physical examination, breath sounds are distant bilaterally. Chest x-ray study shows a large right pneumothorax. After placement of an appropriately sized chest tube, which of the following is the most definitive management?
- Discharge the patient with a Heimlich valve and schedule outpatient follow-up
  - Initiate patient-controlled anesthesia
  - Perform pleurodesis with doxycycline
  - Schedule the patient for blebectomy
  - Wait for the lung to seal on continuous suction
66. A 35-year-old man involved in a motor vehicle accident presents with a knee dislocation that is easily reduced. Radiography of the knee shows no fracture. Which of the following statements about his treatment are true?
- If he has normal pulses he can be discharged.
  - If he has normal pulses he requires either close observation or arteriography.
  - If he has absent distal pulses and severe ischemia he should undergo arteriography in the radiology suite.
  - A popliteal vein injury is best treated with ligation.
  - A popliteal artery injury should be repaired with the ipsilateral saphenous vein if available.
67. Which of the following statements about acute arterial occlusion today is/are not true?
- Most arterial emboli originate in the heart as a result of underlying cardiac disease.
  - It can be treated under local anesthesia.
  - It is usually due to atherosclerotic disease.
  - Surgical treatment can usually be avoided if the lesion is diagnosed early.
68. Thrombosis occurs frequently in thromboangiitis obliterans (Buerger's disease) in which the following vessels except?
- Superficial femoral artery.
  - Radial or ulnar artery.
  - Digital arteries.
  - Superficial veins.

\* Rectal biopsy - Suction  
- Full thickness

- X 69. Which of the following statements regarding Hirschsprung's disease are true?
- a. Suction rectal biopsy is always diagnostic if the specimen includes submucosa
  - X b. Hirschsprung's disease is the result of a sex linked dominant gene AD (long segment dx)  
AR (short segment dx)
  - c. The endorectal pullthrough is demonstrably superior to other forms of surgical construction
  - d. 35 percent or less of patients have an excellent or good functional result following reconstructive surgery
  - e. The important cause of mortality in contemporary practice is enterocolitis
70. Which of the following inhalation anesthetics accumulates in air-filled cavities during general anesthesia?
- a. Diethyl ether
  - b. Nitrous oxide
  - c. Halothane
  - d. Methoxyflurane
  - e. Trichloroethylene
71. The calorie-nitrogen ratio for an infant should be maintained at:
- a. 75:1.
  - b. 100:1.
  - c. 50:1.
  - d. 150:1.
  - e. 25:1.
72. A full term neonate is found to have a swollen right scrotum. Gentle persistent pressure easily reduces an air filled structure back into the abdomen. The condition recurs promptly as the infant begins to cry. This
- a. Mandates immediate surgical repair
  - b. Is the same defect as a communicating hydrocele
  - c. Should have a tension-free mesh repair
  - d. Should prompt exploration of the left groin
  - e. Is generally irreducible in children
73. Which of the following statements about extracellular fluid are true?
- a. The total extracellular fluid volume represents 40% of the body weight.
  - b. The plasma volume constitutes one fourth of the total extracellular fluid volume.
  - c. Potassium is the principal cation in extracellular fluid.

- d. The protein content of the plasma produces a lower concentration of cations than in the interstitial fluid.  
e. The interstitial fluid equilibrates slowly with the other body compartments.
74. A newborn full-term baby boy with diagnosis of imperforate anus is also at risk to have a **VACTERL**
- a. Dextrocardia
  - b. Rib cage anomaly
  - c. Tracheoesophageal fistula
  - d. Ulnar skeletal deformity
  - e. Proximal limb malformation
75. In a patient who had a motor-cycle crash, a CT of the abdomen revealed a peripancreatic hematoma and indistinct pancreatic border. The most definitive test for a pancreatic injury requiring operative intervention is:
- a. ERCP
  - b. Ultrasonography
  - c. CT scanning
  - d. Operative exploration
  - e. Amylase test of lavage fluid
76. In repair of a femoral hernia, the structure most vulnerable to major injury lies:
- a. Medially
  - b. Laterally - femoral vein
  - c. Anteriorly
  - d. Posteriorly
  - e. Superficially
77. In neonates with necrotizing enterocolitis, which of the following findings is an indication of significant bowel ischemia?
- a. Increased gastric residuals.
  - b. Septic shock. ?
  - c. Cardiac failure due to a patent ductus arteriosus.
  - d. Elevated platelet count.
  - e. Erythema of the abdominal wall.
78. On examination, patients presenting with appendicitis typically show maximal tenderness over which of the following areas?
- a. Inguinal region



- b. Immediately above the umbilicus
- c.** At a point between the outer one-third and inner two-thirds a line between the umbilicus and the anterior superior iliac spine
- d. At a point between the outer two-thirds and inner one-third a line between the umbilicus and the anterior superior iliac spine
- e. At the midpoint of a line between the umbilicus and the anterior superior iliac spine

\* 79. A child with a hernia and cryptorchidism is operated upon through the usual inguinal incision. No testicle is found in the inguinal canal. The surgeon should

- a. Repair the hernia and no more at the time
- b. Repair the hernia and use hormones
- c. Explore the retropubic space and repair the hernia
- d. Explore the retropubic space upto the renal pedicle and if the testicle is found and cannot be replaced in the scrotum, leave the testicle in position and repair the hernia
- e. Do the same as in D but excise the testicle if it cannot be replaced in the scrotum

80. Regarding infantile hypertrophic pyloric stenosis

- a. Usually presents between 6 and 12 months of age *x (3-4) wks ✓*
- b. The female : male ratio is 4:1 *x*
- c.** Has a strong familial predisposition
- d. Pathologically shows hypertrophy of the longitudinal muscle layer of the pylorus *x* *in circular muscles*
- e. Presents with bile-stained projectile vomiting *x*

81. Flaps can be classified according to:

- a. Shape
- b. Size
- c. Colour
- d.** Blood supply, *Mode of transfer, Composition*
- e. Depth

82. The following are phases of wound healing except:

- 2. a. Inflammation
- 3. b. Proliferation
- 4. c. Remodelling
- d.** Cellular differentiation
- 1. e. Haemostasis

83. Systemic factors affecting wound healing include the following except:

- a. Smoking
- b. Nutrition
- c. Radiation
- d. Corticosteroids
- e. Diabetes mellitus

84. The following are true about skin grafts, except:

- a. They are either full or split thickness ✓
- b. A skin graft is a unit of tissue transferred with its blood supply
- c. The thicker the graft the greater the degree of secondary contracture ✗
- d. The thinner the graft the greater the degree of secondary contracture
- e. Secondary contracture occurs after the graft has healed

85. The initial phase of skin graft healing involves:

- a. Adherence
- b. Serum imbibition
- c. Inosculation
- d. Neovascularisation
- e. Remodelling

Stages of graft take  
① Adherence  
② Imbibition  
③ Revascularisation

86. The most common cause of graft failure is:

- a. Infection 2.
- b. Haematoma 1.
- c. Inappropriate wound bed
- d. Shearing forces
- e. Technical error

87. The following is false about the epidemiology of cleft lip and palate:

- a. The incidence is lower in the African population compared to the Caucasian population ✓
- b. The incidence is highest in the Asian population ✓
- c. Left sided clefts are commoner than right sided clefts
- d. Isolated cleft palate is commoner in males than females
- e. Isolated cleft lip is more common than isolated cleft palate

- Cleft lip ♂ >  
- Cleft palate ♀ >  
- Asians > Whites > Blacks

\*88. The fluid of choice for intravenous fluid resuscitation of a paediatric patient with severe burns is:

- a. 10% Dextrose
- b. Ringer's Lactate**
- c. 0.9% Normal Saline
- d. 5% Dextrose
- e. 5% Dextrose in Normal Saline

89. The management of a patient with cleft lip and palate begins:

Intrauterine diagnosis & counselling

- a. Before birth**
- b. At birth
- c. At 3 months
- d. At 6 months
- e. At 9 months

↓  
10 Hb  
10 wks  
10 lbs

↓  
10 Hb  
10 months  
10 kg

\*90. A 6 year-old boy was brought to KNH at 1 pm today after being rescued from a house fire. He sustained burns to his left upper limb, right upper limb and entire posterior trunk. He weighs 25 kilograms. The Modified Parklands Formula is used to calculate the volume of fluids required for fluid resuscitation in the first 24 hours. The total volume of fluids he should receive is:

$$TBSA = 4.5 + 4.5 + 18 = 27\% \text{ (Adult)}$$

$$\text{Parkland formula} = 4 \times TBSA \times \text{kg}$$

$$= 4 \times 27 \times 25 = 270 \text{ L}$$

- a. 2 L
- b. 2.7 L + Maintenance intravenous fluids
- c. 2.7 L
- d. 3.6 L
- e. 3.6 L + Maintenance intravenous fluids

91. Regarding exomphalos and gastroschisis → not assoc. with any anomalies except intestinal atresia.

- a. A gastroschisis has a sac **x**
- b. Gastroschisis is associated with major congenital abnormalities **x**
- c. The postoperative mortality of surgery for gastroschisis approaches 50%
- d. Both conditions may be diagnosed prenatally with ultrasound**
- e. Both conditions require delivery by caesarian section

92. Definition of organ space surgical site infections

- a. Infection that occurs within 30 day of operation ✓ (within 1yr - if implant)
- b. Infection involving deep tissues of the incision ✓ (any part of the anatomy other than the incision i.e. deep to the incision)
- c. Organisms isolated from aseptically aspirated fluid ✓
- d. All of the above**
- e. A & D alone

93. The best treatment of a 70-year old patient with metastatic carcinoma of the prostate is:

- a. Radical prostatectomy **x**

- b. Radical radiotherapy
- c. Bilateral orchidectomy
- d. Stilboesterol 5 mg daily for one month
- e. A single dose of Zoladex injection

94. Which of the following cases is considered a clean wound?

- a. Open cholecystectomy for cholelithiasis
- b. Herniorrhaphy with mesh repair
- c. Open prostatectomy ?
- d. Appendectomy with walled-off abscess
- e. Gunshot wound to the abdomen with injuries to the small bowel only

95. Assessment of a breast lump include all of the following EXCEPT

- a. Clinical examination
- b. Mammography
- c. Core biopsy
- d. Ultrasonography
- e. Mastectomy

96. Breast cancer

- a. Commences most frequently in the nipple
- b. Peaud'orange is a sign of early disease
- c. Pain is an early sign
- d. All patients should have a tissue diagnosis prior to definitive surgery
- e. Treatment does not depend on axillary node status

97. All are important in the preoperative management of patients with jaundice except

- a. Vitamin K
- b. Adequate hydration
- c. Input-Output charts
- d. Prophylactic antibiotics
- e. Scrubbing of the surgical site in the ward

98. The following investigations are appropriate prior to surgery

- a. An ECG in all patients older than 30 years
- b. Coagulation screen for all patients with obstructive jaundice
- c. HIV screening for patients with acute appendicitis
- d. Chest X-ray for all patients over 40 years
- e. Liver function test for patients with acute appendicitis

99. Which of the following people can give a valid consent for elective surgery?

- a. A surgeon not involved in care of the patient
- b. The headmaster of a child in boarding school
- c. A patient who is under the influence of alcohol

- d. A magistrate for a minor whose parents decline *life-saving surgery*
- e. A 14-year old

100. Which of the following statements is true?

- a. Cutting needles are used for skin closure.
- b. Hand needles are ideal for skin closure.
- c. Round-bodied needles are used for closure of *laparotomy wounds*.
- d. Needles with a loop-suture should not be used for mass closure of abdomen.
- e. In subcuticular suturing, double-ended needle sutures are used.

✓ Cutting needles - tough/dense tissue e.g. skin, fascia  
✓ Round-bodied: separate tissue fibres rather than cut through them.  
✓ Blunt-ended: closure of abdominal wall  
✓ Hand held: may be used for skin, although it is advised that needle holder be used in all instances to avoid needle stick injuries