Ethiopian Health Profe...

Public health Exam
Nehase 2013/August 2021
PART ONE

SUBJECT CODE: 03
Time Allowed: 2:30 hours

BOOKLET CODE: 013
Number of Items: 100

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 21-year-old male patient presented with a complaint of productive cough of one month duration. He also has low grade fever, night sweats, weight loss and loss of appetite. On examination he is chronically sick looking with vital signs in the normal range; he has no remarkable systemic findings. Investigation of sputum microscopy showed mycobacterium bacilli.

   What is the best next step in the management of the patient?
   (A) Rifampicine and Isoniazide for two months
   (B) Rifampicine and Isoniazide for four months
   (C) Rifampicine, Isoniazide, Ethambutol and Pyrazinamide for four months
   (D) Rifampicine, Isoniazide, Ethambutol and Pyrazinamide for two months

2. A 49-year-old known RVI patient, who has been on ART for the last three years, came with a complaint of whitish coating over his tongue with difficulty and pain during swallowing of two weeks duration. His vital signs are in the normal range. On examination there is cheese coating over the tongue, extending to the pharynx, which bleeds while scraped using a spatula.

   What is the WHO clinical stage of the patient?
   (A) Stage I (B) Stage II (C) Stage III (D) Stage IV

3. A 20-year-old male came with complaints of on and off type high grade fever of five days duration. He also has history of headache and arthralgia. He is acutely sick looking and his cloth is infested with body lice. His pulse rate is 116/min, respirations are 20/min, temperature is 40.5^{0}C and blood pressure is 100/70 mmHg. Blood film shows multiple spirochetes.

   What is the drug of choice for the management of this patient?
   (A) Doxycycline
   (B) Ciprofloxacine
   (C) Erythromycine
   (D) Procaine penicillin

year-old female presented with a complaint of anterior neck swelling of five years duration. She also has increased thirst and appetite despite gradual decrement of her weight, easy fatigability, and warmness of her body.

What is the most appropriate initial investigation for the patient?
(A) FNAC of the thyroid mass
(B) Ultrasound of the thyroid
(C) Thyroid function test
(D) Radionuclide imaging

30. A 38-year-old female came with a complaint of right breast lump of one year duration which was gradually increasing in size. She also has an associated irregularity on the covering skin with nipple inversion. On examination, there is a 3x4 cm sized firm and irregular mass on the right breast with Peud'orange appearance of the covering skin and a 2x2 cm sized right axillary lymphadenopathy.

What is the most likely diagnosis of this patient?
(A) Chronic breast abscess
(B) Phylloide's tumor
(C) Breast cancer
(D) Breast TB

31. A 37-year-old male came to the OPD after he sustained a cut injury to his hand while working on a machine at his work place. He stated that he was vaccinated for tetanus twice about eight years back.

What is the appropriate management for the patient?
(A) Give him only tetanus immunoglobulin (TIG)
(B) Give him only tetanus anti-toxiod (TAT)
(C) Give him both TAT and TIG
(D) Clean wound and send home

32. A 20-year-old male came to an emergency OPD with complaints of abdominal pain, vomiting of ingested matter and loss of appetite associated with low grade fever of two days duration. He was holding his right side abdomen and bending down while coming to the OPD. On examination, there is direct and rebound tenderness at the right lower abdomen.

What is the most likely diagnosis of the patient?
(A) Peptic ulcer disease
(B) Acute cholecystitis
(C) Acute appendicitis
(D) Acute pancreatitis

16. A 39-year-old female was admitted in a hospital with the diagnosis of pyogenic meningitis after she presented with headache, fever and neck stiffness of four days duration. She was put on IV medication. On the third day of treatment, she started to complain of inability to move her left leg. She is alert with blood pressure of 120/80 mmHg, pulse rate of 98/min, respirations of 19/min and temperature of 37.7°C. On neurologic examination, her GCS is 15/15, and power is 3/5 in the left lower extremity and 5/5 in all other extremities

What is the most likely explanation for this patient's body weakness?
(A) Raised intracranial pressure
(B) Hydrocephalus
(C) Muscle atrophy
(D) Brain abscess

17. An 18-year-old female from rural area was brought to an emergency OPD with upper extremities weakness which is more on the right side of five days duration. She has difficulty in combing her hair but can write. She also has back, neck and muscle pain of the same duration. She has no history of vaccination. Her vital signs are in the normal range. On neurologic examination, her GCS is 15/15, power is 2/5 in the right upper limp, 3/5 in the left upper limp and 5/5 in the lower limbs bilaterally, and reflexes are absent

What is the most likely diagnosis of this patient?
(A) Poliomyelitis
(B) Acute myelopathies
(C) Myasthenia gravis
(D) Gullian barre syndrome

18. A 45-year-old woman presented with a four months history of joint pain in the hands associated with stiffness which lasts for about two hours every morning and improves in the afternoon. She has no past history of chronic illness. On physical examination, the small joints of the hands are swollen; the proximal interphalangeal joints are flexed with hyperextension of the distal interphalangeal joint, and the "boutonniere deformity" involving each finger of both hands. Investigation with ESR was 80 mm/hr.

What is the most likely clinical diagnosis?
(A) Osteoarthritis
(B) Rheumatoid arthritis
(C) Ankylosing spondylitis
(D) Systemic lupus erythematosus

19. A 40-year-old male patient presented with complaints of pain and swelling of the first toe of his right foot which began at night time four days ago. The pain and swelling was progressively worsening. He had similar condition a year back and it subsided spontaneously after five days. On musculoskeletal examination, the metatarsophalageal joint of the affected toe is swollen, warm to touch and extremely tender.

What is the most likely clinical diagnosis?
(A) Rheumatoid arthritis
(B) Acute gouty arthritis
(C) Septic arthritis
(D) Osteoarthritis

47. A 50-year-old male came with a complaint of left leg swelling of six months duration which worsens up on standing and long distance walking and relieved during sleeping. On examination, there are superficial, coiled, tortuous vessels seen on the medial surface of his left leg extending to his thigh.

What is the appropriate initial management for this patient?
(A) Encourage him to stay in supine position for longer hours
(B) Advise him to use elastic bandages on daytime
(C) Start him on anticoagulant medications
(D) Refer him to a specialist directly

48. An 18-month-old child was brought with a complaint of intractable vomiting of ingested matter and discomfort in his neck since two days ago. Chest X-ray showed that there is a circular radio opaque lesion behind the trachea.

What is the most likely diagnosis of this child?
(A) Foreign body aspiration
(B) Foreign body ingestion
(C) Esophageal stenosis
(D) Esophageal tear

49. A three-week-old infant, born at 32 weeks of gestation and weighing 1750 g, was brought to the OPD with complaints of abdominal distension, feeding intolerance, and vomiting. On examination, the infant is lethargic with grossly distended and tender abdomen. Laboratory investigation reveals leucopenia and thrombocytopenia. Plain abdominal x-ray shows air in the bowel wall.

What is the most appropriate immediate step in the management of the infant?
(A) NPO with IV fluids
(B) Systemic antibiotics
(C) Surgical consultation
(D) Nasogastric decompression

50. A four-day-old infant, delivered at home, was presented with complaints of irritability and difficulty in opening of the mouth associated with hunger and crying. Physical examination revealed tachypnea, tachycardia, fluctuating temperature and severe spasms with stimulation.

What measure could have prevented this condition from occurring?
(A) Active immunization of the neonate with DPT
(B) Maternal immunization with tetanus toxoid
(C) Human tetanus immunoglobulin
(D) Prophylactic antibiotics at birth

51. A neonate, born to diabetic mother, was brought to the clinic with irritability and jitteriness. He is large, plethoric and tremulous. Physical examination reveals tachycardia, tachypnea and hypothermia.

What is the most likely explanation for this condition?
(A) Hyperglycemia
(B) Hypercalcemia
(C) Hypoglycemia
(D) Polycythemia

24. A 19-year-old male patient presented with a complaint of easy fatigability associated with occasional fever for the past three weeks. He also had repeated episodes of epistaxis in the past three days. He is acutely sick looking, in pain, with blood pressure of 100/70 mmHg, pulse rate of 124/min, respirations of 24/min and temperature of 37.8°C. On examination, he has pale conjunctiva, axillary lymphadenopathy, tenderness over the sternum and hepatomegaly. His CBC results revealed WBC count of 40,000/mm^3, hemoglobin level of 10 mg/dl, and platelet count of 60,000/ml.

What is the most likely clinical diagnosis?
(A) Severe sepsis
(B) Hemolytic anemia
(C) Acute osteomyelitis
(D) Hematologic malignancy

25. A 40-year-old female patient was admitted to a medical ward with a diagnosis of severe community-acquired pneumonia five days back. She was started on prompt treatment with IV antibiotics but her vital signs fail to improve. On the sixth day of admission, she developed confusion. Her blood pressure is 80/40 mmHg, pulse rate is 136/min feeble, respirations are 26/min, and temperature is 38.8°C.

When is the most appropriate time to start vasopressor medication for the patient?
(A) After the fever subsides
(B) After 24 hours of IV antibiotics
(C) Immediately after the first record of BP
(D) When BP fails to improve after adequate IV fluid

26. A 22-year-old female student tried to commit suicide and ingested a "poison". She was brought to emergency unit within half an hour. The mother claims the chemical was "malathion". At presentation she had one episode of vomiting. Otherwise, she is conscious with vital signs in the normal range.

What is the next best step in the management of this patient?
(A) Decontaminate with charcoal
(B) Start IV fluid with NS
(C) Give her IV atropine
(D) Give IV antidote

27. A 45-year-old male patient came with a complaint of intractable vomiting of ingested matter which was intermittently blood tinged of four months duration. He has lost significant amount of weight since the onset of his problem. He looks emaciated, with blood pressure of 75/60 mmHg, and pulse rate of 100/min. Plain abdominal X-ray result shows enlarged gastric bubble and dilated proximal duodenum with paucity of air in the small bowel.

What is the most likely electrolyte abnormality that this patient could have?
(A) Hypokalemia and Hypochloremia
(B) Hyperkalemia and Hyperchloremia
(C) Hypernartemia and Hypermagnisemia
(D) Hypercalcemia and Hyperphosphatemia

83. A 19-year-old G-II, A-I lady presented to an emergency OPD with pushing down pain of 20 hours duration. She is exhausted with blood pressure of 90/60 mmHg, pulse rate of 112/min, respirations of 24/min and temperature of 37.9°C. On examination; uterus is 42 weeks sized with tenderness and retraction band, FHB is 116/min, and a 5 cm dilated cervix, moderate caput and excessive moulding at station -3, and ruptured membrane with offensive meconium stained liquor were the findings on pelvic examination.

What is the most likely diagnosis?
(A) Uterine rupture
(B) Obstructed labor
(C) Shoulder dystocia
(D) Prolonged PROM

84. A 26-year-old G-III, P-II mother presented with a pushing down pain of six hours duration at a gestational age of 39 weeks. Her blood pressure is 120/80 mmHg, pulse rate is 85/min, and temperature is 36.6°C. On obstetric examination, FHB is in the range of 140 to 150/min, cervix is dilated at 5 cm and the vertex is at station -3. Upon artificial rupture of membrane, there was G-I meconium stained liquor and fetal bradycardia in the range of 70 to 80/min is noted for 3 minutes without recovery.

What is the most likely diagnosis?
(A) Cord Prolapse
(B) Uterine Rupture
(C) Maternal Hypotension
(D) Meconium stained liqour

85. A 23-year-old G-I woman presented to the labor ward at active first stage of labor at 40 weeks of gestation. She had an uncomplicated prenatal course. Her blood pressure is 100/ 60 mmHg. On examination, fundal height is 40 cm with FHB of 156/min, and membranes are intact. After one hour of stay in the labor ward the FHB tracing becomes in the range of 160-166/min for two minutes.

What is the most appropriate next step in the patient's care?
(A) Perform Amniotomy
(B) Perform cesarean delivery
(C) Put her in left lateral position
(D) Put the woman in knee-chest position

86. A 24-year-old G-1 woman who is at gestational age of 40 weeks was started on induction of labor for gestational hypertension. She was given Oxytocin for 12 hours and reached a cervical dilation of 6 cm. She underwent cesarean delivery for an indication of non-reassuring fetal heart rate pattern. After delivery of the placenta, profuse bleeding was noted from the uterus, reaching 1500 mL.

What is the most likely cause for the patient's problems?
(A) Cervical laceration
(B) Uterine inversion
(C) Retained tissue
(D) Uterine Atony

96. A 59-year-old P-II mother came to a clinic with a compliant of increased abdominal girth associated with bloating, early satiety and urinary frequency of six months duration. She stated that she used to have irregular menstrual cycle and her age at menarche was at 10 years. On pelvic examination, there is a solid, fixed and irregular left adnexal mass. Routine laboratory investigation results are unremarkable.

What is the primary factor determining the prognosis of the patient?

(A) Duration of the illness
(B) Parity of the patient
(C) Stage of the disease
(D) Family history

97. A 23-year-old single woman came to a clinic for consultation about her reproductive health status. She had three sexual partners. Her age at first sexual intercourse was at 11 years. Her past gynecologic, medical and surgical histories are unremarkable. All the routine tests including HIV and PAP smear results are normal.

When is the next recommended PAP smear screening schedule for the woman?

(A) Every one year
(B) Every three years
(C) Every five years
(D) Every 10 years

98. A 47-year-old P-VI mother presented to a health center with a complaint of pelvic pressure and feeling of incomplete emptying of the bladder associated with low back pain of four years duration. Her past gynecologic, obstetric, medical and surgical histories are unremarkable. On pelvic examination, there is a relaxed and open genital hiatus with a thin-walled, smooth, and reducible bulged mass, the posterior and anterior vaginal walls are also bulged.

What is the most likely diagnosis?

(A) Pedunculated myoma
(B) Uterovaginal prolapse
(C) Gardner's cyst
(D) Lipoma of vagina

99. A five-year-old child was brought to the pediatric OPD with a complaint of ear pain and low grade intermittent fever of four days duration. On physical examination, temperature is 37.9°C but other vital signs were in the normal range. Otoscopic examination revealed a bulged and hyperemic tympanic membrane, and minimal middle ear effusion.

What is the next step in the management of the patient?

(A) Treat with oral antibiotics
(B) Send home with reassurance
(C) Advise to ear wash twice daily
(D) Admit and treat with IV antibiotics

87. A 33-year-old P-2 mother was brought to the emergency room with a complaint of excessive bleeding after she gave birth to a male newborn two hours back at home. She is confused with rapid pulse of 90/bt, pulse rate of 130/min and respiration of 24/min. On examination, uterus is 20 weeks sized and well contracted, and pelvic examination revealed a soft, bulky tissue on the cervical os with no visible lacerations.

What is the most appropriate management for the patient?
(A) Secure IV line and start Oxytocin drips
(B) Do bimanual compression of the uterus
(C) Perform manual exploration of the uterus
(D) Close the vulva and suture the lacerations

88. A 24-year-old primipara presented to a postnatal clinic with a complaint of low-grade intermittent fever of two days duration on her fifth post-operative day after cesarean section. She also has left leg pain and swelling. On examination, her vital signs are in the normal range and there is a grossly swollen, mildly tender left leg with a 4 cm discrepancy from the right. There is no other remarkable systemic finding.

What is the most likely diagnosis?
(A) Cellulitis
(B) Lymphatic Filariasis
(C) Deep vein thrombosis
(D) Septic thrombo-phlebitis

89. A 38-year-old woman is diagnosed with uterine myoma based on a pelvic examination revealing an enlarged irregular uterus and pelvic ultrasound findings six months back. She is currently asymptomatic but stated to have increment in abdominal girth.

What is the most common manifestation of the most likely diagnosis?
(A) Pelvic pain
(B) Menorrhagia
(C) Oligomenorrhea
(D) Recurrent abortion

90. A 17-year-old female presented to the gynecologic OPD accompanied by her classmates after she started to experience abdominal pain in class. She is on the second day of her regular menstrual cycle. She has history of similar complaints previously. On examination, she is in acute pain but there are no remarkable findings in all systems. Routine laboratory investigations were unremarkable.

What is the most appropriate drug management for the patient?
(A) IV Pethidine
(B) IV Diazepam
(C) PO Ibuprofen
(D) PO Diazepam

61. A two-year-old boy was presented with complaints of shortness of breath, chest tightness and cough of two hours duration. He had these symptoms on daily basis. On physical examination, he has nasal flaring, tachypnea, intercostal retractions and diffused wheezing all over the lung fields.

What is the most effective management for the boy?
(A) Systemic steroids
(B) Inhalational SABA
(C) Inhalational LABA
(D) Inhalational Steroids

62. A worried family brought their one-year-old child to the emergency OPD complaining of decreased urine amount of four days duration. The emergency team decided to investigate him on the line of acute renal failure and to differentiate which type of acute renal failure the child is suffering from.

What is the most important factor that helps reach to the diagnosis?
(A) Urine analysis
(B) Urinary indices
(C) Serum Creatinine
(D) Abdominal ultrasound

63. An 18-month-old boy was brought to an emergency OPD after having abnormal body movement which is characterized by flexion and extension of extremities, drooling of saliva and up-rolling of the eyes that lasted for approximately three minutes. He was well except that he had fever preceding the abnormal body movement. His temperature is 39^0C. Laboratory investigations were non-revealing.

What is the most appropriate next step in the management of this case?
(A) Diazepam
(B) Antipyretics
(C) Antiepileptic Drugs
(D) Reassure and send home

64. A 12-month-old infant, who was on formula feeding since one month, was brought to the OPD for a routine checkup. The mother reported that she has been feeding her child goats' milk. Vital signs were in the normal range. On CBC test, Hemoglobin is 9.8 g/l with MCV of 115 fL, and Neutrophils are large and have hyper-segmented nuclei.

What is the most likely explanation for these findings?
(A) β-thalasemia
(B) Iron deficiency anemia
(C) Sideroblastic anemia
(D) Folate deficiency anemia

65. A four-year-old child was presented with complaints of vomiting and diarrhea of three days duration. On physical examination; vital signs are in the normal range, weight for height is 60%, and there is bilateral pitting edema.

What is the most likely diagnosis?
(A) Marasmus
(B) Kwashiorkor
(C) Moderate malnutrition
(D) Marasmic-Kwashiorkor

66. A five-year-old male child, who was admitted in the ward and being treated for severe acute malnutrition (marasmus) for the past one week, currently develops profuse watery diarrhea of 12 hours duration. On physical examination; he is lethargic with pulse rate of 120/min weak, has sunken eye ball and cold feet, and skin pinch goes back slowly.

What is the most appropriate next step in the management of the child?
(A) ReSoMal 10 ml/kg over the first hour
(B) Ringers Lactate IV 20 ml/kg over 30 minutes
(C) Ringers Lactate IV 15 ml/kg over the first hour
(D) ReSoMal 5 ml/kg every 30 minutes for two hours

67. Data from one of the rural health centers showed that the number of under-five children with malnutrition was significantly high. Associated with this, majority of the cases seen at the OPD were diarrheal diseases. The health center wants to target the community and do prevention for malnutrition.

What is the most appropriate measure to be taken in this area?
(A) Promoting key hygiene behavior
(B) Promoting exclusive breast-feeding
(C) Fortifying commonly eaten foods with micronutrients
(D) Promoting adequate and timely complementary feeding

68. A well looking female child came for check up. During evaluation, she can run well and put three words together.

What is the lowest estimated age of the child?
(A) 15 months (B) 24 months (C) 30 months (D) 36 months

69. A two-year- old boy was presented with a complaint of barking cough of two days duration. Associated with this, he has low grade fever and stridor at rest. He is restless with oxygen saturation of 89% and has severe chest indrawing.

What is the most appropriate next step in the patient's care?
(A) Secure IV line and resuscitate (C) Give him antibiotics
(B) Refer him for tracheostomy (D) Put him on oxygen

70. A six-year-old girl, who was having profuse watery diarrhea for two days, was currently presented to the emergency OPD after she became lethargic. She also has decreased urine output and minimal bleeding from one nostril. On examination; her pulse rate is 124/min feeble, and she has dry buccal mucosa and poor skin turgor. Her serum Creatinine level is 1.9 mg/dl (NR. Serum Cr. = 0.6 – 1.2 mg/dl)

What is the most likely diagnosis?
(A) Septic shock (C) Cardiogenic shock
(B) Distributive shock (D) Hypovolemic shock

75. A 32-year-old G-II mother came to the ANC clinic for the first visit with complaints of severe nausea and persistent vomiting. She is amenorrhic for the past 12 weeks. She asks for termination of the pregnancy since she is not tolerating these symptoms.

What is the most appropriate advice for the mother?
(A) Advise her that this condition is treatable
(B) Advise her to use ginger and spicy foods
(C) Advise her on complications of abortion
(D) Advise her on the line of termination

76. A 24-year-old G-III, P-I, A-I mother, whose LNMP is not known but claims to be amenorrhic for the past one and half months, came to a health center with complaints of vaginal bleeding and severe lower abdominal pain of two days duration. She has history of recurrent STI treatment since the age of 18 years. Her blood pressure is 90/50 mmHg, pulse rate is 120/min and temperature is 36.2^0C. On abdominal examination, there is left lower quadrant tenderness and on pelvic examination cervix is closed and there is blood on examining finger. Urine HCG test was positive two days before her presentation.

What is the most appropriate next step in the diagnosis of her condition?
(A) Abdominal ultrasound
(B) Repeat urine HCG
(C) Serum Beta HCG
(D) Pelvic ultrasound

77. A 28-year-old G-III, P-I, A-I (induced abortion) mother came to a health center for the first ANC visit. Her LNMP is not known but she claimed to be amenorrheic for the past 12 weeks. She is a known RVI patient on ART (TDF + 3CT + EFV) for the last five years. Her vital signs are in the normal range. Routine antenatal investigations results are normal.

What is the most appropriate management for the patient?
(A) Continue the same ART regimen
(B) Change the ART regimen
(C) Refer her to hospital
(D) Repeat the HIV test

78. A 32-year-old G-IV, P-III mother presented to an emergency OPD at 38 weeks of gestation with a complaint of bright red and painless vaginal bleeding of two days duration. She has no other complaint and her antenatal course was uneventful. Her vital signs are in the normal range. Obstetric examination revealed a 38 weeks sized uterus with a FHB of 144/min and no active vaginal bleeding. Ultrasound showed a singleton pregnancy with reassuring biophysical profile and placenta implanted in the lower uterine segment covering the internal cervical os.

What is the next step in the management of the mother?
(A) Reassure and send her home
(B) Admit her and start corticosteroids
(C) Admit her and prepare for elective C/S
(D) Start induction of labor with Oxytocin

16. A 39-year-old female was admitted in a hospital with the diagnosis of pyogenic meningitis after she presented with headache, fever and neck stiffness of four days duration. She was put on IV medication. On the third day of treatment, she started to complain of inability to move her left leg. She is alert with blood pressure of 120/80 mmHg, pulse rate of 98/min, respirations of 19/min and temperature of 37.7°C. On neurologic examination, her GCS is 15/15, and power is 3/5 in the left lower extremity and 5/5 in all other extremities

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What is the most likely clinical diagnosis?
(A) Rheumatoid arthritis
(B) Acute gouty arthritis
(C) Septic arthritis
(D) Osteoarthritis

71. An eight-year-old boy was brought to emergency department after he lost his consciousness for 30 minutes. He also has two episodes of vomiting; otherwise it was difficult to obtain further history. His pulse rate is 104/min, temperature is 38.3°C and GCS is 7/15.

What is the most appropriate initial step in the management of this case?
(A) Secure airway
(B) Start antibiotics
(C) Give IV fluid fast
(D) Secure IV line and give IV 40% Dextrose

72. An 11-year-old female presented with complaints of cough and shortness of breath of three hours duration. She has recurrent history of similar complaints. On examination; she looks confused and is cyanotic, her pulse rate is 110/min, respirations are 56/min, temperature is 36°C, oxygen saturation is 53%, and she has diffuse expiratory wheezing. She was diagnosed as having severe exacerbation.

Which sign is the **LEAST** important indicator of asthma severity in the child?
(A) Low O_2 saturation
(B) Presence of cyanosis
(C) Change in mentation
(D) Expiratory wheezing

73. A 15-year-old child came to an OPD for regular checkup. He reported that he has frequent micturition which is more at night, excessive thirst, and voracious appetite. His father is diabetic and is on medication. Physical examination was remarkable for BMI which is 30 kg/m^2 and darkening on his neck and flexural areas. RBS of 240 mg/dl, and elevated Triglycerides and LDL levels were the laboratory investigation findings.

What is the most likely diagnosis?
(A) Diabetes insipidus
(B) Type-I diabetes mellitus
(C) Type-II diabetes mellitus
(D) Maturity onset diabetes of the youth

74. A seven-year-old girl, who is a known diabetic patient and is on Insulin, presented with complaints of abdominal pain and vomiting of two days duration. She also has increased frequency of micturition and thirst. She is confused and disoriented to time and place but her vital signs are in the normal range. Treatment was initiated immediately and after two hours her RBS becomes 170 mg/dl, and venous PH becomes 7.1.

What is the most appropriate next step in the management of the patient?
(A) Add 5% Dextrose to the fluid
(B) Increase same dose of Insulin
(C) Change IV fluids to oral
(D) Discontinue the Insulin

8. A 24-year-old male came with a complaint of cough of seven days duration. He also has high grade fever, chest pain and fast breathing. Otherwise, he has no history of hospital admission or treatment for similar condition. His pulse rate is 108/min, respirations are 26/min and temperature is 38.1^{0}C. On examination, there is dullness and bronchial breath sound over the left middle 1/3rd of the posterior chest. Chest x-ray shows that there is a homogeneous opacity over the middle third of the right chest.

What is the next best step in the management of the patient?

(A) Clarithromycine
(B) Augmentine
(C) Ceftriaxone
(D) Cefuroxime

9. A 28-year-old male presented with complaints of shortness of breath and dry cough of two weeks duration. He also has low grade fever and decreased appetite. He is chronically sick looking with vital signs in the normal range. On respiratory examination, there is dullness and absent air entry over the posterior lower 1/3rd of the left chest.

What is the most likely explanation for this finding?

(A) Consolidation
(B) Lung abscess
(C) Bronchiectasis
(D) Pleural effusion

10. A 29-year-old female, who is a known asthmatic patient on intermittent Salbutamol puff for the last two years, came for routine follow up. She states that she has been using her Salbutamol puff more than three times a day to get relieved in the last one month.

What is the most appropriate next step in the management of this patient?

(A) Oral corticosteroid
(B) Long acting B-agonist(LABA)
(C) Low dose inhaled corticosteroid
(D) High dose inhaled corticosteroid

11. A 27-year-old female came with a complaint of fever of five days duration. She has history of IV drug use for the last one year. Her blood pressure is 120/78 mmHg, pulse rate is 120/min, respirations are 24/min and temperature is 39.2^{0}C. On cardiovascular examination, there is systolic murmur at the apex. Laboratory investigation results show hemoglobin level of 9.5 mg/dl and positive blood culture for Staphylococcus aureus.

What is the most likely diagnosis of this patient?

(A) Infective endocarditis
(B) Acute rheumatic fever
(C) Acute pericarditis
(D) Myocarditis

12. A 66-year-old male came to a clinic for blood pressure check up. Two months back, his blood pressure was 144/92 mmHg and he was advised to have salt free diet and to start follow up. His blood pressure is 158/99 mmHg, pulse rate is 74/min, respirations are 14/min and temperature is 36.7°C. There is no remarkable systemic finding on examination. His serum Creatinine is 0.9 mg/dl. (NR: Serum Cr. = 0.6 – 1.2 mg/dl)

What is the next best step in the management of this patient?
(A) Start single PO anti-hypertensive drug
(B) Start combined PO anti-hypertensive drugs
(C) Appoint him after two days for repeat measurement
(D) Advise on life style modification and send him home

13. A 28-year-old male came to an emergency OPD with a complaint of shortness of breath of six hours duration. He also has pleuritic type of chest pain which improves with leaning forward and worsens with supine position, high grade fever, and dry cough of four days duration. He is acutely sick looking with blood pressure of 70/50 mmHg, pulse rate of 112/min, respirations of 32/min, temperature of 38.7°C. Distended neck veins and distal heart sounds are the findings on cardiovascular examination.

What is the most likely diagnosis of the patient?
(A) Severe pneumonia
(B) Cardiac tamponade
(C) Pulmonary embolism
(D) Spontaneous pneumothorax

14. A 30-year-old male came with complaints of watery diarrhea and vomiting of five days duration. He was being treated with oral antibiotics and ORS but has no improvement. Three days later, he started to complain of decreased urine output and headache. He is lethargic with blood pressure of 140/97 mmHg, pulse rate of 122/min, respirations of 24/min and temperature of 36.8°C. On investigation, serum Creatinine level is 5.4 mg/dl and stool examination shows trophozoite of Giardiasis. (NR: Serum Cr. = 0.6 – 1.2 mg/dl)

What is the most likely cause of the patient's current condition?
(A) Oral antibiotic
(B) GI fluid loss
(C) Sepsis of GI focus
(D) Obstructive uropathy

15. A 35-year-old woman came with complaint of right side flank pain of one day duration. She also has high grade fever and repeated vomiting. She is acutely sick looking with blood pressure of 90/60 mmHg, pulse rate of 124/min, respirations of 22/min and temperature of 40.2°C. On examination, there is right side costovertebral angle tenderness. Laboratory investigation results show, WBC count of 19,000/mm^3 and 12 WBC/HPF on urine analysis.

What is the next best step in the management of this patient?
(A) Abdominal ultrasound
(B) Repeat urine analysis
(C) Start PO antibiotics
(D) Start IV antibiotics

61. A two-year-old boy was presented with complaints of shortness of breath, chest tightness and cough of two hours duration. He had these symptoms on daily basis. On physical examination, he has nasal flaring, tachypnea, intercostal retractions and diffused wheezing all over the lung fields.

What is the most effective management for the boy?
(A) Systemic steroids
(B) Inhalational SABA
(C) Inhalational LABA
(D) Inhalational Steroids

62. A worried family brought their one-year-old child to the emergency OPD complaining of decreased urine amount of four days duration. The emergency team decided to investigate him on the line of acute renal failure and to differentiate which type of acute renal failure the child is suffering from.

What is the most important factor that helps reach to the diagnosis?
(A) Urine analysis
(B) Urinary indices
(C) Serum Creatinine
(D) Abdominal ultrasound

63. An 18-month-old boy was brought to an emergency OPD after having abnormal body movement which is characterized by flexion and extension of extremities, drooling of saliva and up-rolling of the eyes that lasted for approximately three minutes. He was well except that he had fever preceding the abnormal body movement. His temperature is 39°C. Laboratory investigations were non-revealing.

What is the most appropriate next step in the management of this case?
(A) Diazepam
(B) Antipyretics
(C) Antiepileptic Drugs
(D) Reassure and send home

64. A 12-month-old infant, who was on formula feeding since one month, was brought to the OPD for a routine checkup. The mother reported that she has been feeding her child goats' milk. Vital signs were in the normal range. On CBC test, Hemoglobin is 9.8 g/l with MCV of 115 fL, and Neutrophils are large and have hyper-segmented nuclei.

What is the most likely explanation for these findings?
(A) β-thalassemia
(B) Iron deficiency anemia
(C) Sideroblastic anemia
(D) Folate deficiency anemia

65. A four-year-old child was presented with complaints of vomiting and diarrhea of three days duration. On physical examination, vital signs are in the normal range, weight for height is 60%, and there is bilateral pitting edema.

What is the most likely diagnosis?
(A) Marasmus
(B) Kwashiorkor
(C) Moderate malnutrition
(D) Marasmic-Kwashiorkor

56. An eight-year-old child came to an OPD complaining of intermittent fever of one day duration. He also has repeated vomiting of ingested matter, one episode of generalized abnormal body movement and reddish discoloration of urine. On examination; his temperature is 39.6^{0}C, GCS is 14/15, and has pale conjunctiva with icteric Sclera. Laboratory investigation results show Hematocrit level of 28%, RBS of 45 mg/dl and serum Creatinine level of 1.1 mg/dl. (NR: Serum Cr. = 0.6 – 1.2 mg/dl)

What is the most prevalent severity sign in this child?
(A) Jaundice
(B) Convulsion
(C) Renal failure
(D) Haemoglobinuria

57. A five-year-old child was presented with complaints of foul smelling diarrhea associated with crampy abdominal pain, bloating, and flatulence of three weeks duration. Stool examination shows trophozoite stage of a parasite.

What is the most appropriate first line drug for this case?
(A) Tinidazole
(B) Praziquental
(C) Albendazole
(D) Metronidazole

58. A seven-year-old child has easy fatigability, dyspnea, and body swelling. On physical examination; the child is in cardio-respiratory distress with tachypnea and tachycardia, and he has paper white conjunctiva and palms, a gallop rhythm, hepatomegaly, and pitting pedal edema. Management for heart failure was initiated at the emergency.

What is the most likely precipitant of the heart failure in the child?
(A) Rheumatic fever
(B) Severe Anemia
(C) Myocarditis
(D) Arrhythmia

59. A seven-year-old child came with a referral letter from another Hospital. She has been on Furosemide and Predinsolone for acute rheumatic fever for the past two weeks.

What is the most appropriate next step in the patient's care?
(A) Follow up with weekly Bezanthine penicillin
(B) Bezanthine penicillin for subsequent 10 days
(C) Follow up with monthly bezanthine penicillin
(D) Follow up with single dose of Bezanthine penicillin

60. A four-year-old child was presented with complaints of barking cough, hoarseness of voice and inspiratory stridor. He was fully vaccinated. On physical examination; the child is cyanotic and in respiratory distress, his temperature is 38.5^{0}C, has stridor at rest, and pharynx was erythematous.

What is the initial mainstay of treatment for the child?
(A) Dexamethasone
(B) Use of cool mist
(C) Air way management
(D) Nebulized racemic Epinephrine

65. A public health surveillance department has included twenty diseases under the routine surveillance program. From this disease list, poliomyelitis, dracunculiasis and neonatal tetanus are placed in one category.

What is the most likely criterion to select those diseases for national surveillance?
(A) They are international concerns
(B) They are targeted for eradication
(C) They have high pandemic potential
(D) They have significant public health importance

66. An outbreak investigation team received a report of suspected malaria cases from a local health extension worker. The report stated that there were 15 new cases in the area within three days alone.

What is the most important information required to decide as an outbreak?
(A) Bed net utilization (C) Size of the population
(B) Status of the cases (D) Source of the infection

67. An organization develops an action plan to tackle obesity through community based intervention program in a district. In the proposed action plan, nutritional education and school physical activity were given much emphasis during the planning.

What is the prevention interventions planned?
(A) Primary prevention (C) Tertiary prevention
(B) Secondary prevention (D) Primordial prevention

68. Various scholars from different disciplines were invited to educate the youth of a community to increase their awareness on HIV/AIDS from social, psychological and health perspectives.

Which teaching method is best to be applied in this case?
(A) Panel discussion (C) Meeting
(B) Symposium (D) Forum

69. A woreda health office head is planning to organize behavioral change communication message in a community where there is low condom utilization rate despite the presence of high HIV transmission. Majority of the community members are illiterates.

What is the most appropriate way of organizing the message?
(A) Mild fear arousal apple (C) Negative apple
(B) One sided apple (D) Factual apple

68. A health inspector's report of a visit in a district prison indicated that the prisoner's living condition is overcrowded. Additionally their personal hygiene is very poor and their clothes are infested with lice.

What is the most likely communicable disease the prisoners are at risk of?
(A) Bubonic plague
(B) Endemic typhus
(C) Epidemic typhus
(D) Pneumonic plague

69. A healthcare provider, leading a school health program, establishes an integrated health service within the community. The first component of school health program was provision of health essentials in the school environment.

What is the most likely activity to meet the planned objective?
(A) Provision of balanced nutritional support
(B) Provision of safe and adequate water supply
(C) Integration of the school health with community
(D) Organization of communicable disease control team

70. A country located at seashore was hit by an earthquake followed by a massive land slide. The disaster caused loss of life, property damage, socioeconomic disruption and environmental degradation.

What is the most appropriate category of the disaster?
(A) Biological disaster
(B) Complex disaster
(C) Geophysical disaster
(D) Hydrogeological disaster

71. In a metropolitan city of a country, gun violence disaster became a major public health problem. To address the problem, the responsible bodies established a team to alleviate this public health problem.

What is the most appropriate initial measure to be taken by the team?
(A) Investigation of the cause of the violence
(B) Provision of support for the victim families
(C) Integrated approach to stop the gun violence
(D) Public awareness to cope with consequence of the violence

72. A hospital's waste disposal team planned to dispose a mixed healthcare waste, which was mostly composed of contaminated bandage, gloves, paper and cardboards.

What will be the most appropriate waste management technique?
(A) Separating and disposing
(B) Disinfecting all and land filling
(C) Incinerating all and land filling the ash
(D) Controlled burning and burial of the ash

4. A 30-year-old male patient came to a clinic after he sustained nail prick injury to his foo while working at construction site a day back. Upon evaluation the wound is deep and clean.

What is the most appropriate next step in the management of this patient?
(A) PO antibiotics
(B) Tetanus anti-toxin
(C) Wound debridement
(D) Tetauns immunoglobulin

5. A 34-year-old male patient came with a complaint of worsening of epigastric pain of two weeks duration. He was repeatedly treated with anti-acids and Omeprazole in the last three years. He is chronically sick looking with vital signs in the normal range. On examination, he has pale conjunctiva and non icteric sclera, and there is mild epigastric tenderness. Laboratory investigation results showed hemoglobin level of 8.4 mg/dl, and negative *H. pylori* test.

What is the most likely anticipated complication in this patient?
(A) Gastric outlet obstruction
(B) Gastrointestinal bleeding
(C) Perforated peptic ulcer
(D) Gastric lymphoma

6. A 26-year-old male presented with complaints of bloody diarrhea and fever of 12 hours duration. He reported that, a day back he had eaten raw vegetables at a local restaurant. His pulse rate is 116/min, temperature is 38°C, blood pressure is 90/60 mmHg and respirations are 20/min. He has no remarkable systemic findings on examination.

What is the likely clinical diagnosis of this patient?
(A) Shigellosis
(B) Giardiasis
(C) Taeniasis
(D) Cholera

7. A 54-year-old male came with a complaint of abdominal distension of one month duration. His pulse rate is 100/min, respirations are 20/min, blood pressure is 100/70 mmHg and temperature is 36.8°C. On examination, he has grossly distended abdomen with positive signs of fluid collection, gynaecomastia and erythematous palms. On investigation, HBSAg is reactive.

What is the most likely diagnosis of this patient?
(A) Chronic liver disease 2^0 to Autoimmune hepatitis
(B) Chronic liver disease 2^0 to Chronic viral hepatitis
(C) Chronic liver disease 2^0 to Drug induced hepatitis
(D) Chronic liver disease 2^0 to Alcoholic hepatitis

8. A 24-year-old male came with a complaint of cough of seven days duration. He also has high grade fever, chest pain and fast breathing. Otherwise, he has no history of hospital admission or treatment for similar condition. His pulse rate is 108/min, respirations are 26/min and temperature is 38.1°C. On examination, there is dullness and bronchial breath sound over the left middle 1/3rd of the posterior chest. Chest x-ray shows that there is a homogeneous opacity over the middle third of the right chest.

What is the next best step in the management of the patient?
(A) Clarithromycine
(B) Augmentine
(C) Ceftriaxone
(D) Cefuroxime

9. A 28-year-old male presented with complaints of shortness of breath and dry cough of two weeks duration. He also has low grade fever and decreased appetite. He is chronically sick looking with vital signs in the normal range. On respiratory examination, there is dullness and absent air entry over the posterior lower 1/3rd of the left chest.

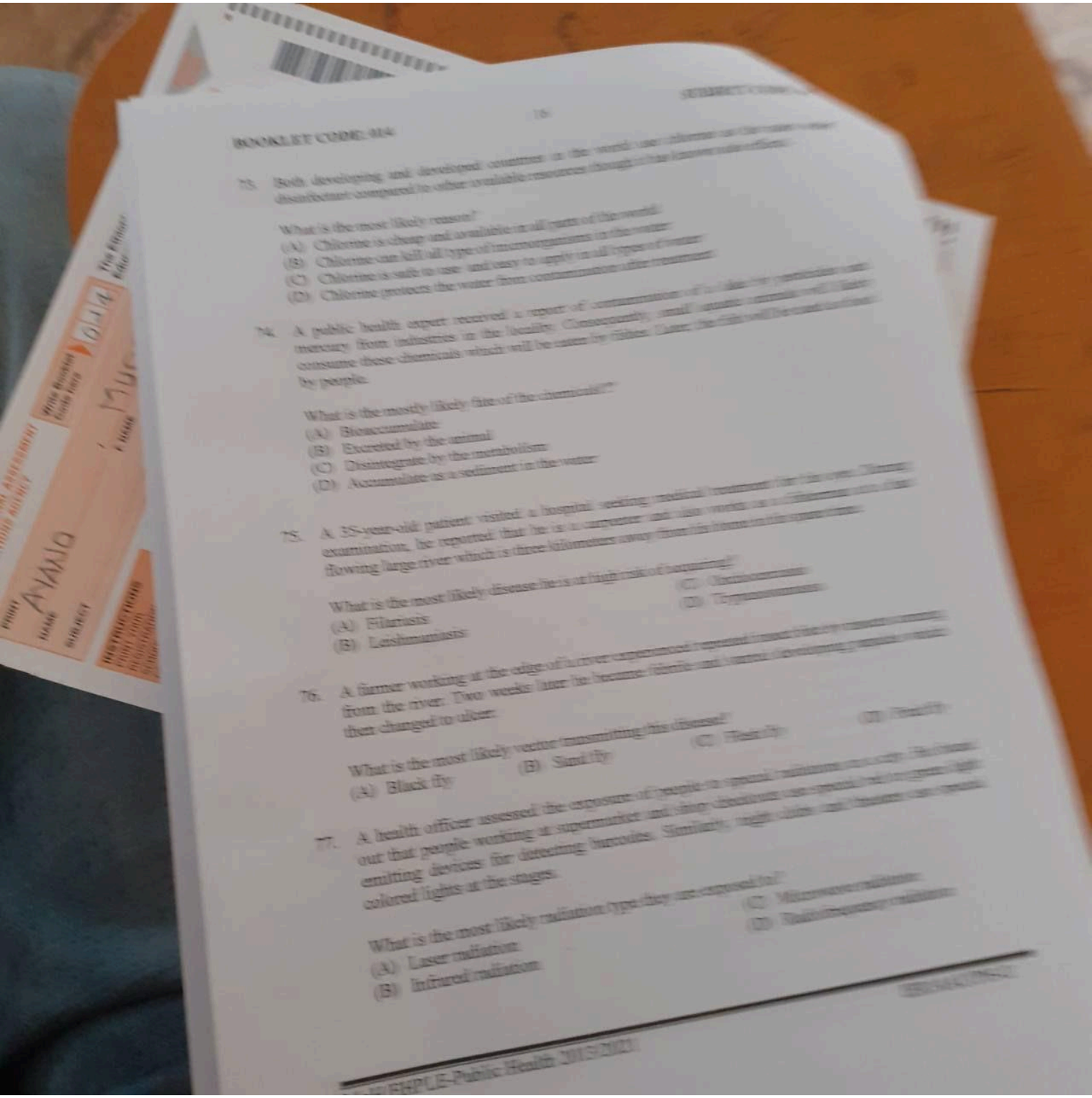
What is the most likely explanation for this finding?
(A) Consolidation
(B) Lung abscess
(C) Bronchiectasis
(D) Pleural effusion

10. A 29-year-old female, who is a known asthmatic patient on intermittent Salbutamol puff for the last two years, came for routine follow up. She states that she has been using her Salbutamol puff more than three times a day to get relieved in the last one month.

What is the most appropriate next step in the management of this patient?
(A) Oral corticosteroid
(B) Long acting B-agonist(LABA)
(C) Low dose inhaled corticosteroid
(D) High dose inhaled corticosteroid

11. A 27-year-old female came with a complaint of fever of five days duration. She has history of IV drug use for the last one year. Her blood pressure is 120/78 mmHg, pulse rate is 120/min, respirations are 24/min and temperature is 39.2°C. On cardiovascular examination, there is systolic murmur at the apex. Laboratory investigation results show hemoglobin level of 9.5 mg/dl and positive blood culture for Staphylococcus aureus.

What is the most likely diagnosis of this patient?
(A) Infective endocarditis
(B) Acute rheumatic fever
(C) Acute pericarditis
(D) Myocarditis



BOOKLET CODE: 014

75. Both developing and developed countries in the world use chlorine as the main water disinfectant compared to other available treatment chemicals in the water supplies.

What is the most likely reason?
(A) Chlorine is cheap and available in all parts of the world.
(B) Chlorine can kill all type of microorganisms in the water.
(C) Chlorine is safe to use and easy to apply to all types of water.
(D) Chlorine protects the water from contamination after treatment.

74. A public health expert received a report of contamination of a lake by mercury from industries in the locality. Consequently, small aquatic animals of the lake consume these chemicals which will be eaten by fishes. Later, the fishes will be consumed by people.

What is the mostly likely fate of the chemical?
(A) Bioaccumulate
(B) Excreted by the animal
(C) Disintegrate by the metabolism
(D) Accumulate as a sediment in the water

75. A 35-year-old patient visited a hospital seeking medical treatment for his eyes. During examination, he reported that he is a carpenter and also works as a shepherd on the flowing large river which is three kilometers away from his home environment.

What is the most likely disease he is a high risk of having?
(A) Filariasis
(B) Leishmaniasis
(C) Onchocerciasis
(D) Trypanosomiasis

76. A farmer working at the edge of a river experienced painful reddening and inflammation from the river. Two weeks later he became feverish and started experiencing painful rashes then changed to ulcers.

What is the most likely vector transmitting this disease?
(A) Black fly
(B) Sand fly
(C) Tsetse fly
(D) Tsetse fly

77. A health officer assessed the exposure of people to neural radiation in a city. He found out that people working at supermarket and shop checkout use metal detectors as security emitting devices for detecting barcodes. Similarly, night clubs and theatres use neon colored lights at the stages.

What is the most likely radiation type they are exposed to?
(A) Laser radiation
(B) Infrared radiation
(C) Microwave radiation
(D) Radiofrequency radiation

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47. A 50-year-old male came with a complaint of left leg swelling of six months duration which worsens up on standing and long distance walking and relieved during sleeping. On examination, there are superficial, coiled, tortuous vessels seen on the medial surface of his left leg extending to his thigh.

What is the appropriate initial management for this patient?
(A) Encourage him to stay in supine position for longer hours
(B) Advise him to use elastic bandages on daytime
(C) Start him on anticoagulant medications
(D) Refer him to a specialist directly

48. An 18-month-old child was brought with a complaint of intractable vomiting of ingested matter and discomfort in his neck since two days ago. Chest X-ray showed that there is a circular radio opaque lesion behind the trachea.

What is the most likely diagnosis of this child?
(A) Foreign body aspiration
(B) Foreign body ingestion
(C) Esophageal stenosis
(D) Esophageal tear

49. A three-week-old infant, born at 32 weeks of gestation and weighing 1750 g, was brought to the OPD with complaints of abdominal distension, feeding intolerance, and vomiting. On examination, the infant is lethargic with grossly distended and tender abdomen. Laboratory investigation reveals leucopenia and thrombocytopenia. Plain abdominal x-ray shows air in the bowel wall.

What is the most appropriate immediate step in the management of the infant?
(A) NPO with IV fluids
(B) Systemic antibiotics
(C) Surgical consultation
(D) Nasogastric decompression

50. A four-day-old infant, delivered at home, was presented with complaints of irritability and difficulty in opening of the mouth associated with hunger and crying. Physical examination revealed tachypnea, tachycardia, fluctuating temperature and severe spasms with stimulation.

What measure could have prevented this condition from occurring?
(A) Active immunization of the neonate with DPT
(B) Maternal immunization with tetanus toxoid
(C) Human tetanus immunoglobulin
(D) Prophylactic antibiotics at birth

51. A neonate, born to diabetic mother, was brought to the clinic with irritability and jitteriness. He is large, plethoric and tremulous. Physical examination reveals tachycardia, tachypnea and hypothermia.

What is the most likely explanation for this condition?
(A) Hyperglycemia
(B) Hypercalcemia
(C) Hypoglycemia
(D) Polycythemia

52. A one-year-old infant was brought to the clinic with complaints of low grade fever and runny nose followed by paroxysm of whooping cough of two weeks duration. He has shortness of breath and becomes restless during the episodes of cough; and vomits following the paroxysms of cough. The mother says that the infant has not been vaccinated.

Which vaccine could have prevented this condition?
(A) BCG (B) OPV (C) DPT (D) Vitamin A

53. A mother brought her two-year-old child with complaints of coryza, cough, conjunctivitis, and fever. The mother states that the child has a rash that began from the face and spread caudally. The immunization record is not up-to-date. Physical examination is remarkable for a morbilliform rash over the body including the palms, and tiny grayish white dots on the buccal mucosa next to the third molar.

What is the most likely diagnosis?
(A) Rubella (B) Mumps (C) Measles (D) Varciella

54. A five-year-old boy was brought to a health center after having watery diarrhea of one day duration. He also has abdominal pain and vomiting of ingested matter. He drinks water eagerly .On examination, the child is irritable and has sunken eye balls and skin pinch goes back slowly.

What is the most appropriate initial management for the patient?
(A) Give fluid and food to treat diarrhea at home
(B) Give fluid and food for some dehydration
(C) Give fluid for severe dehydration
(D) Give Antibiotics for the infection

55. A four-year-old girl was brought to a health center with complaints of cough, fever and shortness of breath of two weeks duration. She has weight loss and loss of appetite. She was given Amoxicillin syrup a week back for the same complaint but she has no significant improvement. Her father has been coughing for the past six months. She is fully vaccinated. Her vital signs and anthropometry are in the normal range. Her ESR is 80 mm/hr.

What is the most likely diagnosis?
(A) Bronchitis
(B) Pneumonia
(C) Presumptive tuberculosis
(D) Hyperactive airway diseases

53. A manager of a primary hospital identified low performance of antenatal care coverage in the previous year. Thus, the manager prepared a plan to improve it using the available resources after identifying the gaps.

Which step of planning is the most appropriate in this case?
(A) Situational analysis
(B) Setting objectives and targets
(C) Setting critical priority problems
(D) Identifying obstacles and limitations

54. A manager of a general hospital assigns resources and health professionals into different departments so as to achieve the organizational goals and objectives.

Which element of organization structure is applied?
(A) Authority
(B) Delegation
(C) Decentralization
(D) Division of labor

55. A health officer, who is working as a manager in a *woreda* health office, went to another place for a field work. He assigned one of his subordinates to perform on behalf of him until he returns from his field work.

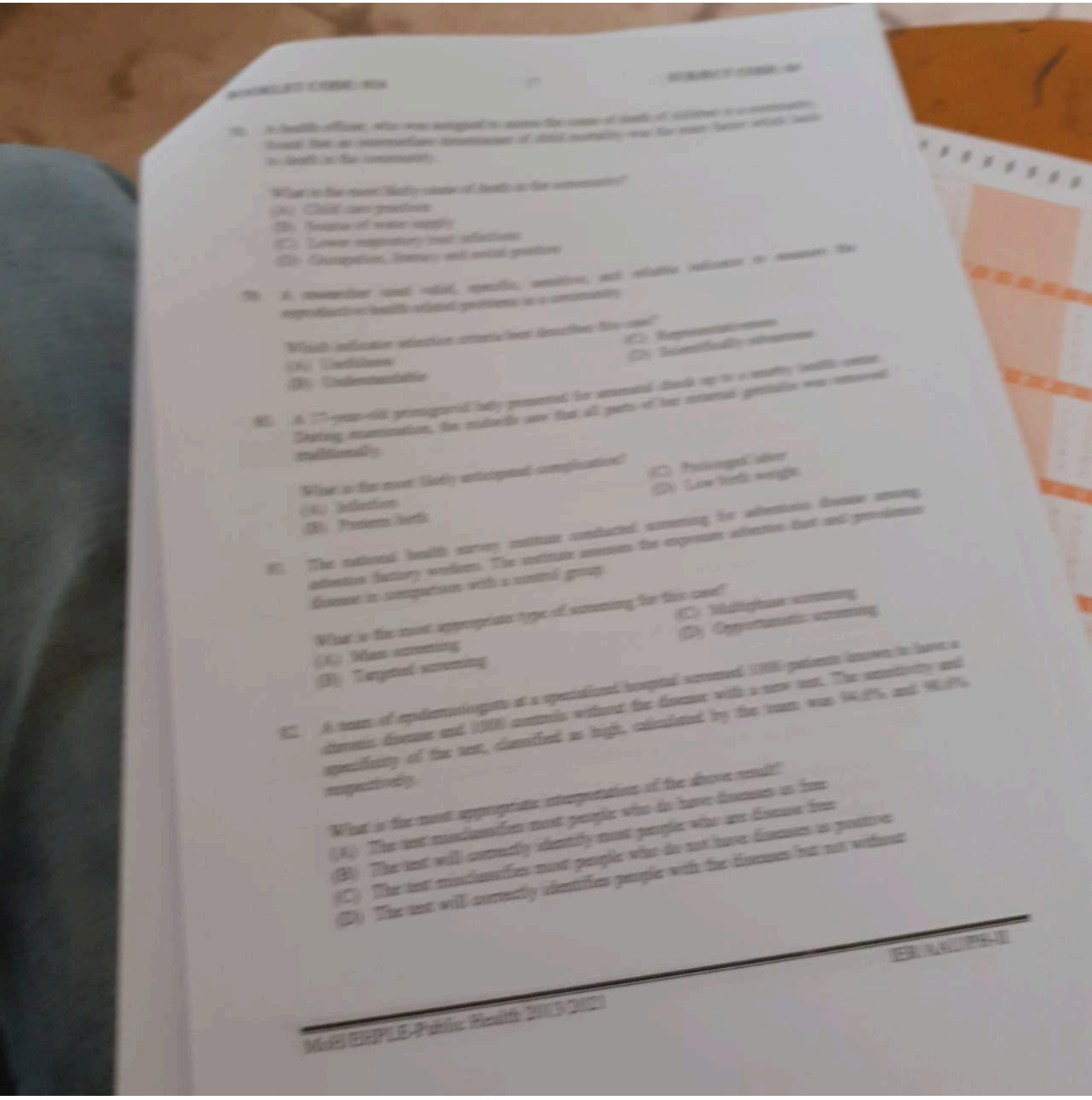
Which organizational building block is best explained in this case?
(A) Delegation
(B) Coordination
(C) Decentralization
(D) Departmentalization

56. A pharmacist, who was rewarded for his best performance last year, also showed a better performance this year. Thus, he is assigned as the head of the department of pharmacy.

Which motivational theory is best explained in this case?
(A) Need theory
(B) Reinforce theory
(C) Learned-need theory
(D) The two- factors theory

57. A manager of primary hospital has the desire and ability to shape his subordinates in making decision to solve organizational and individual problems for the betterment of the organization.

What type of leadership attribute is best explained in this case?
(A) Freedom
(B) Idea time
(C) Conflict resolution
(D) Trust and openness



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42. A 10-year-old male presented to a health center with a complaint of severe pain over the right forearm after he sustained falling down accident from a two meter height. On musculoskeletal examination, the right forearm is swollen and tender with palpable deformity. Right forearm X-ray shows that there is a transverse fracture over the distal 1/3 of the ulnar bone.

What is the most appropriate initial step in the management of the patient?
(A) Apply posterior slab
(B) Apply circular cast
(C) Apply arm sling
(D) Apply traction

43. A 12-year-old male presented to a hospital with a complaint of severe pain over the right side of his pelvis which is not relived by strong analgesics of five months duration. Pelvic x-ray shows that there is onion skin appearing periosteal reaction.

What is the most likely diagnosis?
(A) Osteosarcoma
(B) Ewing sarcoma
(C) Paget's sarcoma
(D) Chondrosarcoma

44. An 18-year-old female presented with shortness breath of one hour duration after she sustained falling down accident from a building. Her blood pressure is 100/60 mmHg, pulse rate is 118/min, respirations are 29 /min, and temperature is 36.8^{0}C. On examination, she has distended neck veins and hypertympanic sound with absent air entry all over the left chest.

What is the most likely diagnosis of the patient?
(A) Cardiac tamponade
(B) Massive hemothorax
(C) Tension pneumothorax
(D) Spontaneous pneumothorax

45. A 30-year-old male came with complaints of fast breathing and chest tightness after he fell down from the second floor to a stony ground on his chest. His respirations are 35/min, and oxygen saturation is 70%. There is shifting of trachea to the left side and absent air entry on the right lung field with hyper resonant note on examination.

What is the next step in the management of this patient?
(A) Refer him directly to hospital
(B) Put him on oxygen and order chest x-ray
(C) Insert a chest tube and put him on oxygen
(D) Do needle thoracentesis at 2nd intercostal space

46. A four- year-old male child was presented immediately after he sustained electrical burn injury to his arm. On musculoskeletal examination there is circumferential eschar over his forearm with a 3x4 cm entry wound over his forearm. He was resuscitated at the hospital.

What is the most common complication this patient can develop?
(A) Arrhythmia
(B) Acute renal failure
(C) Wound contracture
(D) Compartment syndrome

48. A nationwide case control study was conducted to assess the association of life skill training and academic dismissal among fresh female University students. Odds ratio of 0.4 was reported for students who took life skill training compared to students who did not take the training.

What is the most appropriate interpretation of this finding?

(A) The odds of dismissal is 0.4 times less likely in those who took life skill training than those who did not
(B) The odds of dismissal is 0.6 times less likely in those who took life skill training than those who did not
(C) The odds of dismissal is 40% more likely in those who took life skill training than those who did not
(D) The odds of dismissal is 60% more likely in those who took life skill training than those who did not

49. A manger of a health center engaged with the staffs during a sanitation campaign in the compound. The manager showed the staff how it can be done, and also supported and encouraged them to finish the sanitation campaign effectively and efficiently.

What management function is most likely applied?

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

50. A medical officer is performing a quarterly supervision in the laboratory unit of a health center. He assessed the available materials and their functionality using an inventory checklist.

What managerial skill is being implemented?

(A) Conceptual
(B) Technical
(C) Communication
(D) Human relation

51. A manager in a primary hospital assigned the health work forces of the hospital based on their expertise. He also allocated the resources based on the prioritized problems of the hospital.

What managerial principle is applied?

(A) Order
(B) Equity
(C) Remunerate
(D) Unit of direction

52. A health center's manager plans to improve the utilization of institutional delivery until the end of 2012 E.C by assigning committed midwifes and creating awareness in the community.

What is the most appropriate principle of management to be applied?

(A) Converge of work
(B) Learning from experience
(C) Management by objective
(D) Management by exception

24. A patient came to a health center for treatment. On evaluation, the health care provider cannot speak the language of the patient which made it difficult to communicate. There is also a wide cultural difference which made the case very strange to the health professional.

What is the most appropriate principle to be followed in managing the situation?
(A) Recognize diversity
(B) Uphold responsibility
(C) Value work place culture
(D) Challenge dignity barrier

25. A 28-year-old depressed male patient came for a psychiatric evaluation. While interviewing, the psychiatrist used a statement like "I understand how difficult it is being unable to sleep for three days". Then, the patient continued to tell his problems without reservations.

What is the most likely reason of using empathic statement during the interview?
(A) To help the patient to disclose himself
(B) To help the provider to lead the interview
(C) To help the patient to feel being understood
(D) To help the provider to get more information

26. A health professional, who is working in a referral hospital, also works in a private diagnostic center which he owns. This has resulted in a conflict of interest between the hospital and him.

What is the best recommendation to reduce the conflict in this case?
(A) Disclose his affiliation
(B) Use external monitoring
(C) Discontinue his affiliation
(D) Continue his affiliation secretly

27. A health professional uses an open-ended question at first and close-ended questions in the middle of an interview to help him reach at diagnosis. Later, he talks about diagnosis and alternative treatments. At the end, he developed a treatment plan collaboratively with the patient and agreed to divide responsibility for the next session.

What is the evidence that understanding is established in the case?
(A) Two way communications is implemented
(B) Interview technique of the health professional
(C) Diagnosis and treatment alternative is communicated
(D) Decision on the treatment plan is made collaboratively

28. A physician, who was examining a 48-year-old female patient, reached at a diagnosis with a poor prognosis.

What is the most likely issue that should be considered in disclosing the diagnosis?
(A) Worthiness of telling the news
(B) Availability of professional support
(C) Psychological issues
(D) One's ability to accept the patient's reaction

19. A five-year-old, otherwise healthy boy, came with skin colored to hypo-pigmented papular lesions with central umblication over the face of two weeks duration.

What is the most likely diagnosis of this child?
(A) Common wart
(B) Cryptococcosis
(C) Arthroped bite
(D) Molluscum contagiosum

20. A 32-year-old known RVI patient came with a complaint of mildly pruratic skin lesion of two months duration. On examination, there are multiple annular lesions with central clearing and peripheral advancement seen over the trunk.

What is the most likely diagnosis?
(A) Tinea corpooris
(B) Pityriasis versicolor
(C) Seborrheic dermatitis
(D) Small plaque psoriasis

21. A number of patients are waiting for their turn in line to be seen by a health professional. When the health professional came, one of the patients who know him very well, asked him to be seen first. But the health professional refused and politely convinced him to stay in the queue with the other patients.

Which ethical principle does the health professional implement?
(A) Justice
(B) Autonomy
(C) Beneficence
(D) Non-maleficence

22. A 35-year-old man came to a hospital with a complaint of recurrent headache of two weeks duration. During evaluation, the physician did not listen to the patient but kept on asking him leading questions and interrupting him repeatedly.

Which quality of compassionate care is violated in this case?
(A) Respect
(B) Empathy
(C) Motivation
(D) Commitment

23. A health care professional, who has been working in an emergency department for the past two years with a strong sense of motivation, started to come late to work. All his co-workers witnessed his gradual behavioral change; they further explained that he isolates himself and becomes uncompassionate to the patients too.

What is the most likely cause of his behavioral change?
(A) Burnout
(B) Compassion fatigue
(C) The wider health care context
(D) Unbalanced focus between biomedical models

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14. A four-year-old child was brought by her parents with a compliant of whitish central spot on both eyes of one week duration. On history she was not vaccinated fully. She had history of maculopapular rash with runny nose and cough about two weeks back. On ocular examination, she has central corneal ulcer bilaterally.

What is the most appropriate initial management for the child?
(A) Vitamin A supplementation
(B) Topical antibiotics
(C) Investigation
(D) Referral

15. A 50-year-old male patient with Parkinson's disease came with a complaint of skin lesion of three months duration. On examination, there are erythematous plaque lesions over the scalp, eye brows and posterior auricular area bilaterally with yellowish greasy scaling.

What is the most likely diagnosis?
(A) Dandruff
(B) Psoriasis
(C) Lichen planus
(D) Seborrheic dermatitis

16. A 15-year-old girl came with asymptomatic skin lesion of one year duration. Upon evaluation there are open and closed comedos with scattered papules over the face, mostly on the forehead.

What is the most appropriate treatment for this stage of the disease?
(A) Oral Dapsone
(B) Topical retinoid
(C) Photodynamic therapy
(D) Oral contraceptive pills

17. A known RVI patient, who has been on HAART for the past six months, came with a complaint of fever, chills and generalized reddening of the skin of five days duration. His temperature is 39.3°C, blood pressure is 90/60 mmHg, pulse rate is 126/min and respirations are 27/min. On examination, the skin appears glazed, eroded with areas of coalescing erythema, and Nikolyski sign was positive.

Which drug is the most likely cause of the patient's condition?
(A) Zidovudine
(B) Nevirapine
(C) Tenofovir
(D) Indinavir

18. A 23-year-old housewife came with a complaint of prurutic skin lesion of three weeks duration. She stated that her symptom started a month after her husband came back from field work. On examination, there is skin colored and excoriated papules over the trunk and extremities mainly involving the axilla, nipples and the finger web spaces.

What is the most likely diagnosis of this patient?
(A) Scabies
(B) Syphilis
(C) Papular Urticaria
(D) Prurutic papular eruption

24. A patient came to a health center for treatment. On evaluation, the health care provider cannot speak the language of the patient which made it difficult to communicate. There is also a wide cultural difference which made the case very strange to the health professional.

What is the most appropriate principle to be followed in managing the situation?

(A) Recognize diversity
(B) Uphold responsibility
(C) Value work place culture
(D) Challenge dignity barrier

25. A 28-year-old depressed male patient came for a psychiatric evaluation. While interviewing, the psychiatrist used a statement like "I understand how difficult it is being unable to sleep for three days". Then, the patient continued to tell his problems without reservations.

What is the most likely reason of using empathic statement during the interview?

(A) To help the patient to disclose himself
(B) To help the provider to lead the interview
(C) To help the patient to feel being understood
(D) To help the provider to get more information

26. A health professional, who is working in a referral hospital, also works in a private diagnostic center which he owns. This has resulted in a conflict of interest between the hospital and him.

What is the best recommendation to reduce the conflict in this case?

(A) Disclose his affiliation
(B) Use external monitoring
(C) Discontinue his affiliation
(D) Continue his affiliation secretly

27. A health professional uses an open-ended question at first and close-ended questions in the middle of an interview to help him reach at diagnosis. Later, he talks about diagnosis and alternative treatments. At the end, he developed a treatment plan collaboratively with the patient and agreed to divide responsibility for the next session.

What is the evidence that understanding is established in the case?

(A) Two way communications is implemented
(B) Interview technique of the health professional
(C) Diagnosis and treatment alternative is communicated
(D) Decision on the treatment plan is made collaboratively

28. A physician, who was examining a 48-year-old female patient, reached at a diagnosis with a poor prognosis.

What is the most likely issue that should be considered in disclosing the diagnosis?

(A) Worthiness of telling the news
(B) Availability of professional support
(C) Psychological issues
(D) One's ability to accept the patient's re...

Ethiopian Health Professionals' Licensure Examination

Public Health Exam
Nehase 2013/August 2021
PART TWO

BOOKLET CODE: 014 **SUBJECT CODE: 04**
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 four-year-old girl has visited different health facilities with a complaint of frequent tonsillitis and was treated with oral antibiotics. Her parents noted that she has restless sleep, ...ent choking episodes while asleep, and a loud snoring. Physical examination revealed ...vital signs are in the normal range and tonsils are enlarged with no erythema and ...udates. Otoscopic examination is normal.

For which condition is the child at a greater risk?
(A) Respiratory failure
(B) Tonsillar neoplasm
(C) Vocal cord paralysis
(D) Obstructive sleep apnea

2. A 38-year-old male presented with diffuse submandibular swelling associated with fever and throat pain of one week duration. Incision and drainage was done for the diagnosis of submandibular abscess and an antibiotic is to be started.

What type of antibiotics should be considered?
(A) Active against facultative anaerobes
(B) Active against gram positive aerobes
(C) Active against gram negative aerobes
(D) Active against aerobes and anaerobes

3. A 25-year-old man came complaining of plaque accumulation on his lower arch and bleeding with slight touch to his gingival area. On examination, there was plaque which bleeds with manipulation for examination.

What is the most effective long term control method for th...
(A) Scaling
(B) Flossing
(C) I...
(D) F... rush

BOOKLET CODE: 014

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What is the most likely reason?
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(B) Chlorine can kill all type of microorganisms in the water
(C) Chlorine is safe to use and easy to apply in all types of water
(D) Chlorine protects the water from contamination after treatment

74. A public health expert received a report of contamination of a lake by pesticides and mercury from industries in the locality. Consequently, small aquatic animals will likely consume these chemicals which will be eaten by fishes. Later, the fish will be used as food by people.

What is the mostly likely fate of the chemicals??
(A) Bioaccumulate
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75. A 35-year-old patient visited a hospital seeking medical treatment for his eye. During examination, he reported that he is a carpenter and also works as a fisherman at a fast flowing large river which is three kilometers away from his home in his spare time.

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What is the most likely radiation type they are exposed to?
(A) Laser radiation
(B) Infrared radiation
(C) Microwave radiation
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88. A boarding school spends huge amount of money to manage the school's waste which is mainly composed of food leftovers, dung from animal breeding and feces from the student's toilet. Thus A team was assigned to find a cost/resource recovery waste management strategy.

Which strategy is the most appropriate?
(A) Recovering energy from incineration of the waste
(B) Recovering valuable items for reuse from the waste
(C) Recovering biogas from the waste using anaerobic digestion
(D) Recovering domestic fuel by recovering the dung from the waste

89. Students who use a university's cafeterias are often diagnosed with typhoid fever despite proper cooking and storage. Hence, the university's administration seeks an advice to control this disease.

What is the most appropriate intervention for the case?
(A) Testing of food handlers
(B) Checking the quality of the water
(C) Identifying the Source of the raw food
(D) Identifying the Presence of rodents in the kitchen

90. One of the best malaria control strategy which was proved to reduce the prevalence of the disease significantly was indoor residual spray with DDT. However, despite the advantages it is completely banned in most countries since 1972.

What is the most likely explanation for banning?
(A) The toxicity level of DDT to human is very high
(B) DDT is expensive to implement at large scale
(C) DDT is persistent in the environment
(D) Mosquitoes became resistant to DDT

91. A medical center in a big city is under re-innovation to upgrade its services. Fo reason, there is movement of various vehicles which suspends the dust in the Consequently the health workers, patients and visitors experience respiratory proble to the silica in the dust.

What is the costly effective preventive measure?
(A) Using breathing masks
(B) Spraying water regularly
(C) Shading the construction site
(D) Moving to other site till the construction is done

BOOKLET CODE: 014

83. A public health surveillance department has included twenty diseases under the routine surveillance program. From this disease list, poliomyelitis, dracunculiasis and neonatal tetanus are placed in one category.

What is the most likely criterion to select these diseases for national surveillance?
(A) They are international concerns
(B) They are targeted for eradication
(C) They have high pandemic potential
(D) They have significant public health importance

84. An outbreak investigation team received a report of suspected malaria cases from a local health extension worker. The report stated that there were 15 new cases in the area within three days alone.

What is the most important information required to decide as an outbreak?
(A) Bed net utilization
(B) Status of the cases
(C) Size of the population
(D) Source of the infection

85. An organization develops an action plan to tackle obesity through community based intervention program in a district. In the proposed action plan, nutritional education and school physical activity were given much emphasis during the planning.

What is the prevention interventions planned?
(A) Primary prevention
(B) Secondary prevention
(C) Tertiary prevention
(D) Primordial prevention

86. Various scholars from different disciplines were invited to educate the youth of a community to increase their awareness on HIV/AIDS from social, psychological and health perspectives.

Which tea ng method is best to be applied in this case?
(A) Pane ussion
(B) Sym
(C) Meeting
(D) Forum

87. A *woreda* ffice head is planning to organize behavioral change communication message t ity where there is low condom utilization rate despite the presence of high HIV . Majority of the community members are illiterates.

What is the riate way of organizing the message?
(A) Mild fe ple
(B) One sid
(C) Negative apple
(D) Factual apple

78. A health officer, who was assigned to assess the cause of death of children in a community, found that an intermediate determinant of child mortality was the main factor which leads to death in the community.

What is the most likely cause of death in the community?
(A) Child care practices
(B) Source of water supply
(C) Lower respiratory tract infections
(D) Occupation, literacy and social position

79. A researcher used valid, specific, sensitive, and reliable indicator to measure the reproductive health related problems in a community.

Which indicator selection criteria best describes this case?
(A) Usefulness
(B) Understandable
(C) Representativeness
(D) Scientifically robustness

80. A 17-year-old primigravid lady presented for antenatal check up to a nearby health center. During examination, the midwife saw that all parts of her external genitalia was removed traditionally.

What is the most likely anticipated complication?
(A) Infection
(B) Preterm birth
(C) Prolonged labor
(D) Low birth weight

81. The national health survey institute conducted screening for asbestosis disease among asbestos factory workers. The institute assesses the exposure asbestos dust and prevalence disease in comparison with a control group.

What is the most appropriate type of screening for this case?
(A) Mass screening
(B) Targeted screening
(C) Multiphase screening
(D) Opportunistic screening

82. A team of epidemiologists at a specialized hospital screened 1000 patients known to have a chronic disease and 1000 controls without the disease with a new test. The sensitivity and specificity of the test, classified as high, calculated by the team was 94.6% and 98.6% respectively.

What is the most appropriate interpretation of the above result?
(A) The test misclassifies most people who do have diseases as free
(B) The test will correctly identify most people who are disease free
(C) The test misclassifies most people who do not have diseases as positive
(D) The test will correctly identifies people with the diseases but not without

83. A 19-year-old G-II, A-I lady presented to an emergency OPD with pushing down pain of 20 hours duration. She is exhausted with blood pressure of 90/60 mmHg, pulse rate of 112/min, respirations of 24/min and temperature of 37.9°C. On examination, uterus is 42 weeks sized with tenderness and retraction band, FHB is 116/min, and a 5 cm dilated cervix, moderate caput and excessive moulding at station -3, and ruptured membrane with offensive meconium stained liquor were the findings on pelvic examination.

What is the most likely diagnosis?
(A) Uterine rupture
(B) Obstructed labor
(C) Shoulder dystocia
(D) Prolonged PROM

84. A 26-year-old G-III, P-II mother presented with a pushing down pain of six hours duration at a gestational age of 39 weeks. Her blood pressure is 120/80 mmHg, pulse rate is 85/min, and temperature is 36.6°C. On obstetric examination, FHB is in the range of 140 to 150/min, cervix is dilated at 5 cm and the vertex is at station -3. Upon artificial rupture of membrane, there was G-I meconium stained liquor and fetal bradycardia in the range of 70 to 80/min is noted for 3 minutes without recovery.

What is the most likely diagnosis?
(A) Cord Prolapse
(B) Uterine Rupture
(C) Maternal Hypotension
(D) Meconium stained liquor

85. A 23-year-old G-I woman presented to the labor ward at active first stage of labor at 40 weeks of gestation. She had an uncomplicated prenatal course. Her blood pressure is 100/ 60 mmHg. On examination, fundal height is 40 cm with FHB of 156/min, and membranes are intact. After one hour of stay in the labor ward the FHB tracing becomes in the range of 160-166/min for two minutes.

What is the most appropriate next step in the patient's care?
(A) Perform Amniotomy
(B) Perform cesarean delivery
(C) Put her in left lateral position
(D) Put the woman in knee-chest position

86. A 24-year-old G-1 woman who is at gestational age of 40 weeks was started on induction of labor for gestational hypertension. She was given Oxytocin for 12 hours and reached a cervical dilation of 6 cm. She underwent cesarean delivery for an indication of non-reassuring fetal heart rate pattern. After delivery of the placenta, profuse bleeding was noted from the uterus, reaching 1500 mL.

What is the most likely cause for the patient's problems?
(A) Cervical laceration
(B) Uterine inversion
(C) Retained tissue
(D) Uterine Atony

24. A 19-year-old male patient presented with a complaint of easy fatigability associated with occasional fever for the past three weeks. He also had repeated episodes of epistaxis in the past three days. He is acutely sick looking, in pain, with blood pressure of 100/70 mmHg, pulse rate of 124/min, respirations of 24/min and temperature of 37.8^0C. On examination, he has pale conjunctiva, axillary lymphadenopathy, tenderness over the sternum and hepatomegaly. His CBC results revealed WBC count of 40,000/mm^3, hemoglobin level of 10 mg/dl, and platelet count of 60,000/ml.

What is the most likely clinical diagnosis?
(A) Severe sepsis
(B) Hemolytic anemia
(C) Acute osteomyelitis
(D) Hematologic malignancy

25. A 40-year-old female patient was admitted to a medical ward with a diagnosis of severe community-acquired pneumonia five days back. She was started on prompt treatment with IV antibiotics but her vital signs fail to improve. On the sixth day of admission, she developed confusion. Her blood pressure is 80/40 mmHg, pulse rate is 136/min feeble, respirations are 26/min, and temperature is 38.8^0C.

When is the most appropriate time to start vasopressor medication for the patient?
(A) After the fever subsides
(B) After 24 hours of IV antibiotics
(C) Immediately after the first record of BP
(D) When BP fails to improve after adequate IV fluid

26. A 22-year-old female student tried to commit suicide and ingested a "poison". She was brought to emergency unit within half an hour. The mother claims the chemical was "malathion". At presentation she had one episode of vomiting. Otherwise, she is conscious with vital signs in the normal range.

What is the next best step in the management of this patient?
(A) Decontaminate with charcoal
(B) Start IV fluid with NS
(C) Give her IV atropine
(D) Give IV antidote

27. A 45-year-old male patient came with a complaint of intractable vomiting of ingested matter which was intermittently blood tinged of four months duration. He has lost significant amount of weight since the onset of his problem. He looks emaciated, with blood pressure of 75/60 mmHg, and pulse rate of 100/min. Plain abdominal X-ray result shows enlarged gastric bubble and dilated proximal duodenum with paucity of air in the small bowel.

What is the most likely electrolyte abnormality that this patient could have?
(A) Hypokalemia and Hypochloremia
(B) Hyperkalemia and Hyperchloremia
(C) Hypernartemia and Hypermagnisemia
(D) Hypercalcemia and Hyperphosphatemia

39. A researcher has been conducting a survey to estimate the mean survival time of patients with a tumor. However, few data collectors are filling the questionnaire carelessly.

What is the most appropriate action that should be taken to improve the quality of data?

(A) Provide training (C) Conducting pretesting
(B) Close supervision (D) Proving good incentives

40. A nationwide clinical study was done among latent HIV/AIDS cases. The study participants were selected from the community with low socioeconomic status. Initially they were informed that the study will last for about five years but it continued for more than a decade. After a few years, some of them developed the disease and appropriate treatment was given.

What is the most likely ethical principle applied in this scenario?

(A) Justice (C) Malfeasance
(B) Beneficence (D) Respect for persons

41. The Ethiopian medical journal reported a study of 13 HIV-positive patients, who were treated with HAART for at least six months. The CD4 T-cell counts at baseline were as listed below: 130, 168,205, 313, 207, 227, 245, 173, 103, 181, 105, 301, 169

What is the Inter Quartile Range (IQR) for this data set?

(A) 67 (B) 149 (C) 210 (D) 245

42. Hemoglobin A1C is a serum measure often used to monitor compliance among diabetic patients. A sample of five values of hemoglobin A1C obtained from a single diabetic patient are 8.5%, 9.3%, 7.9%, 9.2%, and 10.3%.

What is the most appropriate measure of variation for this sample?

(A) Standard Deviation (C) Variance
(B) Inter quartile range (D) Range

45. Cardiovascular risk factors such as diastolic blood pressure (mmHg) and HDL cholesterol levels (mg/dL) were measured among children in every 3-year intervals. It was noted that the coefficient of variation (CV) was 7.1% for blood pressure and 10.4% for HDL cholesterol.

What is the correct statement about the above scenario?

(A) The variability in cholesterol level measurements and BP cannot be compared
(B) There is high variability in cholesterol level measurements than blood pressure
(C) There is high variability in blood pressure measurements than cholesterol level
(D) There is consistence of measurements in cholesterol level than blood pressure

97. A 22-year-old P-I mother was brought to the emergency room with a complaint of excessive bleeding after she gave birth to a male neonate two hours back at home. She is confused with blood pressure of 90/50 mmHg, pulse rate of 120/min and respirations of 24/min. On examination; uterus is 20 weeks sized and well contracted, and pelvic examination revealed a soft, bulky tissue in the cervical os with no visible lacerations.

What is the most appropriate management for the patient?
(A) Secure IV line and start Oxytocin drips
(B) Do bimanual compression of the uterus
(C) Perform manual exploration of the uterus
(D) Clean the vulva and suture the lacerations

98. A 24-year-old primipara presented to a postnatal clinic with a complaint of low-grade intermittent fever of two days duration on her fifth post-operative day after cesarean section. She also has left leg pain and swelling. On examination, her vital signs are in the normal range and there is a grossly swollen, mildly tender left leg with a 4 cm discrepancy from the right. There is no other remarkable systemic finding.

What is the most likely diagnosis?
(A) Cellulitis
(B) Lymphatic Filariasis
(C) Deep vein thrombosis
(D) Septic thrombo-phlebitis

99. A 39-year-old woman is diagnosed with uterine myoma based on a pelvic examination revealing an enlarged irregular uterus and pelvic ultrasound findings six months back. She is currently asymptomatic but stated to have increment in abdominal girth.

What is the most common manifestation of the most likely diagnosis?
(A) Pelvic pain
(B) Menorrhagia
(C) Oligomenorrhea
(D) Recurrent abortion

100. A 17-year-old female presented to the gynecologic OPD accompanied by her classmates after she started to experience abdominal pain in class. She is on the second day of her regular menstrual cycle. She has history of similar complaints previously. On examination, she is in acute pain but there are no remarkable findings in all systems. Routine laboratory investigations were unremarkable.

What is the most appropriate drug management for the patient?
(A) IV Pethidine
(B) IV Diazepam
(C) PO Ibuprofen
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58. A performance management team of a primary hospital selected twelve indicators of health services to assess the monthly performance of a hospital. Out of the twelve service indicators, three indicators showed very low performance when compared with the intended plan.

Who is the primary responsible decision maker to solve the problem?

(A) Zonal health office
(B) Regional health bureau
(C) Primary health care unit
(D) Federal ministry of health

59. A manager of a primary hospital faced shortage of inpatient rooms in the hospital. He then asked the regional health bureau to provide financial supports, however the regional health bureau could not provide the support. Thus, the manager mobilized stakeholders and the society to make financial aid to the hospital to build inpatient room and it was successful.

Which principle of primary health care is most likely applied?

(A) Equity
(B) Decentralization
(C) Community participation
(D) Inter-sectoral collaboration

60. The Ministry of Health has been working on community awareness creation and publicizes the important concepts and practices of self-responsibility in health and health related issues as most of the country's health problems are preventable.

What policy emphasis is most appropriate in this case?

(A) Development of environmental health
(B) Promotion of occupational health and safety
(C) Development of an appropriate health service management system
(D) Control of communicable diseases, epidemics and diseases related poor living conditions

61. A manager of a primary hospital conducted an assessment on the financial sources for the health care services provided in the hospital. And it was found that about 37% of the patients pay from their pocket to get services.

What is the most likely conclusion about the financial source of the hospital?

(A) Private contribution
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What is the most likely diagnosis?
(A) Brief psychotic disorder
(B) Schizoaffective disorder
(C) Delusional disorder
(D) Schizophrenia

9. A 42-year-old man came with a complaint of depressed mood for several weeks that interferes with his ability to work. He has insomnia with fatigue, feels guilty and has suicidal thoughts and bought pesticide to end his life.

What is the best management for the patient in the primary care setting?
(A) Start him on antidepressant as out patient
(B) Start psychotherapy with anti depressant
(C) Admit him with antidepressant
(D) Refer him to a specialist

10. A 32-year-old man presented to the emergency OPD complaining of "gas in the stomach," shortness of breath, and squeezing back pain that prohibited him from working since six months ago. He had repeated medical evaluation in the tertiary care and they sent him back with reassurance.

What is the most likely diagnosis?
(A) Somatic symptom disorder
(B) Illness anxiety disorder
(C) Conversion disorder
(D) Panic attack

11. A 37-year-old male came with a complaint of painless mass on the right upper eyelid of three months duration. Ocular finding of the right upper lid revealed a non-tender localized nodule under the skin.

What is the most likely clinical diagnosis of the patient?
(A) Chalazion
(B) Hordeolum
(C) Sebaceous cyst
(D) Epithelial inclusion cyst

12. A 34-year-old male patient came with complaints of pain and blurring of vision on his left eye of three days duration after he sustained a falling down accident. He also has headache, fever and malaise. Findings on ocular examination were marked eyelid swelling, restricted ocular motility, visual reduction and proptosis. There is leukocytosis on CBC.

What is the most appropriate initial step in the management of the patient?
(A) Admit and start him on IV antibiotics
(B) Send him home with oral antibiotics
(C) Admit and start him on eye drops
(D) Refer him to ophthalmologist

13. A 35-year-old female presented with sudden onset left eye pain and blurring of vision of three hours duration which is associated with severe headache and photophobia. She has no history of trauma or similar symptoms. Ocular finding in the left eye shows visual acuity of hand motion, injected conjunctiva, cloudy cornea and irregular poorly reactive pupil.

What is the most likely diagnosis of the patient?
(A) Anterior uveities
(B) Herpetic keratitis
(C) Angle closure glaucoma
(D) Hey fever keratoconjuctivits

29. A public health officer, who is interviewing patients, uses a separate folder to record every patient's history and all records related to his patients. He uses a secured cabinet with a lock to put the records of the patient's and to maintain confidentiality.

What is the primary reason that the health professional tries to maintain confidentiality?

(A) To show respect
(B) To promote trust
(C) To prevent harm
(D) To promote autonomy

30. In an outpatient clinic with a very crowded waiting area, a health professional was giving seat and telling patients to wait until he calls their name. One patient stood up and insulted him but he politely asked why he reacted that way and listened to his complaint.

What professional moral value explains the health professional's judgment?

(A) Giving attention to patient is good
(B) Patients have the right to be aggressive
(C) Considering what patients say is helpful
(D) Treating patient with consideration is good

31. The number of cancer patients and related deaths is increasing worldwide. Following this, country leaders are organizing pharmaceutical research institutes to produce effective treatment for this disease.

What is the most appropriate research type for this scenario?

(A) Basic
(B) Applied
(C) Exploratory
(D) Explanatory

32. A researcher has traced published and unpublished literatures related to his research area from national and international research outputs. Finally, he has got many related literatures and uses them accordingly.

What is the most likely violated literature review criterion in this scenario?

(A) Comprehensive
(B) Up-to-date
(C) Relevance
(D) Balance

33. Investigators wanted to assess the effect of school based iron supplementation on ch cognitive development. They randomly assigned participants into two groups; those will receive and will not receive iron supplementation. The supplementation wi provided on a weekly basis for one year.

What is the most appropriate study design for the above scenario?

(A) Prospective Cohort
(B) Cross-sectional
(C) Experimental
(D) Case control

48. A nationwide case control study was conducted to assess the association of life skill training and academic dismissal among fresh female University students. Odds ratio of 0.4 was reported for students who took life skill training compared to students who did not take the training.

What is the most appropriate interpretation of this finding?

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

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

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

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

49. A manger of a health center engaged with the staffs during a sanitation campaign in the compound. The manager showed the staff how it can be done, and also supported and encouraged them to finish the sanitation campaign effectively and efficiently.

What management function is most likely applied?

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

50. A medical officer is performing a quarterly supervision in the laboratory unit of a health center. He assessed the available materials and their functionality using an inventory checklist.

What managerial skill is being implemented?

(A) Conceptual
(B) Technical
(C) Communication
(D) Human relation

51. A manager in a primary hospital assigned the health work forces of the hospital based on their expertise. He also allocated the resources based on the prioritized problems of the hospital.

What managerial principle is applied?

(A) Order
(B) Equity
(C) Remunerate
(D) Unit of direction

52. A health center's manager plans to improve the utilization of institutional delivery until the end of 2012 E.C by assigning committed midwifes and creating awareness in the community.

What is the most appropriate principle of management to be applied?

(A) Converge of work
(B) Learning from experience
(C) Management by objective
(D) Management by exception

92. A cholera outbreak was investigated in a metropolitan city where cases are increasing on a daily basis. The source of the outbreak was confirmed to be from the city water supply.

What is the most appropriate control measure for the above case?
(A) Treatment of infected people
(B) Closure of food and drink premises
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93. A nine-month-old infant was brought by his mother with a complaint of cough and fast breathing of one week duration. The infant has no pervious immunization history. After a thorough evaluation, he was diagnosed with pneumonia.

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(B) Promote access to emergency contraception
(C) Reducing poverty and alcohol consumption in the community
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14. A four-year-old child was brought by her parents with a compliant of whitish central spot on both eyes of one week duration. On history she was not vaccinated fully. She had history of maculopapular rash with runny nose and cough about two weeks back. On ocular examination, she has central corneal ulcer bilaterally.

What is the most appropriate initial management for the child?
(A) Vitamin A supplementation
(B) Topical antibiotics
(C) Investigation
(D) Referral

15. A 50-year-old male patient with Parkinson's disease came with a complaint of skin lesion of three months duration. On examination, there are erythematous plaque lesions over the scalp, eye brows and posterior auricular area bilaterally with yellowish greasy scaling.

What is the most likely diagnosis?
(A) Dandruff
(B) Psoriasis
(C) Lichen planus
(D) Seborrheic dermatitis

16. A 15-year-old girl came with asymptomatic skin lesion of one year duration. Upon evaluation there are open and closed comedos with scattered papules over the face, mostly on the forehead.

What is the most appropriate treatment for this stage of the disease?
(A) Oral Dapsone
(B) Topical retinoid
(C) Photodynamic therapy
(D) Oral contraceptive pills

17. A known RVI patient, who has been on HAART for the past six months, came with a complaint of fever, chills and generalized reddening of the skin of five days duration. His temperature is $39.3^{0}C$, blood pressure is 90/60 mmHg, pulse rate is 126/min and respirations are 27/min. On examination, the skin appears glazed, eroded with areas of coalescing erythema, and Nikolyski sign was positive.

Which drug is the most likely cause of the patient's condition?
(A) Zidovudine
(B) Nevirapine
(C) Tenofovir
(D) Indinavir

18. A 23-year-old housewife came with a complaint of prurutic skin lesion of three weeks duration. She stated that her symptom started a month after her husband came back from field work. On examination, there is skin colored and excoriated papules over the trunk and extremities mainly involving the axilla, nipples and the finger web spaces.

What is the most likely diagnosis of this patient?
(A) Scabies
(B) Syphilis
(C) Papular Urticaria
(D) Prurutic papul...

53. A manager of a primary hospital identified low performance of antenatal care coverage in the previous year. Thus, the manager prepared a plan to improve it using the available resources after identifying the gaps.

Which step of planning is the most appropriate in this case?
(A) Situational analysis
(B) Setting objectives and targets
(C) Setting critical priority problems
(D) Identifying obstacles and limitations

54. A manager of a general hospital assigns resources and health professionals into different departments so as to achieve the organizational goals and objectives.

Which element of organization structure is applied?
(A) Authority
(B) Delegation
(C) Decentralization
(D) Division of labor

55. A health officer, who is working as a manager in a woreda health office, went to another place for a field work. He assigned one of his subordinates to perform on behalf of him until he returns from his field work.

Which organizational building block is best explained in this case?
(A) Delegation
(B) Coordination
(C) Decentralization
(D) Departmentalization

56. A pharmacist, who was rewarded for his best performance last year, also showed a better performance this year. Thus, he is assigned as the head of the department of pharmacy.

Which motivational theory is best explained in this case?
(A) Need theory
(B) Reinforce theory
(C) Learned-need theory
(D) The two- factors theory

57. A manager of primary hospital has the desire and ability to shape his subordinates in making decision to solve organizational and individual problems for the betterment of the organization.

What type of leadership attribute is best explained in this case?
(A) Freedom
(B) Idea time
(C) Conflict resolution
(D) Trust and openness

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33. A 54-year-old female came with a complaint of abdominal pain of three days duration. She also has abdominal distension, failure to pass stool and flatus with intermittent vomiting of ingested matter. Her blood pressure is 80/60 mmHg and pulse is feeble. There is distended abdomen with asymmetric shape and hyper tympanic note on examination.

What is the first line management for this patient?
(A) Insert an NG tube and observe
(B) Prepare her for emergency surgery
(C) Resuscitate and Insert a rectal tube
(D) Start her on broad spectrum antibiotics

34. A 40-year-old male came with a complaint of bleeding just after defecation of three weeks duration. He also has excruciating pain during defecation and the bleeding is bright red. He was having constipation two weeks prior to the onset of his current symptoms. On examination, there is a linear mucosal defect with a severe tenderness and raised border on the posterior wall of the rectum.

What is the most likely diagnosis of the patient?
(A) Hemorrhoid
(B) Anal fissure
(C) Fistula in-ano
(D) Ano-rectal cancer

35. A 68-year-old male presented with complaints of failure to pass urine and lower abdominal pain of 10 hours duration. He has been to a nearby health center for the same complaint and the nurse tried inserting NG tube to relive the retention but failed. On abdominal examination bladder is palpable and tender, and on digital rectal examination the prostate is enlarged and firm with movable rectal mucosa.

What is the most appropriate initial step in the management of the patient?
(A) Condom catheter
(B) Suprapubic catheter
(C) Aspiration with needle
(D) Trans urethral catheter

36. An 18-year-old student came to a health center with complaints of pain in the groin and lower abdominal area of six hours duration. His blood pressure is 110/70 mmHg, pulse rate is 110/min, temperature is 37.4^0C and respirations are 22/min. On genitourinary examination there is swollen, tender and high ridding testis. Laboratory investigation results show WBC of 10000/mm^3 and urine analysis is non-revealing.

What is the most likely diagnosis for the patient?
(A) Varicocoele
(B) Testicular torsion
(C) Fourier's gangrene
(D) Epididymo-orchitis

58. A performance management team of a primary hospital selected twelve indicators of health services to assess the monthly performance of a hospital. Out of the twelve service indicators, three indicators showed very low performance when compared with the intended plan.

Who is the primary responsible decision maker to solve the problem?
(A) Zonal health office
(B) Regional health bureau
(C) Primary health care unit
(D) Federal ministry of health

59. A manager of a primary hospital faced shortage of inpatient rooms in the hospital. He then asked the regional health bureau to provide financial supports, however the regional health bureau could not provide the support. Thus, the manager mobilized stakeholders and the society to make financial aid to the hospital to build inpatient room and it was successful.

Which principle of primary health care is most likely applied?
(A) Equity
(B) Decentralization
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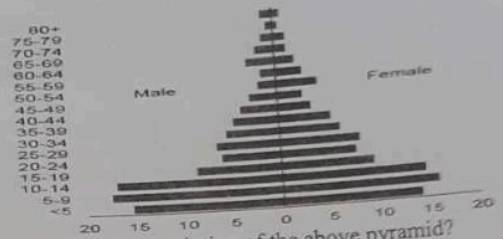
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44. The pyramid below shows the population distribution of a country in the year 2016 by age group and sex.



What is the most appropriate description of the above pyramid?

(A) Low birth rates
(B) Low death rates
(C) High fertility rates
(D) High life expectancies

45. A study was conducted among 18 male and 11 female hypertensive patients to measure the serum Creatinine concentration level. The male patients had a mean level of 1.7 mg/dL with a standard error of the mean of 0.4, while the female patients had a mean of 3.4 mg/dL with a standard error of the mean of 1.03. The Critical Values for the t distribution is 2.052 at 9 degree of freedom.

What is the 95% confidence interval of mean difference?

(A) -1.10, 4.50
(B) 0.89, 2.51
(C) -1.23, 4.63
(D) 0.85, 2.55

46. A group of researchers planned to conduct a study on Alzheimer's patients. The researchers are interested in comparing the rate of obesity between sexes of patients. From the total 20 patients included, 10 of them are males.

What is the most appropriate statistics for this scenario?

(A) t-test
(B) Z-test
(C) x^2 -test
(D) F-test

47. A group of researchers want to examine the association between antenatal care (ANC) service utilization and birth outcome. They have included 250 pregnant women who have ANC follow up and 500 do not have. 10 among ANC attendants and 200 among non-ANC attendants delivered neonates with low birth weight.

What is the value of relative risk for this scenario?

(A) 0.06
(B) 0.10
(C) 10.00
(D) 0.25

88. A boarding school spends huge amount of money to manage the school's waste which is mainly composed of food leftovers, dung from animal breeding and feces from the student's toilet. Thus A team was assigned to find a cost/resource recovery waste management strategy.

Which strategy is the most appropriate?
(A) Recovering energy from incineration of the waste
(B) Recovering valuable items for reuse from the waste
(C) Recovering biogas from the waste using anaerobic digestion
(D) Recovering domestic fuel by recovering the dung from the waste

89. Students who use a university's cafeterias are often diagnosed with typhoid fever despite proper cooking and storage. Hence, the university's administration seeks an advice to control this disease.

What is the most appropriate intervention for the case?
(A) Testing of food handlers
(B) Checking the quality of the water
(C) Identifying the Source of the raw food
(D) Identifying the Presence of rodents in the kitchen

90. One of the best malaria control strategy which was proved to reduce the prevalence of the disease significantly was indoor residual spray with DDT. However, despite the advantages it is completely banned in most countries since 1972.

What is the most likely explanation for banning?
(A) The toxicity level of DDT to human is very high
(B) DDT is expensive to implement at large scale
(C) DDT is persistent in the environment
(D) Mosquitoes became resistant to DDT

91. A medical center in a big city is under re-innovation to upgrade its services. For this reason, there is movement of various vehicles which suspends the dust in the area. Consequently the health workers, patients and visitors experience respiratory problem due to the silica in the dust.

What is the costly effective preventive measure?
(A) Using breathing masks
(B) Spraying water regularly
(C) Shading the construction site
(D) Moving to other site till the construction is done

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What is the most appropriate next step in the intervention?
(A) Community empowerment
(B) Community development
(C) Community organization
(D) Community mobilization

98. A *woreda* health facility prepared a sample poster on female genital mutilation and planned to distribute it to the community.

What is the most appropriate next step to be done by the facility?
(A) Community mobilization
(B) Audience segmentation
(C) Need assessment
(D) Pre-testing

99. A health professional is assigned in a nutrition intervention project, which is responsible to address nutritional deficiencies using nutrition specific interventions.

What will be the area of focus of this intervention?
(A) Inadequate food intake
(B) Inadequate access to food
(C) Inadequate access to health services
(D) Inadequate care of mothers and children

100. A 20-month-old female child was presented with watery diarrhea of three days duration. On anthropometric assessment, her weight, height and MUAC was found to be 7.6 kg, 75 cm and 10.7 cm respectively. She has no oedema and passed the appetite test.

Which supplementation is contraindicated for the child?
(A) Iron
(B) Zinc
(C) Vitamin A
(D) De-worming medication

THE END

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(B) Audience segmentation
(C) Need assessment
(D) Pre-testing

99. A health professional is assigned in a nutrition intervention project, which is responsible to address nutritional deficiencies using nutrition specific interventions.

What will be the area of focus of this intervention?
(A) Inadequate food intake
(B) Inadequate access to food
(C) Inadequate access to health services
(D) Inadequate care of mothers and children

100. A 20-month-old female child was presented with watery diarrhea of three days duration. On anthropometric assessment, her weight, height and MUAC was found to be 7.6 kg, 75 cm and 10.7 cm respectively. She has no oedema and passed the appetite test.

Which supplementation is contraindicated for the child?
(A) Iron
(B) Zinc
(C) Vitamin A
(D) De-worming medication

THE END

Ethiopian Health Professionals' Licensure Examination

Public Health Exam
Nehase 2013/August 2021
PART TWO

BOOKLET CODE: 014 SUBJECT CODE: 86
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 four-year-old girl has visited different health facilities with a complaint of frequent tonsillitis and was treated with oral antibiotics. Her parents noted that she has restless sleep, frequent choking episodes while asleep, and a loud snoring. Physical examination revealed that vital signs are in the normal range and tonsils are enlarged with no erythema and exudates. Otoscopic examination is normal.

   For which condition is the child at a greater risk?
   (A) Respiratory failure
   (B) Tonsillar neoplasm
   (C) Vocal cord paralysis
   (D) Obstructive sleep apnea

2. A 38-year-old male presented with diffuse submandibular swelling associated with fever and throat pain of one week duration. Incision and drainage was done for the diagnosis of submandibular abscess and an antibiotic is to be started.

   What type of antibiotics should be considered?
   (A) Active against facultative anaerobes
   (B) Active against gram positive aerobes
   (C) Active against gram negative aerobes
   (D) Active against aerobes and anaerobes

3. A 25-year-old man came complaining of plaque accumulation on his lower arch and bleeding with slight touch to his gingival area. On examination, there was plaque which bleeds with manipulation for examination.

   What is the most effective long term control method for this case?
   (A) Scaling
   (B) Flossing
   (C) Dentifrices
   (D) Fluoride toothbrush

9. A 42-year-old man came with a complaint of depressed mood for several weeks that interferes with his ability to work. He has insomnia with fatigue, feels guilty and has suicidal thoughts and bought pesticide to end his life.

What is the best management for the patient in the primary care setting?
(A) Start him on antidepressant as our patient
(B) Start psychotherapy with anti depressant
(C) Admit him with antidepressant
(D) Refer him to a specialist

10. A 32-year-old man presented to the emergency OPD complaining of "gas in the stomach," shortness of breath, and squeezing back pain that prohibited him from working since six months ago. He had repeated medical evaluation in the tertiary care and they sent him back with reassurance.

What is the most likely diagnosis?
(A) Somatic symptom disorder
(B) Illness anxiety disorder
(C) Conversion disorder
(D) Panic attack

11. A 37-year-old male came with a complaint of painless mass on the right upper eyelid of three months duration. Ocular finding of the right upper lid revealed a non-tender localized nodule under the skin.

What is the most likely clinical diagnosis of the patient?
(A) Chalazion
(B) Hordeolum
(C) Sebaceous cyst
(D) Epithelial inclusion cyst

12. A 34-year-old male patient came with complaints of pain and blurring of vision on his left eye of three days duration after he sustained a falling down accident. He also has headache, fever and malaise. Findings on ocular examination were marked eyelid swelling, restricted ocular motility, visual reduction and proptosis. There is leukocytosis on CBC.

What is the most appropriate initial step in the management of the patient?
(A) Admit and start him on IV antibiotics
(B) Send him home with oral antibiotics
(C) Admit and start him on eye drops
(D) Refer him to ophthalmologist

13. A 35-year-old female presented with sudden onset left eye pain and blurring of vision of three hours duration which is associated with severe headache and photophobia. She has no history of trauma or similar symptoms. Ocular finding in the left eye shows visual acuity of hand motion, injected conjunctiva, cloudy cornea and irregular poorly reactive pupil.

What is the most likely diagnosis of the patient?
(A) Anterior uveities
(B) Herpetic keratitis
(C) Angle closure glaucoma
(D) Hey fever keratoconjuctivits

BOOKLET CODE: 014

14. A four-year-old child was brought by her parents with a complaint of whitish coated spot on both eyes of one week duration. On history she was not vaccinated fully. She had history of maculopapular rash with runny nose and cough about two weeks back. On ocular examination, she has central corneal ulcer bilaterally.

What is the most appropriate initial management for the child?
(A) Vitamin A supplementation
(B) Topical antibiotics
(C) Investigation
(D) Referral

15. A 50-year-old male patient with Parkinson's disease came with a complaint of skin lesion of three months duration. On examination, there are erythematous plaque lesions over the scalp, eye brows and posterior auricular area bilaterally with yellowish greasy scaling.

What is the most likely diagnosis?
(A) Dandruff
(B) Psoriasis
(C) Lichen planus
(D) Seborrheic dermatitis

16. A 15-year-old girl came with asymptomatic skin lesion of one year duration. Upon evaluation there are open and closed comedos with scattered papules over the face, mostly on the forehead.

What is the most appropriate treatment for this stage of the disease?
(A) Oral Dapsone
(B) Topical retinoid
(C) Photodynamic therapy
(D) Oral contraceptive pills

17. A known RVI patient, who has been on HAART for the past six months, came with a complaint of fever, chills and generalized reddening of the skin of five days duration. His temperature is 39.3°C, blood pressure is 90/60 mmHg, pulse rate is 126/min and respirations are 27/min. On examination, the skin appears glazed, eroded with areas of coalescing erythema, and Nikolyski sign was positive.

Which drug is the most likely cause of the patient's condition?
(A) Zidovudine
(B) Nevirapine
(C) Tenofovir
(D) Indinavir

18. A 23-year-old housewife came with a complaint of prurutic skin lesion of three weeks duration. She stated that her symptom started a month after her husband came back from field work. On examination, there is skin colored and excoriated papules over the trunk and extremities mainly involving the axilla, nipples and the finger web spaces.

What is the most likely diagnosis of this patient?
(A) Scabies
(B) Syphilis
(C) Papular Urticaria
(D) Prurutic papular eruption

lesions with central umblication over the face of two weeks duration.

What is the most likely diagnosis of this child?
(A) Common wart
(B) Cryptococcosis

20. A 32-year-old known RVI patient came with a complaint of mildly pruritic skin lesion of two months duration. On examination, there are multiple annular lesions with central clearing and peripheral advancement seen over the trunk.

What is the most likely diagnosis?
(A) Tinea corpooris
(B) Pityriasis versicolor

21. A number of patients are waiting for their turn in line to be seen by a health professional. When the health professional came, one of the patients who know him very well, asked him to be seen first. But the health professional refused and politely instructed him to stay in the queue with the other patients.

Which ethical principle does the health professional implement?
(A) Justice
(B) Autonomy

22. A 35-year-old man came to a hospital with a complaint of recurrent headache of two weeks duration. During evaluation, the physician did not listen to the patient but kept on asking him leading questions and interrupting him repeatedly.

Which quality of compassionate care is violated in this case?
(A) Respect
(B) Empathy

23. A health care professional, who has been working in an emergency department for the past two years with a strong sense of motivation, started to come late to work. All his co-workers witnessed his gradual behavioral change; they further explained that he isolates himself and becomes uncompassionate to the patients too.

What is the most likely cause of his behavioral change?
(A) Burnout
(B) Compassion fatigue
(C) The wider health care context
(D) Unbalanced focus between biomedical models

BOOKLET CODE: 014

34. A research institution wants to identify the types of cardiovascular morbidity in a country. The institution grouped the hospitals based on their rank as primary, secondary and tertiary level. Then hospitals were randomly selected from each group to conduct the study.

What is the most appropriate sampling method used in this scenario?
(A) Simple random sampling
(B) Cluster random sampling
(C) Stratified random sampling
(D) Systematic random sampling

35. A hospital manager wishes to know what proportions of patients admitted to the orthopedic department has died. A 95% confidence interval is desired with a width interval of 0.06 and the population proportion is estimated as 0.20 from a previous study.

What is the sample size needed for the above study?
(A) 10
(B) 87
(C) 171
(D) 174

36. An epidemiologist has planned to estimate the prevalence of Sudden Infant Death Syndrome (SIDS) among infants admitted to the ICU of a hospital.

What is the most appropriate measurement tool to be used?
(A) Observational checklist
(B) Document review checklist
(C) Self administered questionnaire
(D) Face to face interview questionnaire

37. A health officer has planned a study on 50 fetuses that underwent open fetal myelomeningocele closure. He collected all data without taking into account persons who refused to be interviewed and unwilling to give response.

What is most likely ethical principle violated in this study?
(A) Equal benefit
(B) Not doing harm
(C) Informed consent
(D) Doing the right thing

38. Few studies have shown that there is an association of migraine with cardiovascular disease. A cohort study was conducted to evaluate the association among women. Women were asked whether a physician had diagnosed them as having migraine and cardiovascular disease. This finding was confirmed through review of medical record or supporting information by a physician who was blinded to the exposure status.

What is the most likely compromised methodological issue in this study?
(A) Assessment of exposure status
(B) Selection of study participants
(C) Selection of data collection tools
(D) Ascertainment of outcome status

39. A researcher has been conducting a survey to estimate the mean survival time of patients with a tumor. However, few data collectors are filling the questionnaire carelessly.

What is the most appropriate action that should be taken to improve the quality of data?
(A) Provide training
(B) Close supervision
(C) Conducting pretesting
(D) Proving good incentives

40. A nationwide clinical study was done among latent HIV/AIDS cases. The study participants were selected from the community with low socioeconomic status. Initially they were informed that the study will last for about five years but it continued for more than a decade. After a few years, some of them developed the disease and appropriate treatment was given.

What is the most likely ethical principle applied in this scenario?
(A) Justice
(B) Beneficence
(C) Malfeasance
(D) Respect for persons

41. The Ethiopian medical journal reported a study of 13 HIV-positive patients, who were treated with HAART for at least six months. The CD4 T-cell counts at baseline were as listed below: 130, 168,205, 313, 207, 227, 245, 173, 103, 181, 105, 301, 169

What is the Inter Quartile Range (IQR) for this data set?
(A) 87
(B) 149
(C) 210
(D) 245

42. Hemoglobin A1C is a serum measure often used to monitor compliance among diabetic patients. A sample of five values of hemoglobin A1C obtained from a single diabetic patient are 8.5%, 9.3%, 7.9%, 9.2%, and 10.3%.

What is the most appropriate measure of variation for this sample?
(A) Standard Deviation
(B) Inter quartile range
(C) Variance
(D) Range

43. Cardiovascular risk factors such as diastolic blood pressure (mmHg) and HDL cholesterol levels (mg/dL) were measured among children in every 3-year intervals. It was noted that the coefficient of variation (CV) was 7.1% for blood pressure and 10.4% for HDL cholesterol.

What is the correct statement about the above scenario?
(A) The variability in cholesterol level measurements and BP cannot be compared
(B) There is high variability in cholesterol level measurements than blood pressure
(C) There is high variability in blood pressure measurements than cholesterol level
(D) There is consistence of measurements in cholesterol level than blood pressure

cannot speak the language of the patient which made it difficult [illegible] also a wide cultural difference which made the case very strange to the health

What is the most appropriate principle to be followed in managing the situation?
(A) Recognize diversity
(B) Uphold responsibility
(C) Value work place culture
(D) Challenge dignity barrier

25. A 28-year-old depressed male patient came for a psychiatric evaluation. While interviewing, the psychiatrist used a statement like "I understand how difficult it is being unable to sleep for three days". Then, the patient continued to tell his problems without reservations.

What is the most likely reason of using empathic statement during the interview?
(A) To help the patient to disclose himself
(B) To help the provider to lead the interview
(C) To help the patient to feel being understood
(D) To help the provider to get more information

26. A health professional, who is working in a referral hospital, also works in a private diagnostic center which he owns. This has resulted in a conflict of interest between the hospital and him.

What is the best recommendation to reduce the conflict in this case?
(A) Disclose his affiliation
(B) Use external monitoring
(C) Discontinue his affiliation
(D) Continue his affiliation secretly

27. A health professional uses an open-ended question at first and close-ended questions in the middle of an interview to help him reach at diagnosis. Later, he talks about diagnosis and alternative treatments. At the end, he developed a treatment plan collaboratively with the patient and agreed to divide responsibility for the next session.

What is the evidence that understanding is established in the case?
(A) Two way communications is implemented
(B) Interview technique of the health professional
(C) Diagnosis and treatment alternative is communicated
(D) Decision on the treatment plan is made collaboratively

28. A physician, who was examining a 48-year-old female patient, reached at a diagnosis with a poor prognosis.

What is the most likely issue that should be considered in disclosing the diagnosis?
(A) Worthiness of telling the news
(B) Availability of professional support
(C) Psychological issues
(D) Her's ability to accept the patient's reaction

48. A nationwide case control study was conducted to assess the association of life skill training and academic dismissal among fresh female University students. Odds ratio of 0.4 was reported for students who took life skill training compared to students who did not take the training.

What is the most appropriate interpretation of this finding?

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

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

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

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

49. A manger of a health center engaged with the staffs during a sanitation campaign in the compound. The manager showed the staff how it can be done, and also supported and encouraged them to finish the sanitation campaign effectively and efficiently.

What management function is most likely applied?

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

50. A medical officer is performing a quarterly supervision in the laboratory unit of a health center. He assessed the available materials and their functionality using an inventory checklist.

What managerial skill is being implemented?

(A) Conceptual
(B) Technical
(C) Communication
(D) Human relation

51. A manager in a primary hospital assigned the health work forces of the hospital based on their expertise. He also allocated the resources based on the prioritized problems of the hospital.

What managerial principle is applied?

(A) Order
(B) Equity
(C) Remunerate
(D) Unit of direction

52. A health center's manager plans to improve the utilization of institutional delivery until the end of 2012 E.C by assigning committed midwifes and creating awareness in the community.

What is the most appropriate principle of management to be applied?

(A) Converge of work
(B) Learning from experience
(C) Management by objective
(D) Management by exception

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