Ethiopian Health Professionals' Licensure Examination
Medicine Exam

Megabit 2012/March 2020
PART TWO

BOOKLET CODE: 016 **SUBJECTCODE: 06**
Number of Items: 100 **Time Allowed: 2:30 hours**

DIRECTTIONS: Each of the following questions is followed by four possible alternative answers. Read each question carefully and blacken the letter of your best choice on the separate answer sheet provided.

1. A 25-year-old female patient who came from low land area and relatively healthy before four days presented with headache, high grade fever and vomiting of two days and confusion of six hours duration . Her vital signs were: BP= 90/60 mmHg, PR= 120/min, RR= 30/min and Temperature= 39 ^{0}C. There is icteric sclera, and pale conjunctiva on examination. Her RBS was 40 mg/dl. Malaria RDT result showed plasmodium falciparum positive.

   What is the first line management?
   (A) Quinine IV
   (B) Arthemeter IM
   (C) Artesunate IV
   (D) Arthemeter lumefantrene

2. A 75-year-old male patient was brought to emergency with sudden onset of loss of consciousness of 3 hours duration. The vital signs are BP: 190/100 mmHg, PR: 52, and RR: 30/min. He moans, opens his eyes and withdraws to pain. His right side pupil is mid dilated and sluggish. RBS: 60 mg/dl and the physician ordered CT scan for further investigation .

   What is the most likely brain CT scan finding in this patient?
   (A) Minimal parietal hemorrhage
   (B) Chronic ischemia
   (C) Lacunar stroke
   (D) Midline shift

3. A 68-year-old female patient was brought to emergency department after she became non-communicative. On evaluation, her vital signs are within normal range. She had snoring and excessive oral secretion. She was producing incomprehensive sound, can open her eyes with painful stimulus and decorticate posturing. Pupils are mid size and reactive bilaterally.

   What is the most likely cause of the neurologic state of the patient?
   (A) Supratentorial lesion
   (B) Metabolic derangement
   (C) Hypoperfuison
   (D) Tumor bleeding

4. A 65-year-old, known hypertensive and ischemic heart disease patient on aspirin, presented with fatigue of two months and frequent coffee ground vomiting of two days. Physical examination showed paper white conjunctiva.

What is the most likely cause for these manifestations?
(A) Variceal bleeding
(B) Peptic ulcer disease
(C) Mallory Weiss tear
(D) Gastric tumor

5. A 72-year-old male patient came to hospital with BP: 190/120 mmHg, PR: 78 /min, and GCS: 15/15. Urinalysis showed: no protein, Cr: 0.6 test and ECG: Sinus rhythm with rate 75. He was given 50 mg IM tramadol after which the headache subsided but the BP remained unchanged.

What is the most likely diagnosis?
(A) Hypertensive encephalopathy
(B) Malignant hypertension
(C) Hypertensive emergency
(D) Hypertensive urgency

6. A 46-year-old male patient who was known alcoholic for 15 years was presented with abdominal distension leg swelling and yellowish discoloration of the eyes for the last 6 months. He was given furosemide 40 mg oral BID for the last 2 weeks then he started to have excessive urination. He was brought to emergency with complaint of confusion and sleep disturbance.

What is the most likely diagnosis in this case?
(A) Spontaneous bacterial peritonitis
(B) Hepatic encephalopathy
(C) Cerebral hypo-perfusion
(D) Uremia

7. A 27-year-old male alcoholic patient was brought with history of epigastric pain, vomiting of three days, cough and shortness of breath of two days duration. BP: 90/60 mmHg, PR: 132, RR: 40/min, Temperature: 38.3 ^{0}C, SPO2: 84% on non-rebreather face mask oxygen, and GCS: 13/15. CXR showed bilateral diffuse patchy infiltrate. WBC count and serum lipase were raised.

What is the most appropriate management for this patient?
(A) Start diuresis
(B) Initiate antibiotics
(C) Start salbutamol puff
(D) Mechanical ventilation

8. A 34-year-old female patient was presented with abnormal body movement of all extremities with drooling of saliva and tongue biting of 3 hours. She had still birth 3 weeks ago. BP 130/80 mmHg, PR: 112 beats/min, and Temperature: 38.3 ^{0}C. Laboratory results showed WBC: 20,000, and urinalysis: glucose +2 and protein +1.

What is the most appropriate management in this case?
(A) Magnesium sulphate
(B) Sodium valproate
(C) Diazepam
(D) Antibiotics

9. A 42-year-old male patient who was found unconscious on street brought by policemen during your night shift. On evaluation; BP: 80/50 mmHg. PR: 116 beats/min, pale conjunctiva, and patient was anxious. There was no visible bleeding anteriorly and FAST exam was negative.

What is the most appropriate evaluation method at this point?
(A) Log roll and exposure
(B) Head to toe evaluation
(C) Jaw thrust and chin lift
(D) Send for abdomino-pelvic CT scan

10. A 32-year-old male patient who sustained falling down accident from 1st floor came complaining chest pain worsening on breathing. On physical examination; BP= 130/80 mmHg, PR: 110/min, RR: 34/min, SPO2: 85%, on atmospheric air. There is crepitus to palpation over right side anterior chest but bilaterally with good air entry. CXR result is pending.

What is the most important intervention for this patient?
(A) Chest tube insertion
(B) Optimal analgesia
(C) Non invasive ventilation
(D) Collect chest X-ray for decision

11. A 29-year-old previously healthy male patient, who was stabbed by robbers over the back medial to the left scapula, was brought to an emergency department. He was complaining pain and shortness of breath. On physical examination; BP = 90/60 mmHg, PR = 132/min, RR = 34/min, SPO2 = 85% on 10L oxygen. CXR shows left side diffuse haziness.

What is the most likely source of bleeding in this case?
(A) Internal mammary arteries
(B) Intercostal arteries
(C) Superficial veins
(D) Great vessels

12. A 75-year-old male sustained injury after falling down while riding his horse three hours back. He is having severe abdominal pain. On physical examination; BP = 80/50 mmHg PR = 110/min, RR = 34/min, and pale conjunctiva. Ultrasound revealed hypoechoic area i Morrison's pouch.

What is the most appropriate management for the patient?
(A) Do laparatomy
(B) Initiate inotropic agents immediately
(C) Have abdominal CT to know extent of injury
(D) Give 2-3 liters of crystalloid till BP is corrected

13. A 38-year-old female was injured and had bleeding from the head and ear after she was hit with stick while fighting two days back. On evaluation, GCS was 12/15 and there is 2cm × 4cm deep scalp laceration over the right parietal area with bony crepitus. On brain CT, there is depression of the skull more than its thickness beneath the wound area and hemorrhagic contusions with small pneumocephalus.

What is the most likely indication for neurosurgical intervention in this patient?
(A) Basal skull fracture
(B) Altered mental status
(C) Depressed skull fracture
(D) Presence of pneumocephalus

14. A 26-year-old male patient sustained injury after falling down from a 10m height while working at a construction site. He was unconscious for 30 minutes before arrival to the emergency room. On physical examination; BP = 179/98mmHg, PR = 62/min, GCS = 14/15, and sluggish right side pupil. Skull CT scan shows biconvex lesion over the right temporo-parietal region.

What is the most appropriate indication for surgical intervention in the patient?
(A) Presence of decreased GCS
(B) Initial loss of consciousness
(C) Presence of subdural hematoma
(D) Raised intracranial pressure

15. An offender hit a 45-year-old male patient over his head with stick and the patient lost his consciousness two hours later and was brought to the emergency room. On evaluation; BP = 105/60 mmHg, PR = 78/min and weak, RR = 17/min and irregular. He flexes to pain, moans and no eye opening.

What is the calculated mean arterial pressure in this patient?
(A) 90 mmHg
(B) 82.5 mmHg
(C) 75 mmHg
(D) 45 mmHg

16. A 67-year-old male patient was brought to the emergency room with a complaint of weakness of all extremity after falling down while riding a horse two days back. He was referred to a neurosurgery center with C-collar applied. On examination, power was 2/5 and 4/5 on upper and lower extremities respectively. C-spine lateral x-ray shows anterior displacement of C-2 over C-3.

What is the most likely type of injury in this case?
(A) Vertical compression
(B) Hyperextension
(C) Hyperflexion
(D) Rotational

17. A four-year-old male child was presented to the EOPD with a history of sudden onset of cough and shortness of breath for two hours. On evaluation, PR = 134/min, RR = 50/min, SPO2 = 85% with room air, and there is wheeze on auscultation. Chest x-ray revealed right side hyperinflation of the lung.

What is the most likely diagnosis?
(A) Severe Bronchial asthma
(B) Foreign body aspiration
(C) Acute bronchiolitis
(D) Croup

18. A four-year-old female child was brought to emergency room by ambulance from a health centre. She had vomiting, diarrhea and fever for two days duration. On physical examination; PR = 146/min and weak, RR = 50/min, T° = 38°C, Wt. = 20kg, there was sunken eyeball, and cold extremities and was confused. She started on IV fluid 400ml over one hour, but the vital signs are not changed.

What is the most likely cause of the patient's condition?

(A) Severe dehydration
(B) Hypovolemic shock
(C) Obstructive shock
(D) Sepsis syndrome

19. A previously healthy three-year-old child was brought by his mother after he had frequent loose stools and five episodes of vomiting of ingested matter over 12 hours. He has cold mottled skin, with PR of 148/min with sinus tachycardia. His skin became warmer and capillary refill was in<1sec after he took 20ml/kg normal saline over 10 minutes. Despite the treatment provided, the child suddenly arrested and CPR was initiated.

What is the likely cause of the arrest?

(A) Congenital heart disease
(B) Sepsis
(C) Respiratory failure
(D) Hypokalemia

20. A 13-year-old male patient was on follow up at a psychiatric clinic for mood disorder and taking Amytriptilline 50mg PO daily. His friends brought him to the emergency after one episode of focal seizure, and loss of consciousness. On examination; BP = 180/90mmHg, PR = 136/min, RR = 32/min, T^0 = 39 ^{0}C, he is confused and restless. ECG shows wide QRS complex tachycardia.

What is the most appropriate management for this child?

(A) Initiate Sodium bicarbonate
(B) Initiate Calcium Gluconate
(C) Start on Propranolol
(D) Initiate Phenytoin IV

21. A 14-year-old known CRVHD patient, who is on follow up taking Lasix and Spironolactone, came complaining palpitation and shortness of breath of two days duration. Apical heart rate is 180/min irregularly-irregular and BP = 110/80 mmHg. ECG shows narrow complex QRS with absent p-waves.

What is the most appropriate management for the patient before referral?

(A) Digoxin PO
(B) Metoprolol IV
(C) Amiodarone PO
(D) Dopamine

22. A seven-year-old male child, who has been having palpitation and shortness of breath for two days, collapsed at the triage while being evaluated. On evaluation, the child is not breathing, and central pulse is not palpable.

What is the first most appropriate intervention for this child?

(A) Start ventilation
(B) Open the air way first
(C) Put on high flow oxygen
(D) Initiate chest compression

46. A 20-year-old obese female presented to emergency OPD with rapid progressive loss of vision in both eyes of five days duration. She experienced severe generalized headache prior to her visual symptoms. CT scan shows no abnormality. On examination: BP= 170/110 mmHg. Direct ophthalmoscope examination shows bilateral papilledema.

What is the next most appropriate step that will save her sight?
(A) Lower the ICP
(B) Weight management
(C) Refer to ophthalmologist
(D) Manage the systemic hypertension

47. A 55-year-old man was presented to emergency OPD with two weeks history of difficulty of opening his left eye. He had mild headache a week before his current complain. On examination: there was complete ptosis of his left upper eye lid. He has also limitation of eye movement in all directions except abduction. Pupil is mid dilated and poorly reactive to light.

What is the most likely diagnosis of this patient?
(A) Multiple cranial nerve palsy
(B) Horner syndrome
(C) Abducence nerve palsy
(D) Oculomotor nerve palsy

48. A 25-year-old female came to ophthalmic OPD with a compliant of tearing, pain and redness in the right eye. She has history of trauma with a piece of plant leaf four days back. On examination: right eye visual acuity= 6/60, conjunctiva was hyperemic, Cornea was edematous and there were satellite infiltrates. Laboratory result of staining the corneal infiltrate with KOH was positive.

What is the most likely diagnosis?
(A) Bacterial keratitis
(B) Fungal keratitis
(C) Viral keratitis
(D) Toxic keratitis

49. A 34-year-old man who has normal vision came to ophthalmic OPD with bilateral gritty and burning sensation in both eyes. Torch light examination showed: Hyperemic and greasy anterior lid margins with soft scales and adherence of lashes to each other, normal appearing meibomian glands. There was whitish dandruff like scales over the scalp and the skin behind the ears.

What is the most likely diagnosis?
(A) Seborrhric blepharitis
(B) Bacterial blepharitis
(C) Infestation blepharitis
(D) Allergic blepharitis

50. A 33-year-old female came to OPD with tearing and foreign body sensation in the right eye for six years duration. She gets relieved of symptoms whenever she pulls out some of the ingrown eyelashes. On examination, she had three misdirected eyelashes rubbing the left cornea and a linear tarsal conjunctival scarring.

What is the most likely diagnosis of this patient?
(A) Trachomatous intense
(B) Trachomatous trichiasis'
(C) Tracomatous scarring
(D) Trachomatous Folliculitis

28. A five–days-old neonate is presented with difficulty of breathing since birth characterized by increasing effort to breath during mouth closure with chest retractions followed by cyanosis. This cycle is broken by crying and there is failure to pass a 6F catheter through the nose into the nasopharynx.

What is the best appropriate investigation to confirm the diagnosis?
(A) Magnetic Resonance Imaging
(B) Lateral neck x-ray
(C) Computed Tomography Scan
(D) Flexible laryngoscopy

29. A 50-year-old male patient presented with progressive and persistent hoarseness of voice for six months duration. He has dyspnea on mild exertion and has been smoking about ten cigarettes per day for the last ten years.

What is the most appropriate initial investigation?
(A) Head & neck CT scan
(B) Positron emission tomography
(C) PA chest X-ray
(D) Neck ultrasound

30. A 45-year-old male patient came to emergency OPD with swelling of the floor of the mouth for five days duration and he had difficulty in opening the mouth fully. Examination finding showed an indurated, tender & diffuse swelling of floor of the mouth and a carious lower second molar tooth.

What is the most likely diagnosis?
(A) Ludwig's angina
(B) Infected ranula
(C) Inflamed branchial cyst
(D) Pyogenic lymphadenopathy

31. A 21-year-old patient came with a complaint of dental pain after taking cold and sweet foods for one week duration. The pain is relieved immediately on avoiding the aggravating factors. On examination there are cavities of multiple teeth.

What is the most likely diagnosis?
(A) Scurvy
(B) Reversible pulpitis
(C) Necrotizing gingivitis
(D) Acute apical periodontitis

32. A 31-year-old patient came with a chief complaint of tooth pain for one-week duration. The pain is spontaneous and persists even after removal of cold or hot stimulus. Radiographic evidence showed radiolucencies on the occlusal surface of second molar extending in to the canal.

What is the most appropriate treatment option recommend?
(A) Temporary filling
(B) Root canal treatment
(C) Scaling and root planning
(D) Analgesic and oral hygiene

33. A 23-year-old female patient came to emergency OPD with a complaint of throbbing pain on the left lower posterior jaw. On history, she had fever and limitation in mouth opening for five days duration. On physical examination she has swollen red tender gingival pad around un-erupted lower third molar area and associated lymphadenopathy.

What is the most likely diagnosis?
(A) Pericoronitis
(B) Peritonsillar abscess
(C) Sublingual space abscess
(D) Submandibullar space infection

34. A 45-year-old female known diabetic patient for the last seven years came with complaint of sub mental swelling and difficulty of breathing associated with low-grade fever for five days. On physical examination there is firm brownish bilateral swelling of submandibular, sublingual and submental spaces and a decayed lower third molar tooth.

What is the most appropriate management?
(A) Secure the airway, antibiotic administration and extraction of the offending tooth
(B) Secure the airway, drainage, antibiotics and treat the offending tooth.
(C) Antibiotic administration and extraction of the offending tooth
(D) Surgical drainage and antibiotic administration

35. A 21-year-old female patient came to emergency OPD with a complaint of falling down accident from stairs. Her past medical history is unremarkable. On clinical and radiographic examination, she had posteriorly displaced anterior segment of mandible with associated signs of respiratory distress.

What is the most likely diagnosis?
(A) Bilateral angle fracture
(B) Bilateral parasymphysis fracture
(C) Bilatreal condylar fracture
(D) Bilateral body fracture

36. An 18-year-old patient came with a complaint of discoloration of right upper central incisor. He had history of trauma seven years back. He has also associated discharge from the vestibular area. On clinical examination the tooth is non vital and with a sinus tract. Periapical x-ray reveals round radiolucency over the root of right upper central incisor.

What is the most likely diagnosis?
(A) Radicular cyst
(B) Dentigerous cyst
(C) Lateral periodontal cyst
(D) Dermoid cyst

37. A 19-year-old second year University student is brought to the Emergency OPD by his dorm-mates late in the evening. He complains sudden onset of palpitation, feelings of shortness of breath, restlessness, sweating, and fear of dying. The duty physician reassured him and sent home. He is always in fear of another attack. He had multiple hospital visits with the same complaints since one year and has no history of substance abuse or other medical problem.

What is the most likely diagnosis?
(A) Agoraphobia with panic attack
(B) Social phobia with panic disorder
(C) Panic disorder
(D) Panic attack

38. A 29-year-old woman who gave birth three weeks before became disinterested during caring for herself and her newborn. Her mother reports that she has become tearful and has started to refuse food saying that she wants to die as she is not worthy of being a mother. She gets a few hours of sleep in the afternoons but struggles to fall asleep at night. She has no history of past psychiatric illness.

What is the most likely diagnosis?
(A) Bipolar disorder with peripartum onset
(B) Brief Psychotic Disorder with peripartum onset
(C) Persistent Depressive Disorder with peripartum onset
(D) Major Depressive Disorder with peripartum onset

39. A 36-year-old male patient was brought to an emergency room by his family. Over the last one week, the client became energetic; wanted to work all the night rather than sleep; over talkative, showed bossy attitude and being happy with no apparent reason. No history of past mental illness or substance abuse.

What is the most likely diagnosis?
(A) Bipolar II disorder
(B) Schizoaffective bipolar sub type
(C) Cyclothymia
(D) Bipolar I disorder

40. A physician has prescribed a medication for 27-year-old woman who had a one month history of persistent low mood associated with difficulty in initiating sleep, significant lack of appetite, concentration and energy. On her follow-up appointment, the physician could not find her chart yet, she presents with the complaints of dry mouth, constipation and occasional blurring of vision.

What is the most likely medication she has been taking?
(A) Amitriptyline
(B) Citalopram
(C) Fluoxetine
(D) Sertraline

41. A 35-year-old man was brought to the Hospital by his wife for being suspicious towards her and started to refuse meals believing that she has poisoned him in the last two days. She also reports that he has been in similar condition for five years and was doing relatively well. She added that he has lost interest in most activities in recent years and spends his days lying on his bed .Upon evaluation; he avoids eye contact, mumbles incomprehensibly and at times speaks at a high volume as if in a dialogue.

What is the most likely diagnosis?
(A) Brief Psychotic Disorder
(B) Delusional Disorder
(C) Schizophrenia
(D) Schizophreniform Disorder

42. A 27-year-old widowed female was presented to OPD with complains of difficulty in initiating and maintaining sleep and always has night mares. She also experiences fear of dying and keeps her door partly open to let people get in case if she needs help. She couldn't stop thinking about the incident and flash backs. Her illness dated back to one year after she has been involved in a car accident where many people died. Since then, she never crossed the place where the incident occurred.

What is the most likely diagnosis?
(A) Acute Stress Disorder
(B) Adjustment disorder
(C) Post-Traumatic Stress Disorder
(D) Unspecified trauma and stress related disorder

43. A 50-year-old man with a history of heavy drinking for the past 20 years wants to quit alcohol by himself since he is motivated to be supported as outpatient. But he couldn't stand the irritability, jitteriness, insomnia and craving. He had history of abnormal body movement three years ago after he was arrested by police for a day. The physician requested base line investigation.

What is the most appropriate next step in the management of this patient?
(A) Advise him not to quit alcohol
(B) Prescribe an antiepileptic drug
(C) Reassure and send him home
(D) Prescribe Benzodiazepine

44. A 15-year-old female from rural Ethiopia was presented with history of recurrent episodes of abnormal body movement lasting for 30- 35 minutes. Witnesses report that, she keeps her eyes tightly shut during the episodes and has no loss of bladder control, foaming or drooling of saliva. The episodes mostly occur when she is at the middle of an exam or during conflict with her parents. She has never sustained any bodily harm during the episodes. She appeared indifferent when asked about her symptoms but reported she has not been able to carry out her house chores because of them. Upon admission, she had one episode in which she was noted to be moving her extremities in a haphazard manner. All medical evaluations were non-revealing. Her cousin has a history of seizure disorder.

What is the most likely diagnosis?
(A) Conversion Disorder
(B) Generalized Tonic-Clonic Seizure
(C) Somatic Symptom Disorder
(D) Temporal Lobe Epilepsy

45. A 30-year-old female presented to medical OPD with compliant of palpitation, significant weight loss and hot flashes for the past one month. On examination BP 130/90 mmHg, PR= 120 bpm. She has visible anterior neck mass.

What is the most appropriate ocular finding to reach the diagnosis?
(A) Red eyes
(B) Lid retraction
(C) Decreased light reflex
(D) Decreased visual acuity

46. A 20-year-old obese female presented to emergency OPD with rapid progressive loss of vision in both eyes of five days duration. She experienced severe generalized headache prior to her visual symptoms. CT scan shows no abnormality. On examination: BP= 170/110 mmHg. Direct ophthalmoscope examination shows bilateral papilledema.

What is the next most appropriate step that will save her sight?
(A) Lower the ICP
(B) Weight management
(C) Refer to ophthalmologist
(D) Manage the systemic hypertension

47. A 55-year-old man was presented to emergency OPD with two weeks history of difficulty of opening his left eye. He had mild headache a week before his current complain. On examination: there was complete ptosis of his left upper eye lid. He has also limitation of eye movement in all directions except abduction. Pupil is mid dilated and poorly reactive to light.

What is the most likely diagnosis of this patient?
(A) Multiple cranial nerve palsy
(B) Horner syndrome
(C) Abducence nerve palsy
(D) Oculomotor nerve palsy

48. A 25-year-old female came to ophthalmic OPD with a compliant of tearing, pain and redness in the right eye. She has history of trauma with a piece of plant leaf four days back. On examination: right eye visual acuity= 6/60, conjunctiva was hyperemic, Cornea was edematous and there were satellite infiltrates. Laboratory result of staining the corneal infiltrate with KOH was positive.

What is the most likely diagnosis?
(A) Bacterial keratitis
(B) Fungal keratitis
(C) Viral keratitis
(D) Toxic keratitis

49. A 34-year-old man who has normal vision came to ophthalmic OPD with bilateral gritty and burning sensation in both eyes. Torch light examination showed: Hyperemic and greasy anterior lid margins with soft scales and adherence of lashes to each other, normal appearing meibomian glands. There was whitish dandruff like scales over the scalp and the skin behind the ears.

What is the most likely diagnosis?
(A) Seborrhric blepharitis
(B) Bacterial blepharitis
(C) Infestation blepharitis
(D) Allergic blepharitis

50. A 33-year-old female came to OPD with tearing and foreign body sensation in the right eye for six years duration. She gets relieved of symptoms whenever she pulls out some of the ingrown eyelashes. On examination, she had three misdirected eyelashes rubbing the left cornea and a linear tarsal conjunctival scarring.

What is the most likely diagnosis of this patient?
(A) Trachomatous intense
(B) Trachomatous trichiasis'
(C) Tracomatous scarring
(D) Trachomatous Folliculitis

51. At pediatric ward, a child was admitted for severe dehydration and malnutrition two days back. Ocular examination revealed conjuctival and corneal dryness.

For what ocular condition is the patient at greatest risk?
(A) Permanent visual loss
(B) Conjuctival scarring
(C) Corneal melting
(D) Bitot's spots

52. A 9-year-old boy complains difficulty to see the alphabets on the blackboard at school. He can read better from his exercise book. Parents were worried about his condition and brought him to pediatric OPD.

What is the most likely diagnosis?
(A) Myopia
(B) Hyperopia
(C) Astigmatism
(D) Presbyopia

53. An asthmatic mother brought her one-year-old infant for his recurrent itchy skin rash since three months of age, which she tried to manage it at home. The physician wants to reach to the diagnosis through the criteria used in clinical practice for atopic dermatitis.

Which finding is more suggestive to atopic dermatitis?
(A) Presence of dryness
(B) presence of hyperlinear palm
(C) presence of rash on extensors
(D) presence of pityriasis alba

54. A 15-year-old girl came to OPD with predominantly papulopustular and few black and white tipped papules on her face and upper chest.

What will be the best treatment option for this patient?
(A) Oral and topical antibiotics
(B) Oral antibiotics and Oral retinoids
(C) Oral and topical corticosteroids
(D) Oral corticosteroid and topical antibiotics

55. At ART clinic, a patient came for HAART initiation. The patient's chart shows the reason for HAART initiation is the presence of a certain dermatologic condition.

What skin condition is most appropriate for initiation of HAART?
(A) Seborrheic Dermatitis
(B) Acute Retroviral Syndrome
(C) Dermatomal Herpes Zoster Infection
(D) Kaposi's Sarcoma

56. A mother brought her 24-year-old son who has follow up at neurology referral clinic for developing skin lesion following change in his medication because his seizure was not controlled by the previous medication. Physical examination showed that he has morbiliform rashes on the trunk.

What is the most likely cause of his skin condition?
(A) Phenytoin
(B) Fluoxiten
(C) Carbamazepine
(D) Amitriptyline

57. A 45-year-old male patient who was treated for Giardiasis previously came to OPD with complaint of burning skin lesion of two days duration. On physical examination, he has well demarcated hyperpigmented patches with slight erythema at the periphery and multiple sites of the body with no further progression.

What is the most likely Diagnosis?
(A) Fixed drug eruption.
(B) Steven-Johnson Syndrome.
(C) Toxic Epidermal necrolysis.
(D) Exanthematous drug eruption.

58. Physical examination of a two-year-old male patient who has follow-up at Atopic Dermatitis clinic is found to be irritable, febrile and has generalized redness of the skin with sloughing and erosion in some parts of the body. The mother reported that he had erosion following some pus containing lesions on the border of eczematous lesions since last week.

What is the most appropriate management option?
(A) Oral antibiotics
(B) Topical antibiotics
(C) Skin care with emollient
(D) Intra venous antibiotics

59. A 38-year-old carpenter was presented at OPD with brownish-yellow discoloration and crumbling of few fingernails. On history, he states that it started on one fingernail initially.

What is the most appropriate treatment option?
(A) Fluconazole 100 mg weekly for 12 weeks
(B) Terbinafine 250 mg daily for 6 weeks
(C) Itraconazole 100 mg daily for 8 weeks
(D) Griseofulvin 500 mg daily for 8 weeks

60. A 24-year-old female patient comes with a complaint of dysurea, backache, post coital bleeding, fever, nausea and vomiting of about one week duration. She reported history of new sexual partner since last two months and she is using intrauterine contraceptive device. The physician is using the syndromic approach posted at the clinic for assessment.

What is the most likely diagnosis of this client?
(A) Genital ulcer
(B) Ectopic pregnancy
(C) Vaginal discharge
(D) Pelvic inflammatory diseases

61. Currently, Ethiopian health extension programs are being implemented to address primary health care services throughout the country. The recent report showed that there are performance differences between rural and urban residences. It was planned to conduct a household survey to investigate the effectiveness of the programs.

Which sampling method will yield a valid representative data?
(A) Simple random sampling
(B) Stratified random sampling
(C) Cluster random sampling
(D) Systematic random sampling

62. Woreda health office planned to scale up vital events registration in its all kebeles in 2020. Then, a research team was established to assess the status of vital registration and related challenges among the kebeles.

What type of study design is appropriate to generate the data?
(A) Case control
(B) Cohort
(C) Cross-sectional
(D) Ecological

63. Obtaining adequate sample size is often a challenge in a research. Hence the researcher must consider relevant factors that would minimize the influence of the sample size.

What factor should be considered to reduce variability due to the sampling method employed?
(A) Attrition rate
(B) Incomplete response
(C) Design effect
(D) Type of error

64. A community-based cross-sectional study is being carried out to determine the cervical cancer screening service uptake and its associated factor among age ≥ 21-years-old women.

What is the most appropriate data collection method?
(A) Self-administered interview
(B) Face to Face interview
(C) Telephone interview
(D) Postal mail interview

65. Research teams conducted a study among latent and free Chancroid individuals in a certain country. While advertizing the project, they announced that the participants would get free health care, meals, transportation fee and so on for their participation .The participants were also told that the study will be conducted for one year but to be continued for the coming one decade or more.

What is the most likely abused ethical principle in the above case?
(A) Justice
(B) Beneficence
(C) Malfeasance
(D) Respect for persons

66. A consecutive HIV/AIDS survey was conducted among sampled 1000 first year university students. At the first survey, 10 were HIV positive. At the second survey, 10 more students were HIV positive and its cumulative incidence was 1%.

What is the most likely interpretation of this finding?
(A) Being first year has 1% risk for HIV/AIDS
(B) Being first year has 1% burden for HIV/AIDS
(C) The burden of HIV/AIDS is 1% among first year students
(D) Risk of acquiring HIV/AIDS is 1% among first year students

7. A nationwide case control study was done among fresh female university students on association of life skill training and academic dismissal. Odds ratio of 0.4 was reported for students who took life skill training compared with students who did not take.

What is the most likely interpretation of this finding?

(A) The odds of dismissal is 0.4 times less likely in those who took life skill training than who did not

(B) The odds of dismissal is 0.6 times less likely in those who took life skill training than who did not

(C) The odds of dismissal is 40% more likely in those who took life skill training than who did not

(D) The odds of dismissal is 60% more likely in those who took life skill training than who did not

68. The 2016 Ethiopian demographic and health survey had investigated hemoglobin status of 10,752 children between 6-59 months of age. The result showed that, 56% of the cases suffered from some degree of anemia, 25% had mild anemia, 28% had moderate anemia and 3% were having severe anemia.

What is the appropriate graph that can be used to summarize this data?

(A) Bar graph
(B) Dot plot
(C) Histogram
(D) Line graph

69. A hospital manger wants to ensure activities are done as planned. To check the progress of the activities, the manager has to compare the actual performance with the set goals of the hospital.

What management function best describes the situation?

(A) Leading
(B) Planning
(C) Organizing
(D) Controlling

70. A team of health professionals are assigned to develop a strategic plan for the hospital. The team formulated the desired outcomes of the hospital in terms of measurable parameters.

Which step of planning process is stated?

(A) Situational analysis
(B) Designing strategies
(C) Problem prioritization
(D) Setting objectives and targets

71. Two teams of medical laboratory technologists with the same equipments are given 200 blood samples each to test for hookworm parasites. Team 'A' completes the tests in 20 hours and team 'B' in 10 hours.

What is the best conclusion about the work of the lab technologists?
(A) Both are efficient
(B) Both are inefficient
(C) Team B is more efficient than Team A
(D) Team A is more efficient than Team B

72. A hospital manager distributes work among the administrative staff and orders them to perform their tasks.

Which component of chain of command is being exercised?
(A) Authority
(B) Responsibility
(C) Span of control
(D) Unity of command

73. A new medical graduate was assigned as the head of MCH service at a district hospital. The hospital's medical director provided him information about the norms and standards which will be applied while performing activities.

Which human resource management did the director apply?
(A) Training
(B) Recruitment
(C) Orientation
(D) Performance appraisal

74. An outpatient service manager received a report that there is a conflict among the staff working in the outpatient department. He then tried to talk to them about the situation. However, they pretended that the conflict doesn't really exist and were unwilling to raise the problem, hoping that it will be solved easily.

What type of conflict management style is this?
(A) Avoidance
(B) Compromise
(C) Collaboration
(D) Accommodation

75. A physician was appointed as a supervisor of a special task force which is composed of competent, experienced, reliable, decision makers and individuals willing to take responsibility.

What leadership style should be adopted?
(A) Anarchic style
(B) Autocratic style
(C) Democratic style
(D) Laissez-faire style

76. Storekeepers of a primary hospital allocate materials from the stores to the various departments of a hospital based on the request from each department.

Which material management activity is performed by the storekeepers?
(A) Issuing
(B) Storing
(C) Ordering
(D) Purchasing

77. Following the implementation of Business Process Reengineering in the health sector, the Ethiopian health delivery system has been modified and the health service is restructured into a new tier system.

What is this health care delivery system in Ethiopia?
(A) Six tier system
(B) Four tier system
(C) Five tier system
(D) Three tier system

78. An epidemic investigation team was formed by the woreda health bureau to investigate and intervene on the epidemic which occurred in a certain location. The team was composed of professionals from different disciplines and all members accepted their role and started functioning well.

At which stage is the above team found?
(A) Forming
(B) Norming
(C) Storming
(D) Performing

79. A regional health bureau manager monitored the level of community satisfaction after a program has been implemented and found that the community is satisfied.

Which program monitoring component did the manager perform?
(A) Input
(B) Impact
(C) Output
(D) Process

80. In a primary hospital most key decisions are made by the top management without involving their subordinates and with little participation from the employees.

What describes this management?
(A) The hospital is more centralized
(B) The hospital is more decentralized
(C) The lower-level employees actually make decisions
(D) The top managers make decisions with more input from below

81. A community nutrition counselor counsels individuals about meal frequency and energy demand based on their level of activity, body weight, growth and other factors. The counselor focuses on that group of individuals who needs high-energy intake per kg.

What is the most likely group of focus in this case?
(A) Infants
(B) Adolescents
(C) Pregnant women
(D) Lactating mothers

82. In a school health program, the health officer observed signs and symptoms of a certain disease among students. The water supply for the community is from a nearby unprotected small spring used without treatment. However, based on his assessment he decided to construct a new water source aiming at increasing the quantity first.

What is the most likely disease he observed during the assessment?
(A) Scabies
(B) Cholera
(C) Giardiasis
(D) Typhoid fever

83. A pregnant woman comes for anti-natal follow up for the first time. During assessment, it was identified that she knows about the importance of using bed net and believes that using it protects her from getting malaria. She has been using bed net for the last one year.

What behavioral factor led to persistent use of bed net?
(A) Predisposing
(B) Reinforcing
(C) Preventing
(D) Enabling

84. A clinician working in a district hospital received a report describing; 36,000 live births, 244 stillbirths, 450 neonatal deaths, 266 early neonatal deaths in one-year period.

What is the prenatal mortality rate?
(A) 6.8 per 1000
(B) 12.5 per 1000
(C) 14.1 per 1000
(D) 14.2 per 1000

85. A surveillance officer assigned in the regional health office provide scientific baseline data and information for priority setting, planning, implementing and evaluating disease control program for both communicable and non-communicable health problems at woreda level.

What is the most appropriate surveillance in this case?
(A) Active surveillance
(B) Passive surveillance
(C) Sentinel surveillance
(D) Integrated surveillance

86. HIV/AIDS is one of the major the causes of morbidity and mortality in developing countries and remains both a clinical and public health challenge. Hence, the ministry of health decided to conduct a population based screening program.

Which characteristics should be fulfilled by the screening test?
(A) Highly sensitive and positive predictive value
(B) Highly specific and sensitive
(C) Highly sensitive and negative predictive value
(D) High specific and negative predictive value

87. A physician working in woreda health office is planning to give health education for members of malaria prevention club in an elementary school, about proper utilization of insecticide treated bed net.

What are the most appropriate teaching materials to be used?
(A) Billboard and magazine
(B) Leaflets and pamphlets
(C) Brusher and booklets
(D) Flipchart and poster

88. A waste composition of an industry includes paper (65%), plastics (5%) and organic materials (30%). The industry adopted an environmental protection program which is aimed at reducing the waste meant for final disposal.

What is the most appropriate strategy to achieve better results?
(A) Sanitary land fill
(B) Composting
(C) Recycling
(D) Reuse

89. A worker in a leather processing tannery develops trench foot disease after working in animals' skin soaking and transporting section. He has to carry soaked animal skins and transport to other sections of the factory without wearing proper personal protective equipment.

What is the most likely risk factor of his illness?
(A) Carrying heavy load of animal skins
(B) Being wet during soaking and carrying
(C) The chemical during the soaking process
(D) The extreme coldness of the soaking water

90. A 28-year-old woman who had a child with neural tube defect in her previous pregnancy visited a clinic for nutritional advice to prevent the occurrence of similar problem on her next pregnancy.

What is the most effective preventive measure?
(A) Iron supplementation, starting from first month of pregnancy
(B) Iron supplementation, starting from third month of pregnancy
(C) Folic acid supplementation, starting from third month of pregnancy
(D) Folic acid supplementation, starting from first month of pregnancy

91. A 50-year-old patient who has developed hypertensive stroke a year ago came to your department for follow up.

What is the most appropriate level of health education you provide to the patient?
(A) Primary health education
(B) Secondary health education
(C) Tertiary health education
(D) Quaternary health education

92. A team was suggesting different strategies to control epidemics and endemic occurrences of malaria. From the available options, the team wants to focus on preventing the epidemic first.

What is the most effective method?
(A) Using predator organisms
(B) Using mosquito repellents
(C) Household residual spraying
(D) Distributing impregnated bed net

93. A 32-year-old woman with controlled seizure disorder was presented to a surgical OPD with right toe gangrene. The surgeon decided urgent amputation of her toe but she refused the procedure.

What would be the appropriate ethical principle applied?
(A) Autonomy
(B) Beneficence
(C) Confidentiality
(D) Mal-beneficence

94. An intern working in a specialized hospital observed that her supervisor, who is a senior specialist, involved in bribery and referred the patient abroad for unnecessary treatment.

What is the most appropriate next step the intern should take?
(A) She has a legal responsibility to report
(B) She should tell to her colleagues for decision
(C) The specialist has the right to practice
(D) She should not take any measure

95. A 42-year-old- health officer in rural health center is serving with only two nurses for years. He started to complain about his job, unable to maintain good therapeutic relationship and even blame himself for serving the clinic alone. He previously felt good about his job and was proud of the difference he makes. Lately, he became physically and emotionally exhausted and complains headache and resigned from the health center.

What is the most appropriate measure will be done for him?
(A) Salary Adjustment
(B) Start him anxiolytics
(C) Mindfulness and self-care training
(D) Transfer him to other health facility

96. An old lady brought a six-month-old infant to the clinic with the complaint of cough and fever. On evaluation, she told the nurse that she is the grandmother of the child and both of his parents died due to HIV recently and she also acquired the virus while caring for her daughter. The nurse was touched by the story and cried in front of them.

What best describes the Nurse's Reaction?
(A) Empathy
(B) Sympathy
(C) Compassion
(D) Caring

97. A 26-year-old health professional tells her patient about the right to involve in treatment choice and decision. The patient asked "could I ask the older doctor, the one I trust the most". Then she replied "sure you can do that "and the client came on the next day.

What does the process most imply?
(A) Building trust
(B) Establishing rapport
(C) Respecting patient right
(D) Demonstrating her confidence

98. A 27-year-old diabetic man is admitted to the hospital with severe pneumonia. The Physician holds his insulin for that moment and started IV antibiotics. Then she forgets to reorder the medication for two days .There is no clinical deterioration and the insulin is restarted.

What would be the next best measure?
(A) Tell the patient it was a clerical error but that he will be all right
(B) Inform chief resident and senior but not the patient since he will be all right
(C) Because it was not clinically significant she does not have to say anything to the patient
(D) Apologize and tell the patient that she forgot to reorder the insulin, but that he will be all right

99. A young competent physician has been working in a Hospital. The physician who was sensitive to patients' need, respectful, caring, and compassionate became neutral through time. He tried to make the Hospital environment patient friendly but was not successful because of the leaders' reluctance.

What would be the possible contributing factors for losing his professional qualities?
(A) Client related factors
(B) Personal Factors
(C) Environmental Factors
(D) Health system factors

100. A surgeon has just moved into his own private practice. His patient with lymphoma signs consent for an exploratory laparotomy to stage lymphoma. He does not inform the patient that CT scanning is a valid option. The surgeon tells her, "I don't trust those scans. We always did laparotomies in my career." The patient develops an abdominal wound infection leaving her with a scar that ends her career as a model. In the suit that follows the surgeon states, "I did the most accurate procedure for my patient to exclude cancer in the abdomen. That is what all my professors did in their practice."

What will be the most likely outcome?
(A) He will win the case because he took informed consent
(B) He will lose the case because the patient was not informed
(C) He will win the case since he has done the standard care procedures
(D) He will lose the case because the invasive procedure can be avoidable

THE END