



PHARMACOLOGY

- 1) A 30 years old female patient is taking some antiepileptic drug to which she responded well. Recently she started taking oral contraceptive pills, however she still conceived despite contraception. If the contraception failure is drug induced, which one of the following antiepileptic drugs is most likely responsible?
- A. Carbamazepine
 - B. Diazepam
 - C. Ethosuximide
 - D. Gabapentin
 - E. Valproic Acid
- 2) Which one of the following drugs is often used in the heroin detoxification programmes?
- A. Alfentanil
 - B. Buprenorphine
 - C. Naloxone
 - D. Pentazocin
 - E. Pethidine
- 3) A patient with known epilepsy is to undergo surgical procedure under general anesthesia. Which one of the following inhalational GA is most likely contraindicated in this patient?
- A. Desflurane
 - B. Enflurane
 - C. Halothane
 - D. Isoflurane
 - E. Nitrous Oxide
- 4) The primary mechanism of action of local anesthetics involves the blockade of which of the following ion channels?
- A. Activated, ligand gated Ca²⁺ channels
 - B. Activated, voltage gated Ca²⁺ channels
 - C. Inactivated, voltage gated Na⁺ channels
 - D. Inactivated, ligand gated K⁺ channels
 - E. Resting voltage gated K⁺ channels
- 5) A 24 years old man with a history of partial seizures has been treated with valproic acid, however it is not fully effective and his neurologist prescribes another drug approved for adjuvant use in partial seizures. Unfortunately the patient develops a toxic epidermal necrolysis. The second drug prescribed was?
- A. Carbamazepine
 - B. Diazepam
 - C. Lamotrigine
 - D. Valproic Acid
 - E. Vigabatrin
- 6) Which one of the following antiparkinsonian drugs should be avoided in a patient of glaucoma?
- A. Benztropine
 - B. Bromocriptine
 - C. Ropinirole
 - D. Selegiline
 - E. Tolcapone
- 7) A patient with ischemic heart disease was administered an IV general anesthetic for a short surgical procedure. However it caused pain on administration and patient experienced nausea postoperatively. Which one of the following intravenous general anesthetics was he most likely administered?
- A. Etomidate
 - B. Ketamine
 - C. Midazolam
 - D. Propofol
 - E. Thiopentone
- 8) A patient after being given a local anesthetic complains of increasing anxiety. On examination she has tachycardia while immediate ECG shows ventricular tachycardia. Which one of the following local anesthetics was most likely administered?
- A. Bupivacaine
 - B. Lignocaine
 - C. Mepivacaine
 - D. Procaine
 - E. Prilocaine
- 9) A patient on antiparkinsonian drug Levodopa starts taking a multivitamin preparation. However soon after he notices a decrease in the effectiveness of Levodopa. Which one of the following vitamins is responsible for reduction in beneficial effects of Levodopa?
- A. Vitamin B1
 - B. Vitamin B2
 - C. Vitamin B6
 - D. Vitamin B12
 - E. Vitamin C
- 10) A patient with schizophrenia is prescribed Clozapine. Recurrence of which one of the following signs and symptoms will most likely prompt his physician to change the medication?
- A. Blurring of vision
 - B. Hyperglycemia



PHARMACOLOGY

- 1) A 30 years old female patient is taking some antiepileptic drug to which she responded well. Recently she started taking oral contraceptive pills, however she still conceived despite contraception. If the contraception failure is drug induced, which one of the following antiepileptic drugs is most likely responsible?
 - A. Carbamazepine
 - B. Diazepam
 - C. Ethosuximide
 - D. Gabapentin
 - E. Valproic Acid
- 2) Which one of the following drugs is often used in the heroin detoxification programmes?
 - A. Alfentanil
 - B. Buprenorphine
 - C. Naloxone
 - D. Pentazocin
 - E. Pethidine
- 3) A patient with known epilepsy is to undergo surgical procedure under general anesthesia. Which one of the following Inhalational GA is most likely contraindicated in this patient?
 - A. Desflurane
 - B. Enflurane
 - C. Halothane
 - D. Isoflurane
 - E. Nitrous Oxide
- 4) The primary mechanism of action of local anesthetics involves the blockade of which of the following ion channels?
 - A. Activated, ligand gated Ca²⁺ channels
 - B. Activated, voltage gated Ca²⁺ channels
 - C. Inactivated, voltage gated Na⁺ channels
 - D. Inactivated, ligand gated K⁺ channels
 - E. Resting voltage gated K⁺ channels
- 5) A 24 years old man with a history of partial seizures has been treated with valproic acid, however it is not fully effective and his neurologist prescribes another drug approved for adjuvant use in partial seizures. Unfortunately the patient develops a toxic epidermal necrolysis. The second drug prescribed was?
 - A. Carbamazepine
 - B. Diazepam
 - C. Lamotrigine
 - D. Valproic Acid
 - E. Vigabatrin
- 6) Which one of the following antiparkinsonian drugs should be avoided in a patient of glaucoma?
 - A. Benztropine
 - B. Bromocriptine
 - C. Ropinirole
 - D. Selegiline
 - E. Tolcapone
- 7) A patient with ischemic heart disease was administered an IV general anesthetic for a short surgical procedure. However it caused pain on administration and patient experienced nausea postoperatively. Which one of the following intravenous general anesthetics was he most likely administered?
 - A. Etomidate
 - B. Ketamine
 - C. Midazolam
 - D. Propofol
 - E. Thiopentone
- 8) A patient after being given a local anesthetic complains of increasing anxiety. On examination she has tachycardia while immediate ECG shows ventricular tachycardia. Which one of the following local anesthetics was most likely administered?
 - A. Bupivacaine
 - B. Lignocaine
 - C. Mepivacaine
 - D. Procaine
 - E. Prilocaine
- 9) A patient on antiparkinsonian drug Levodopa starts taking a multivitamin preparation. However soon after he notices a decrease in the effectiveness of Levodopa. Which one of the following vitamins is responsible for reduction in beneficial effects of Levodopa?
 - A. Vitamin B1
 - B. Vitamin B2
 - C. Vitamin B6
 - D. Vitamin B12
 - E. Vitamin C
- 10) A patient with schizophrenia is prescribed Clozapine. Recurrence of which one of the following signs and symptoms will most likely prompt his physician to change the medication?
 - A. Blurring of vision
 - B. Hyperglycemia

- C. Increase in serum creatinine
 - D. Prolongation of QT interval
 - E. Sore throat
- 11) A patient with recently diagnosed schizophrenia is prescribed a typical antipsychotic drug. His attendant should be warned about which one of the following adverse effects?
- A. Diarrhea
 - B. Decreased heart rate
 - C. Increased salivation
 - D. Nausea and vomiting
 - E. Postural hypotension
- 12) A patient on oral anticoagulant warfarin becomes severely depressed and is prescribed an antidepressant. Soon after he comes back with bleeding from various sites of the body. Which one of the following drugs most likely caused this effect?
- A. Amitriptyline
 - B. Fluoxetine
 - C. Mirtazepine
 - D. Phenelzine
 - E. Venlafaxine
- 13) Which one of the following statements concerning lithium is correct?
- A. It has narrow therapeutic index
 - B. Has a rapid onset of action
 - C. Has extensive plasma protein binding
 - D. Is more useful in depressive phase of bipolar disorder
 - E. Renal excretion is increased by diuretics
- 14) A patient brought to the emergency after ingesting 30 times the normal daily therapeutic dose of amitriptyline. Of the following possible signs and symptoms, which one of the following is most likely to be observed in this patient?
- A. Excessively high blood pressure
 - B. Increased bowel sounds
 - C. Pinpoint pupils
 - D. Sedation, coma
 - E. Urinary incontinence
- 15) Which one of the following drugs will be prescribed to a patient suffering from repeated episodes of bipolar disorder and not responding to lithium and can also be used in pregnancy?
- A. Amitriptyline
 - B. Bupropion
 - C. Fluphenazine
 - D. Haloperidol
 - E. Quetiapine
- 16) High concentration of a metabolite of which one of the following opioids may cause seizures in high doses or in patients with renal dysfunction?

- A. Buprenorphine
 - B. Fentanyl
 - C. Levorphanol
 - D. Meperidine
 - E. Pentazocin
- 17) Ethanol is used in methanol poisoning because it:
- A. Antagonises the actions of methanol
 - B. Decreases the generation of its toxic metabolites by inhibiting its metabolism
 - C. Increases excretion of methanol
 - D. Replenishes the folate stores that have been depleted by methanol
 - E. Reduces the blood levels of methanol by stimulating its metabolism
- 18) Which one of the following drugs is often used by the male bodybuilders to enhance muscle strength and it may cause increased aggressiveness and irritability with occasional agitation?
- A. Amphetamine
 - B. Cocaine
 - C. Heroin
 - D. Marijuana
 - E. Oxandrolone
- 19) Which one of the following benzodiazepines may cause day time anxiety as an early sign of withdrawal due to its very short half life when it is being used to treat insomnia?
- A. Alprazolam
 - B. Chlordiazepoxide
 - C. Diazepam
 - D. Triazolam
 - E. Temazepam
- 20) A 35-years-old woman with a history of migraine reports to her physician that the last time she used her medicine to stop an acute attack, she felt numbness and tingling in her extremities and blanching and cyanosis of her fingers. Which one of the following medications did she take?
- A. Dihydroergotamine
 - B. Methysergide
 - C. Naproxen
 - D. Sumatriptan
 - E. Tramadol

PHYSIOLOGY

- 21) A 2 years old boy with gross motor delays presented with wide-based, unsteady gait and headaches over 1 month. A brain MRI reveals a large posterior fossa mass. He underwent total resection and microscopy showed small blue round cell, Homer Wright rosettes and high mitotic count. The most likely diagnosis is:
- A. Meningioma
 - B. Glioblastoma

- C. Astrocytoma
 D. Choroid plexus tumor
 E. Medulloblastoma
- 22) A 67-year-old male with a 70-pack-per-year smoking history and hypertension is eating dinner with friends when he suddenly begins to speak in incomplete sentences and with noticeable pauses between small groups of words. He is brought to the emergency room. During his subsequent hospital admission, a follow-up CT scan is performed 24 hours after his arrival at the emergency room. Of the following, which is most likely to be identified?
- A. Ischemic injury in the superior left frontal lobe
 B. Ischemic injury in the superior right frontal lobe
 C. Ischemic injury in the superior left parietal lobe
 D. Ischemic injury in the inferior left frontal lobe
 E. Ischemic injury in the inferior right frontal lobe
- 23) A 45-year-old woman is rushed to the emergency room following an automobile accident. Ten hours after admission, the patient complains of a severe headache and blurred vision. An X-ray film of the cranium shows a fracture of the temporal parietal bone. Despite emergency craniotomy, the patient dies. Which of the following pathologic findings would be expected at autopsy?
- A. Epidural hematoma
 B. Intracerebral hemorrhage
 C. Intraventricular hemorrhage
 D. Subarachnoid hemorrhage
 E. Subdural hematoma
- 24) A 37-year-old first presented to her family physician with loss of vision in her right eye about 7 years ago. Since that time, she has done fairly well, with occasional episodes in which she has had a variety of symptoms including weakness of her left lower extremity, loss of sensation in her right upper extremity, and one episode where she had urinary incontinence. Of the following, what would gross examination of the brain most likely reveal?
- A. Normal parenchyma
 B. Metastatic carcinoma
 C. Plaques
 D. Multiple foci of hemorrhage
 E. Central pontine myelinolysis
- 25) A 41-year-old male commits suicide by shooting himself in the chest. The forensic pathologist who is performing the autopsy

examines the brain and notes that both caudate nuclei appear atrophic. Of the following, what molecular abnormality was present in this individual?

- A. CAG repeats
 B. CGA repeats
 C. Mutation of chromosome 1
 D. Mutation of chromosome 14
 E. Inability to catabolize very-long-chain fatty acids
- 26) A 46-year-old female presents to her family physician with the complaint of double vision. Physical examination reveals ptosis. The doctor diagnoses Bell's palsy, and tells the patient the condition will most likely pass. Over the next 6 months, she presents to her physician several times, both with similar changes involving her eyes, and also with muscle weakness involving her thighs and arms. No muscle wasting develops. Her symptoms abate with a trial of cholinesterase inhibitor. Of the following, what is the most likely diagnosis?
- A. Amyotrophic lateral sclerosis
 B. Duchenne's muscular dystrophy
 C. Myasthenia gravis
 D. Eaton-Lambert syndrome
 E. Guillain-Barré syndrome
- 27) A pathologist is examining a brain tumor resected from a 63-year-old male. The pathologist identifies psammoma bodies in the histologic section. Of the following, what is true of this tumor type?
- A. The prognosis is good.
 B. The tumor most frequently occurs at the cerebellopontine angle.
 C. The tumor derives from Rathke's pouch.
 D. The appearance of the tumor cells is sometimes described as a fried egg.
 E. The tumor is rare.
- 28) An 83-year-old male is being seen for a routine examination by his primary care physician at the nursing home where he resides. Over the past 4 years, he has developed progressively worsening memory loss, impaired language function, and altered social skills. A CT scan of the head revealed no anatomic abnormalities. Testing for RPR, B12, folate, and thyroid function were all within normal limits. Of the following, what is the most likely diagnosis?
- A. Parkinson's disease
 B. Alzheimer's dementia
 C. Cerebral infarct involving the left middle cerebral artery distribution
 D. Creutzfeldt-Jakob disease

- E. Multiple sclerosis
- 29) A 27-year-old male is partying with friends and snorts cocaine. Shortly thereafter, he becomes unresponsive on the couch. Fortunately, his friends bring him to emergency within minutes. Resuscitation is begun, but a pulse is not restored until they arrive at the emergency room, approximately 20 minutes after he went unresponsive. He does not regain consciousness. One day later, he is pronounced brain dead. An autopsy is performed by a forensic pathologist. Of the following, which change would be identified in the hippocampus?
- Gliosis
 - Red neurons
 - Neurofibrillary tangles
 - Microglial nodules
 - Foamy macrophages
- 30) A previously healthy 31 years old female experiences a sudden severe headache and loses consciousness within an hour. CT scan reveals extensive subarachnoid hemorrhage at the base of the brain. A lumbar puncture yields cerebrospinal fluid with many red blood cells, but no white blood cells. The CSF protein is slightly increased, but the glucose is normal. Which of the following is the most likely diagnosis?
- Acute bacterial meningitis
 - Ruptured berry aneurysm
 - Progressive multifocal leukoencephalopathy
 - Hypertensive hemorrhage
 - Amyloid arteriopathy
- 31) A 43-year-old alcoholic is brought to the emergency room by EMTs, who were called by the patient's family. Over the past two days, he has complained of a headache, which he described as severe and throbbing. Today, they found him unresponsive in his bed, with vomit on the bed. His vital signs are a temperature of 101.3°F, pulse of 108 bpm, and blood pressure of 152/87 mm Hg. What is the most likely etiology of his condition?
- Staphylococcus aureus
 - Neisseria meningitidis
 - Hemophilus influenzae
 - Streptococcus pneumoniae
 - Mycobacterium tuberculosis
- 32) A 68-year-old man presents with a 2-week history of tonic-clonic seizures that initially involve his left arm but have more recently progressed to involve his left leg. The seizures are accompanied by muscle weakness but no other neurologic signs. A

CT scan reveals a mass in the left cerebral hemisphere. A left frontoparietal craniotomy is performed. Histologic examination of the brain biopsy shows extensive necrosis and palisading of tumor cells around necrosis. Which of the following is the appropriate diagnosis?

- Craniopharyngioma
 - Ependymoma
 - Ganglioglioma
 - Glioblastoma multiforme
 - Meningioma
- 33) A 50-year-old man presents to the emergency room after suffering an epileptic seizure. Vital signs are normal. An X-ray of the patient's head shows a mass in the left cerebral hemisphere with scattered foci of calcification. Histologic examination of a brain biopsy rounded tumor cells with a clear halo around them (fried egg appearance). Which of the following is the appropriate diagnosis?
- Ependymoma
 - Glioblastoma
 - Hemangioblastoma
 - Meningioma
 - Oligodendroglioma
- 34) A 45-year-old man presents with weakness and wasting of the muscles of his right hand for 8 months. Physical examination shows fasciculations of the hand. The patient's speech is impaired, and 6 years later, he dies of respiratory insufficiency. Autopsy shows atrophy of ventral roots in the spinal cord. Which of the following is the most likely diagnosis?
- Amyotrophic lateral sclerosis
 - Parkinson disease
 - Huntington disease
 - Multiple infarct dementia
 - Pick disease
- 35) A patient admitted in emergency with history of seizure and fever was diagnosed to have Herpes simplex 1 virus infection of the brain. She was started on antiviral medication but became increasingly unresponsive and expired. Examination of affected brain tissue at autopsy would most likely reveal which of the following pathologic findings?
- Charcot-Bouchard aneurysms
 - Focal plaques of demyelination
 - Neurofibrillary tangles
 - Perivascular cuffs of lymphocytes
 - Spongiform degeneration
- 36) A 45-year-old man with AIDS is admitted to the hospital with a productive cough, fever, and night sweats. An X-ray film of the

chest shows an ill-defined area of consolidation at the periphery of the right middle lobe and mediastinal lymphadenopathy. A sputum culture grows acid-fast bacilli. The patient develops severe headache and neck rigidity. Which of the following pathogens is the most likely cause of meningitis in this patient?

- A. Aspergillus flavus
- B. Cryptococcus neoformans
- C. Mycobacterium tuberculosis
- D. Neisseria meningitidis
- E. Toxoplasma gondii

37) A 34-year-old male has a one-week history of cough, congestion, and a slight fever. Following these he develops weakness in his legs, which then progresses to his thighs. He is admitted to the hospital. The weakness continues and involves his abdominal musculature and his diaphragm, necessitating intubation. Ultimately, the weakness passes, he is extubated and able to leave the hospital with no lingering complications. He had no significant past medical history, and, at the time of his weakness, other than the preceding symptoms, no other manifestations. Of the following, what is the most likely diagnosis?

- A. Lyme disease
- B. Lambert-Eaton syndrome
- C. Myasthenia gravis
- D. Guillain-Barré syndrome
- E. Transient ischemic attack

38) Which one the following is NOT a tumor of central nervous system:

- A. Astrocytoma
- B. Meningioma
- C. Ependymoma
- D. Retinoblastoma
- E. Oligodendroglioma

39) A 4 year old child presented with large infratentorial cerebellar cystic tumor with mural nodule on CT-scan. On microscopy it is composed of bland looking bipolar cells with eosinophilic granular bodies and pink rosenthal fibres in fibrillary background. What is the diagnosis?

- A. Glioblastoma multiforme WHO grade IV
- B. Meningioma WHO Grade I
- C. Medulloblastoma WHO Grade IV
- D. Pilocytic Astrocytoma WHO grade I
- E. Oligodendroglioma

40) A 15-year-old boy is rushed to the emergency room after suffering a tonic-clonic seizure 4 weeks after a bite by a rabid bat. The boy appears irritable and agitated, and his parents state that he has difficulty

swallowing fluids. Lumbar puncture shows numerous lymphocytes. The patient becomes delirious, slips into a coma, and expires. At autopsy, the brain stem shows infiltrates of lymphocytes around small blood vessels and evidence of neuronophagia. Some neurons contain eosinophilic inclusions. What is the proper name for these neuronal inclusions?

- A. Councilman bodies
- B. Hirano bodies
- C. Lewy bodies
- D. Negri bodies
- E. Psammoma bodies

41) Following statement is true of Schwannoma/neurilemmoma?

- A. It is a malignant counterpart of neurofibroma
- B. It's a a round blue cell tumor
- C. Spindly cells forming palisade around acellular areas called VEROCAY bodies are characteristic
- D. It's a Non-encapsulated tumor and cannot be separated from nerve
- E. Pseudopalisading of atypical tumor cells around necrosis

42) The best described etiology for Berry aneurysm is which of the following?

- A. Degeneration of internal elastic lamina
- B. Degeneration of tunica media
- C. Defect in muscular layer
- D. Low grade inflammation in the vessel wall
- E. Defect in tunica intima

FORENSIC

43) Most poisonous part of Dethura plant.

- A. Seeds
- B. Leaves
- C. Stems.
- D. Flowers
- E. Roots

44) Most potent form of cannabis indica.

- A. Bhang
- B. Charas
- C. Majum
- D. Ganga
- E. Heroin

45) Fatal Dose of Dethura Plant

- A. 15-20 seeds
- B. 5 Leaves
- C. 100-125 Seeds
- D. 1cm of stem
- E. 50-80 Seeds

46) The following poison is used as a stupefying agent

- A. Methanol
- B. Kerosene Oil
- C. Dathura

- D. Ganga
E. Paraquat
- 47) Delusion is
A. True Belief
B. False Belief
C. Happiness
D. Fear of some thing
E. Sadness
- 48) Hallucination
A. True Sense of perception
B. Sense of Happiness
C. A type of insomnia
D. Obsession
E. Psychosis
- 49) Lucid interval occurs in
A. Delirium
B. Insanity
C. Insomnia
D. Obsession
E. Psychosis
- 50) I Q In severe Mental Retardation
A. 50-69
B. 35-49
C. 20-34
D. 15-20
E. 25-30
- 51) Snake venom
A. Respiratory Secretions
B. Watery
C. Ambar Colour
D. Mostly fat
E. Having no enzyme
- 52) Treatment of snake bite
A. Local Dressing is done
B. Keep the patient cold.
C. Distal tourniquet
D. incision and suction
E. Immobilize the bitten limbe
- 53) Medico legal importance of snake poisoning
A. No importance
B. Accidental
C. Suicidal
D. Used to earn mony
E. Do not be used for homicidal purpose
- 54) Fatal Dose of cobra poisoning
A. 40 mg
B. 10mg
C. 15mg of dried venom
D. 45mg
E. 25mg
- 55) Barbiturates
A. Derivatives of tannic acid
B. No Role in seizures
C. CNS Depressants
D. CNS Stimulants
E. Causes hyper reflexia
- 56) Post mortem appearance in barbiturate poisoning

- A. Powder of drug not found in stomach
B. Un remarkable
C. No frothing
D. Signs of Asphyxia
E. Not used for suicidal purpose
- 57) Further absorption in barbiturate poisoning can be achieved by.
A. Giving Antibiotics
B. Coffee
C. Gastric lavage
D. Reassurance
E. O2 inhalations
- 58) Symptoms of barbiturate poisoning
A. Headache
B. Hot skin
C. Dri irritating cough
D. Areflexia
E. Frequent micturition
- 59) Fatal dose of strychnine poisoning
A. One Crushed seed
B. Six Crushed seeds
C. Two whole seeds
D. One whole seed
E. Two crushed seeds
- 60) Nux vomica seeds are.
A. Hard, flat and ash gray
B. Soft flat, ash gray
C. Hard, spherical, red
D. Hard, flat, convex on both side
E. Hard and round with concave side.

COMMUNITY MEDICINE

61) In a village of 250,000 population, crude birth rate was recorded as 15 per 1000 population. In a year 45 maternal deaths were recorded in that village.

Lead In: Maternal Mortality Ratio (MMR) of village was

- A. 0,2/1000 live births
B. 6/1000 live births
C. 71000 live births
D. 10/1000 live births
E. 12/1000 live births

$$\frac{45}{3750} \times 1000 = 3.750$$

62) An epidemiologist noted that in a closed urban locality, 27 cases of Naegleria occurred and only 2 survived.

Lead In: Killing power of Naegleria is

- A. 40.5 %
B. 64.5 %
C. 82.5 %
D. 92,5 %
E. 98.5 %

63) To see the relationship between coffee drinking and carcinoma of pancreas, a researcher conducted a Cohort study, At the end of study, Population Attributable Risk was calculated as 75%

Lead In: Population Attributable Risk 75% means

- A. 75 % of population is having carcinoma of pancreas
- B. 75 % of population can be saved from carcinoma of pancreas by eliminating coffee drinking
- C. Risk factor positive has 75 times more chances to develop carcinoma of pancreas as compared to risk factor negatives
- D. Prevalence of carcinoma of pancreas is 75/ 100 population
- E. There is probability of 75% that risk factor under study will cause carcinoma of pancreas

64) For a preventive vaccine trial of a new typhoid vaccine, 5000 persons were inducted in a study. Out of 2500 vaccinated persons, 100 contracted Typhoid during 3 years' time. From non-vaccinated group, 600 contracted Typhoid in same time period.

Lead In: The vaccine efficacy is

- A. 73.3 %
- B. 83.3 %
- C. 88.3 %
- D. 92.3 %
- E. 97.3 %

65) In screening test against diseases, cut off line plays an important role for sensitivity and specificity.

Lead In: If we increase the cut off line from 100 mg/dl to 110 mg/dl, for screening of diabetes mellitus then

- A. True negative and false negative will increase
- B. True negative will increase and false negative will decrease
- C. True positive and false negative will increase
- D. True positive and false positive will increase
- E. True positive will increase and false positive will decrease

66) Diagnostic test results

		Diagnostic test results	
		+	-
Screening test results	+	27	35
	-	10	77
		n = 149	

Lead In: Sensitivity of test is:

- A. 38.96 %
- B. 43.5 %
- C. 69 %
- D. 72.9 %
- E. 88.5 %

67) Blinding or masking is heart of Randomized clinical trials.

Lead In: In a double-blind randomized control trial followings are masked

- A. Participants and analyzer
- B. Observer and analyzer

- C. Analyser, observer and participants
- D. Participants and observer
- E. Only participants

68) A researcher inducted 5000 persons in a study for a period of 5 years to see the presence of disease in them. 100 persons left the study after remaining in study for 2 years. Rest of the persons completed the study and at the end of study 494 cases were noted.

Lead In: Incidence density rate of this study is

- A. 2 cases / 100 person years
- B. 3 cases / 100 person years
- C. 4 cases / 100 person years
- D. 5 cases / 100 person years
- E. 6 cases / 100 person years

69) In a village of 2000 population (1200 males and 800 females), 48 females and 70 males died in a year.

Lead In: The sex specific death rate for male is

- A. 35 / 1000 population
- B. 38 / 1000 male population
- C. 70 / 1000 population
- D. 75 / 1000 male population
- E. 79 / 1000 population

70) In a joint family there were 15 children from 3 to 12 years of age. 4 children had measles when they were 4 years old. 3 children were protected through vaccination. Epidemiologist noted 7 children having measles in a short period of time.

Lead In: Secondary Attack Rate of measles is

- A. 57.6 %
- B. 66.7 %
- C. 71.4 %
- D. 85.7 %
- E. 97.5 %

71) In a clinical setting, a physician assembled 20 cases of his ward and those cases were assigned groups randomly. After one-week results were analysed.

Lead In: This type of study design is

- A. Concurrent parallel
- B. Cross over type of study design
- C. Cross sectional survey
- D. Longitudinal survey
- E. Quasi experimental design

72) In a village of 20000 persons (11000 males and 9000 females), 300 died of TB, 50 of snake bite, 200 of corona, 300 of diarrhoea and 400 of malaria.

Lead In: Proportional mortality rate from diarrhoea is

- A. 12 %
- B. 24 %
- C. 36 %
- D. 48 %
- E. 58 %

73) In a village of 30000 persons (16000 males and 14000 females), 300 persons died of TB, 60 of snake bite, 200 of corona, 300 of diarrhoea and 420 females died of pregnancy related disorders.

Lead In: Proportional Mortality due to pregnancy related disorders is

- A. 3%
- B. 9.2%
- C. 16.8%
- D. 23.2%
- E. 32.8%

$$\frac{420}{14000} \times 100$$

74) A researcher is interested in the effects of practical (outside the classroom) teaching on intellectual development. She believes practical method is better than inside the classroom method. She obtains a random sample of 100 grade three students. It is believed that grade 3 students have an IQ of 80. The practical method students had an average IQ of 85 with a standard deviation of 5.

- Which is the Null Hypothesis of the study?
- A. Practical teaching improves IQ
 - B. Practical teaching affects IQ
 - C. IQ levels in practical teaching outside are equal to IQ levels in classrooms
 - D. IQ levels in practical teaching outside are better than classroom teaching
 - E. IQ levels are decreased in practical teaching outside

75) A study in Abbottabad regarding prevalence of Hypertension in women revealed that both the mean and median of diastolic blood pressure of women is approximately 100 and the standard deviation is 10.

- Which of the following is true regarding this data?
- A. Approximately 95% of people have diastolic blood pressure between 100 and 110
 - B. The distribution is nearly symmetrical
 - C. The distribution is nearly asymmetrical
 - D. The 95% confidence limit on the mean for all in this population are 100 and 115 mm Hg
 - E. The prevalence of Hypertension is high in this region

76) A study was conducted in Rawalpindi to find out the heights of 4th year MBBS. The results showed that average height was almost the same

- How is this chosen variable classified?
- A. Discrete
 - B. Ordinal
 - C. Dichotomous
 - D. Continuous
 - E. Normal

77) A survey done in Swat assessed Vitamin A deficiency in 500 school children less than 8 years age. The results were as follows:

VITAMIN A LEVELS	
Mean	18 ng/ml ↑
Median	13 ng/ml
Mode	12 ng/ml ↓

What conclusion can you draw about this distribution from these values?

- A. Normal distribution
- B. Positively skewed
- C. Negatively skewed
- D. Bimodal
- E. Multimodal



78) The principal of a school randomly checked the ages of 10 preschool children. In the collected data, the ages were: 2.5, 3, 3, 3, 3.5, 3.5, 4, 4, 4, and 4.5. The mean age of preschool children is

- A. 3.6
- B. 3
- C. 4
- D. 3.5
- E. 4.5

$$\frac{35}{10} = 3.5$$

79) An analysis of the race of patients who visit an emergency room reveals that 40% are white, 25% are black, 20% are Native American, and 15% are Asian.

Which is the best method of depicting these data graphically?

- A. Frequency Polygon
- B. Cumulative frequency graph
- C. Normal curve
- D. Histogram
- E. Pie chart

80) Mean Body Mass Index (BMI) levels for 500 males and 500 females aged 30-40 years were compared.

What will be the most appropriate statistical test to assess whether the difference is significantly different or not?

- A. t test
- B. Chi-square test
- C. Fisher exact test
- D. Correlation analysis
- ~~E. ANOVA~~

81) On World Diabetic Day, the blood sugar levels of many individuals were checked randomly as part of a screening program. 10 individuals had the same blood sugar value that was 100 mg/dl

What will be the standard deviation in these 10 individuals as there is no variability?

- A. 1
- B. -1
- C. 0
- D. 2
- E. -2

85 ± 5
85 ± 5
100 ± 10
86 - 110
→ 88.7

82) The mean birth weight of first-born infants of 25 women who were malnourished during pregnancy was 200 gm lower than that of the first born infants of 12 women who were normal weight. The difference was statistically significant at the 5% level ($p < 0.05$).

What does this statement mean?

- A. Malnutrition during pregnancy retards fetal growth
- B. The difference observed between mean birth weights was too large to have occurred by chance alone.
- C. The difference observed between mean birth weights could have easily occurred by chance alone
- D. The number of patients studied was not sufficient to achieve a conclusive result
- E. Malnutrition during pregnancy does not influence fetal growth

83) The students of Women Medical College visited Burn Hall School. The numbers of students per class from class I to class 5 were as follows: 27, 23, 15, 18, 30, 24, 8, 12 and 16.

What is the median number in this series?

- A. 12
- B. 15
- C. 16
- D. 18
- E. 20

8, 12, 15, 16, 18, 23, 24, 27, 30

84) The heights of 4th year MBBS students were taken and plotted on a graph. The data was found to be normally distributed

What is a normal distribution curve mainly based on?

- A. Mean and sample size
- B. Mean and standard deviation
- C. Range and sample size
- D. Range and standard deviation
- E. Mean and range

85) A survey was carried out in Abbottabad to measure the blood pressure of women between the ages of 40-60 years. Results revealed that most women fell in the area between mean and 2 standard deviations.

Approximately how much values will be included in the distribution in the area between two standard deviations on either side of the mean $(\bar{X}) \pm 2S$

- A. 68%
- B. 90%
- C. 95%
- D. 99.7%
- E. 100%

86) Rabies is a preventable viral disease of mammals with the vast majority of rabies cases occurring in wild animals like raccoons, skunks, bats, and foxes and humans

How soon do symptoms typically appear after a person is infected with the rabies virus?

- A. Less than one week

- B. 7-28 days
- C. 30-90 days
- D. 6 months
- E. 6 months 1 year

87) A 35 year old female divorced teacher presents with history of not eating well and wanting to remain isolated. Depression is a common psychiatric problem that is seen by psychiatrists. If not properly treated what is the common problem related to depression?

- A. Nervous break down
- B. Substance abuse
- C. Suicidal tendency
- D. Job failure
- E. Insomnia

MEDICINE & FAMILY MEDICINE

88) Which of the following is NOT considered a potential complication of multiple sclerosis?

- A. Paralysis
- B. Epilepsy
- C. Cognitive impairment
- D. Urinary incontinence
- E. loss of vision

89) Which imaging technique is commonly used to diagnose multiple sclerosis?

- A. Positron emission tomography (PET)
- B. Magnetic resonance imaging (MRI)
- C. Computed tomography (CT)
- D. Electroencephalogram (EEG)
- E. Skull X-ray

90) 45 years old female patient presented with sudden onset of bilateral lower limb weakness. She also gives history of blindness a year ago which settled on its own. On examination tone is increased reflexes are brisk plantars are upgoing. Fundoscopy shows optic atrophy. What is the most probable diagnosis

- A. Caries Spine
- B. Multiple sclerosis
- C. Guillian Barre Syndrome
- D. Cauda Equina Syndrome
- E. Cervical Spondylosis

91) 45 years old male patient presented with sudden onset of worsening paraplegia. He gives history of fever cough and since 3 months. On examination power is 3/5 in bilateral lower limbs. Tone is increased bilaterally, reflexes are brisk and plantars are bilateral upgoing. Upper limbs are normal on examination. What investigation will you order to confirm the diagnosis

- A. CT Brain
- B. Lumbar Puncture
- C. MRI Thoracic Spine
- D. Nerve conduction studies
- E. MRI Lumbosacral spine

92) 25 years old female presents with weakness of lower limbs for the past four months. She also complains of double vision in the evenings. She is completely fine when she wakes up in the morning. The weakness and diplopia worsens as the day passes. On examination power is 3/5 in both lower limbs tone and reflexes are normal plantars down going. What is the most likely diagnosis

- A. Myasthenia Gravis
- B. Multiple sclerosis.
- C. Guillian Barre Syndrome
- D. Cauda Equina Syndrome
- E. Cervical Spondylosis

93) Which of the following is NOT a potential complication of epilepsy?

- A. Memory loss
- B. Depression
- C. Hypertension
- D. Sudden unexpected death in epilepsy
- E. Fractures

94) Status epilepticus is characterized by

- A. A seizure lasting less than 5 minutes
- B. A seizure lasting more than 30 minutes
- C. A seizure occurring only during sleep
- D. A seizure with no loss of consciousness
- E. A focal seizure converting into a generalized seizure

95) 74 years old male patient presented with loss of balance since 1 year. He also complains of increased forgetfulness and urinary incontinence. What is the likely diagnosis

- A. Alzheimer's Disease
- B. Ischemic Stroke
- C. Senile dementia
- D. Vascular Dementia
- E. Normal Pressure Hydrocephalus

96) 35 years old male presents with sudden onset of weakness of lower limbs started from the foot and ascending upwards. He also gives a history of diarrhea a few days ago. On examination power in the lower limbs is 2/5. Ankle and knee jerk are absent. Plantars are mute. What is the likely diagnosis

- A. Guillian Barea syndrome
- B. Transverse Myelitis
- C. Tuberculous spine
- D. Brain Tumour
- E. Cauda Equina Syndrome

97) 35 years old male patient gives history of low grade evening fever and weight loss since 3 months. On presentation he is drowsy since 3 days and has 5 episodes of vomiting in these 3 days, on examination neck is stiff and kernigs sign is positive.

CSF examination shows 500 WBCs All Lymphocytes, Proteins 80 (15-60 mg/dl), glucose 25 (50-80 mg/dl). What is the likely diagnosis

- A. Acute Bacterial meningitis
- B. Tuberculous Meningitis
- C. Viral Encephalitis
- D. Viral Meningitis
- E. Subarachnoid Haemorrhage

98) Which of the following is a sign of upper motor neuron lesion?

- A. Hyporeflexia
- B. Fasciculations
- C. Hypertonia
- D. Down going planter
- E. Muscle wasting

99) The correct schedule of rabies vaccine is according to the following days

- A. 0,3, 7, 14
- B. 0,7,14,28
- C. 1,14, 28
- D. 0,1,6
- E. 6, 10, 14

PSYCHIATRY

100) A 28 year old woman comes to see you complaining of lethargy and a low mood for the past three weeks. She has been off her food and been struggling to follow her favourite soaps on TV. She denies any thoughts of self-harm or suicide. She lost her job a few months ago due to redundancy and hasn't been able to find something since despite trying.

What is your diagnosis?

- A. Depressive illness
- B. Schizophrenia
- C. Bipolar affective disorder
- D. Sleep disorder
- E. Eating disorder

101) A 34 years old patient diagnosed with major depressive illness for first time, what is first line of treatment?

- A. SSRI
- B. SNRI
- C. TCA
- D. ECT
- E. Thyroxin

102) A patient exhibits psychotic symptoms after an episode of epilepsy, this psychosis is called

- A. Primary psychosis
- B. Secondary psychosis
- C. Schizophrenia
- D. Acute and transient psychotic episode
- E. Simple schizophrenia

103) A 42 years old patient presented in medical emergency with complaints of palpitations and episode of fear that he

- B. PACU
- C. ICU
- D. HDU
- E. Recovery Room

PRIME

117) What is the first step in resolving a conflict in healthcare settings?

- A. Avoidance
- B. Collaboration
- C. Compromise
- D. Escalation
- E. Communication

118) Which approach is the most effective for resolving conflicts in healthcare?

- A. Ignoring the issue
- B. Seeking legal intervention
- C. Assertiveness and mutual respect
- D. Blaming others
- E. Withdrawing from the situation

NEUROSURGERY

119) A patient age 4 years come to OPD with neck rigidity and fever CSF analysis show 70 lymphocytes ,proteins high than normal and a turbid color glucose is low than normal ..

- A. Diagnosis
- B. Treatment
- C. Complications
- D. Other signs

120) A patient got a motorcycle accident, his GCS is 8/15 CT scan done show a lens shaped EDH

- A. What is common artery ruptured?
- B. What is lucid interval
- C. What are red flags in neurotrauma
- D. Who will u manage

might die, these episodes are 3/month at least

Diagnosis is:

- A. Generalized anxiety disorder
- B. Stress disorder
- C. Depression
- D. Psychosis
- E. Panic attacks

104) A 13 years old adolescent girl comes to you with self-harm eventually last evening

What is first step?

- A. Admit patient
- B. Retain patient
- C. Counsel patient
- D. Counsel parents
- E. Report to police

105) A 24 years old male presented in OPD with 7 months history of delusions and hallucinations, history of homicidal attempt reported

What is your provisional diagnosis?

- A. Paranoid schizophrenia
- B. Simple schizophrenia
- C. Hebephrenic schizophrenia
- D. Catatonic schizophrenia
- E. Post schizophrenic depression

106) A 24 years old female presented with anger and emotional outburst after breakup with fiancé, she has multiple scratches on her left forearm, history of self-harm reported in past as well, Which type of personality disorder you suspecting in this patient?

- A. Borderline personality
- B. Paranoid personality
- C. Antisocial personality
- D. Schizotypal personality
- E. Schizoid personality

107) A 45 years old male presented with weeping episodes, decrease sleep, anxiousness for 02 days after his mother's death

What is your first diagnosis?

- A. Acute sleep disturbance
- B. Sleep disorder
- C. Bipolar affective disorder
- D. Acute stress reaction
- E. Generalized anxiety disorder

108) A 19 years old female presented with sudden loss of movements in bilateral lower limbs, she is unable to walk, followed by a quarrel at cousin's wedding

Diagnosis:

- A. Dissociation
- B. Acute stress reaction
- C. Depression
- D. Dissociative identity disorder

E. Dissociative motor disorder

PEDIATRICS

109) Which one is not a feature of meningeal inflammation?

- A. High grade fever
- B. Projectile vomiting
- C. Head ache
- D. Seizures
- E. None of above

110) Which kind of rash is pathognomonic of meningococcal sepsis?

- A. Maculopapular
- B. Pustular
- C. Petechial
- D. Urticarial
- E. None of above

111) Which precaution should be taken before lumbar puncture?

- A. Pyrexial management
- B. Fundoscopy
- C. T brain
- D. Ultrasound
- E. All of above

112) Which chemo prophylaxis is recommended for streptococcal pneumonic meningitis?

- A. None
- B. Rifampicin
- C. Cefixime
- D. Dexamethosone
- E. Amoxyciline

113) Which one is not true for tuberculous meningitis?

- A. It is a primary lesion
- B. It results from a metastatic caseous lesion
- C. Primary lesion is usually in lung
- D. Not reported in infants below 4 months of age
- E. All of above

ANESTHESIA

114) Which of the following drugs causes dissociative anesthesia

- A. Diazepam
- B. Propofol
- C. Ketamine
- D. Midazolam
- E. Bupivacaine

115) What mixture of gases is used in anesthesia?

- A. O₂ and CO₂
- B. O₂, CO₂ and N₂O
- C. O₂ and N₂O
- D. CO₂ and N₂O
- E. Room Air and N₂O

116) Immediately after the surgery, the patient is usually shifted to

- A. CCU