

KHYBER MEDICAL COLLEGE PESHAWAR
(EXAMINATION SECTION)
INTERNAL EVALUATION EXAMINATION
BLOCK-J
4th YEAR MBBS (Held on 25-03-2024)

Class No: _____

Time Allowed: 120 Minutes

Max Marks: 120

Note: Attempt ALL MCQ's.

- Use only blue / black pen. Possession / use of mobile phones and other electronic accessories are strictly prohibited.
- Response sheets without roll numbers will be cancelled. Student's result will be declared "Under Report" if (i) MCQ question paper is not returned back along with response sheet or is tampered by the student (ii) The roll number is not written on the said paper

PHARMACOLOGY			
1.	A 30 years old man with a history of panic attacks came to OPD with symptoms of palpitations, sweating and dryness of mouth that didn't improve with psychotherapy. Which of the following drugs is most suitable to treat his panic disorder?		
	A Carbamazepine	<input checked="" type="checkbox"/> B Escitalopram	C Haloperidol
	D Thiopentone	E Phenezine	
2.	A 52 years old man was shifted to Operation Théâtre for the fracture of femur head. To reduce anxiety of the patient, the anesthetist injected which of the following drug along with general anesthetic?		
	<input checked="" type="checkbox"/> A Midazolam	B Haloperidol	C Diazepam
	D Phenobarbitone	E Atropine	
3.	A 35-year-old female presented to emergency department with tonic colonic seizures. The nurse on duty gives her diazepam intravenously to control seizures. What is the most possible mechanism of action of diazepam?		
	A Closure of chloride channel	B Closure of sodium channel	C Closure of calcium channel
	D Membrane depolarization	<input checked="" type="checkbox"/> E Membrane hyperpolarization	
4.	A 28 years old man was brought unconscious to the emergency department who had an accidental overdose of clonazepam tablets. Which of the following drugs is used as an antidote for this toxicity?		
	A Acetylcysteine	B Atropine	C Dabigatran
	<input checked="" type="checkbox"/> D Flumazenil	E Naloxone	
5.	A 25 years old female comes for her first antenatal visit at 5th week of gestation. She tells her doctor that she is taking Paroxetine for depression for the past one month. Which of the following fetal complications is associated with its use?		
	A Abortion	B Cardiac malformations	<input checked="" type="checkbox"/> C Growth retardation
	D Prematurity	E Stillbirth	
6.	A 33-year-old female was brought to hospital for acute change in mental status noticed by her husband. He reports that she has been taking a drug for schizophrenia for the past one year. On examination, the woman is diaphoretic, with some rigidity of her extremities. Her BP is 198/109, Temperature 101°F. Blood analyses show grossly elevated creatine kinase. Which of the following would be appropriate treatment for this patient?		
	A Escitalopram	B Chlorpromazine	<input checked="" type="checkbox"/> C Dantrolene
	D Fluoxetine	E Haloperidol	
7.	A 38-year-old male patient of epilepsy visits his physician for routine check-up. His seizures are well controlled by using a drug which acts by blocking sodium channels and modulation of NMDA receptors. Which one of the following drugs act through this mechanism?		
	A Carbamazepine	B Gabapentin	C Lamotrigine
	D Phenytoin	<input checked="" type="checkbox"/> E Sodium valproate	
8.	A 5-year-old girl is brought to OPD because of episodic 'blinking out' which began one month ago. The patient has episodes in which she abruptly stops all activities, remains motionless with occasional fumbling hand movement for about 10 seconds, followed by a rapid return to full consciousness. Which of the following is drug of choice to treat this condition?		
	A Carbamazepine	<input checked="" type="checkbox"/> B Ethosuximide	C Gabapentin
	D Levetiracetam	E Phenytoin	
9.	A 67-year-old woman with a history of classic angina pectoris is seeking treatment for migraine headaches of moderate intensity. Which of the following drugs is contraindicated for treating migraine in this patient?		
	A Acetaminophen	B Aspirin	C Naproxen
	D Propranolol	<input checked="" type="checkbox"/> E Sumatriptan	

10. A 05-year-old child is admitted to the hospital with a low-grade fever and a persistent cough that has resulted in vomiting episodes. After few days his fever has resolved, and all that is left is a slight cough. He is discharged from the hospital by the pediatrician who recommends an over-the-counter opioid antitussive. Which of the following did he recommend?

- A Dextromethorphan B Loperamide C Naloxone
D Morphine E Tramadol

11. A 60-year-old patient is brought to emergency room at 4:00 PM by his friend after a road accident. He has multiple fractures and the surgeon decided to perform surgery. Which of the following is a potent analgesic but a weak anesthetic drug?

- A Benzodiazepine B Halothane C Ketamine
D Nitrous oxide E Thiopental

12. A 6-year-old child was brought to ER with complaints of pain abdomen, vomiting and fever. He has tender abdomen with raise TLC. The Surgeon decided to perform laparotomy. Which of the following inhalational anesthetics is used for as induction agent of choice in children?

- A Desflurane B Halothane C Isoflurane
D Methoxyflurane E Sevoflurane

A 60-year-old male patient developed profound fever, skeletal muscle rigidity, autonomic hyperactivity and systemic electrolyte imbalance as part of response to general anesthetic drug. Which of the following is most likely responsible for these symptoms?

- A Ether B Halothane C Isoflurane
D Nitrous oxide E Sevoflurane

14. A 17-year-old athlete with a history of asthma comes to your clinic seeking a medication for migraine prophylaxis. Which of the following drugs would you avoid using in this patient?

- A Amitriptyline B Propranolol C Topiramate
D Valproate E Venlafaxine

15. A 55 years old lady, who is a diagnosed case of psychiatric illness, presented to you for medical checkup. While looking at her previous prescription, you found that she is using Lithium carbonate (LC) for the last 6 months. What is the most probable disease for which she is using LC?

- A Anxiety disorder B Bipolar affective disorder C Depression
D Obsessive compulsive disorder E Psychosis

16. A 33 years old lady, diagnosed with ovarian cancer and is on chemotherapy. She was operated for acute appendicitis, but she went in respiratory depression and could not make smooth recovery from anesthesia. Which one of the following drugs can be used to treat her respiratory depression?

- A Amitriptyline B Bromazepam C Carbamazepine
D Doxapram E Ondansetron

17. A first-year surgery interneer has rotated in numerous surgical disciplines, including general surgery, cardiothoracic surgery, urology and surgical oncology. He is quite used to liberally ordering morphine for pain control. However, which of the following is an absolute contraindication to opioid use?

- A Acute pulmonary edema B Femur fracture C Closed head injury
D Myocardial infarction E Renal colic

18. An otolaryngologist decides to perform sinus surgery to debride the scarred sinus tissue. During the procedure he elects to use an agent that has good local anesthesia as well as vasoconstrictive properties. What agent might he use?

- A Cocaine B Lidocaine C Mepivacaine
D Procaine E Tetracaine

19. A 23-year-old man is brought to the emergency room after he was found walking the streets, proclaiming himself "Master of the world." The physician recommends starting the patient on lithium therapy for acute mania. Which of the following is associated with lithium use?

- A Fine tremors B Hyperthyroidism C Urinary retention
D Weight loss E Gingival hyperplasia

A 35 years old male patient of depression visited his physician for follow-up, 06 months after using selective serotonin reuptake inhibitor (SSRI). Upon questioning, he revealed that he still had not returned to the normal activities and reluctantly admitted that he had not been taking his medication because of some of the side effects. Which one is likely to be the most bothersome?

- Headache B Sexual dysfunction C Tachycardia
Tremor E Weight gain

PATHOLOGY

21. A 35 years old male patient died from herpetic encephalitis. Which of the following is relevant microscopic feature after post mortem examination of his brain:

- A Cowdry bodies B Lewy bodies C Negri bodies
D Nissl substance E Neuropil

22. A 40 years old male patient is suffering from rabies after dog bite one month back. He has difficulty in drinking water and dyspnea. What changes would you expect in the basal ganglia of this patient:

- A Cowdry bodies B Lewy bodies C Negri bodies
D Nissl substance E Vesicular nuclei

23. A 65 years old lady is suffering from Alzheimer disease and is receiving treatment for the last 5 years. Which one of the following is relevant pathological finding in this case?

- A Axonal reaction B Gliosis C Neurofibrillary tangles
D Plaques E Red neuron

24. A new born baby is suffering from fever, vomiting and meningeal irritation. CSF examination shows increase proteins and decreased sugar level. Which one of the following is the cause of this condition?

- A Aspergillosis B E coli C H influenza
D N meningitides E Streptococcus Pneumonia

25. A 10 years old child was having posterior fossa mass on CT scan. What is the most probable diagnosis?

- A Abscess B Arachnoid cyst C Glioma
 D Medulloblastoma E Meningioma

26. A young lady was suffering from left cerebral hemisphere tumor on CT scan examination. The tumor was Dural based and shifted the ventricle to one side. Which one is the most relevant diagnosis?

- A Meningioma B Neurofibromatosis C Primary germ cell tumor
D Tuberos sclerosis E Von-hippel lindau disease

27. A 64-year-old homeless male alcoholic is brought to the ER by a friend because he was not eating much for a month and was "acting strange." He was febrile, emaciated, lethargic, and disoriented. The cerebrospinal fluid showed 620 white blood cells per mm³, which were all mononuclear, and a low glucose of 24 mg/dL. The Gram stain and fluorochrome stains revealed no organisms. What is a likely diagnosis?

- A Coccidioidomycosis B Cryptococcosis C Lyme disease
 D Tuberculosis E Viral meningitis

28. A 70-year-old male is diagnosed with a brain tumor arising in the white matter. The tumor appears to be rapidly expanding, gray, and poorly defined. Microscopic examination of his brain revealed an increased number of glial cells appearing in a palisading manner. It is determined that the patient will only survive for a few months. What will be gross feature of this tumor?

- A Butterfly appearance B Increased gliosis C Liquefactive necrosis
D Lymphocytic infiltration and lipid laden macrophage E Spongiform appearance

29. Following a bar fight, a 22-year-old man is brought unconscious to the emergency department. Several minutes earlier, he had been hit on the head with a heavy iron club and had been briefly unconscious, but had then apparently recovered. One or two minutes later, he had again lost consciousness. Which of the following is the most likely diagnosis?

- A Epidural hematoma B Subarachnoid hemorrhage C Subdural hematoma
D Stroke E Transient ischemic attack

30. A 35 years lady is suffering from space occupying lesion in the brain. On CT scan examination there is a tumor in the right cerebral hemisphere. Histopathologist reported this case as pilocytic astrocytoma. Which of the following microscopic features are diagnostic?

- A Cowry bodies B Neurofibrillary tangle C Negri bodies
D Neuronal plaques E Rosenthal fibers

A newborn girl is found to have herniation of both the spinal cord and meninges through a defect in the vertebral arch of the spinal column. Her mother had not had prenatal care and had not taken nutritional supplements during pregnancy. Which of the following best describes this defect?

- A Anencephaly B Hydrocephalous C Meningocele
 D Meningomyelocele E Spina bifida occulta

32	A 70-year-old man has a 2 day history of worsening generalized headache and increasing obtundation. He now complains of stiffness in his neck. On physical examination vital signs include T 38.7°C, pulse 85/minute, respirations 23/minute, and blood pressure 130/85 mm Hg. A CBC reveals a WBC count of 16,850/microliter. Serum electrolytes include a glucose of 88 mg/dL. A lumbar puncture yields cloudy cerebrospinal fluid with a glucose of 32 mg/dL, protein 146 mg/dL, and cell count of 3800 WBCs (95% PMNs and 5 % mononuclears) and 122 RBCs. He receives antibiotic therapy and improves. Which of the following long-term complications is most likely to develop from this man's current disease?				
	A Cerebral infarction	B Cerebellar tonsillar herniation	<input checked="" type="checkbox"/> C Encephalitis		
	D Hydrocephalus	E Subdural hematoma			
33	A 58-year-old man presented with tinnitus, ipsilateral loss of hearing, unsteadiness and dizziness. Symptoms were first noted 9 months prior to examination and progressed very slowly. If the cause is a tumor, which of the following is most likely?				
	A Ependymoma	B Glioblastoma	C Medulloblastoma		
	D Neuroblastoma	<input checked="" type="checkbox"/> E vestibular-acoustic Schwannoma			
34	A 75-year-old woman appears well after slipping on wet pavement and striking the right side of her head. She did not remember fall. She complained of persistent headache and confusion. Magnetic imaging studies revealed a subdural hematoma over the lateral aspect of the right cerebral hemisphere. Which of the following is a well-known characteristic of this disorder?				
	A Bleeding from arteries of the circle of Willis	B Causally associated with hypertension	<input checked="" type="checkbox"/> C Caused by venous haemorrhage		
	D Laceration of branches of middle artery	E Rapidly progressive cerebral compression			
35	A 10 years old child is suffering from fever, headache, vomiting and neck rigidity. On physical examination CSF is purulent. Laboratory report shows increase protein and decrease sugar. Which one of the following is the causative organism?				
	A Escherichia coli	<input checked="" type="checkbox"/> B Neisseria meningitidis	C Streptococcus pyogenes		
	D Staphylococcus aureus	E Salmonella typhi			
36	A 65 years old male patient is suffering from acute pyogenic meningitis. Which of the following is not relevant to this condition?				
	A Cloudy or purulent CSF	B Increased pressure	<input checked="" type="checkbox"/> C Lymphocyte count raised to 90,000/mm ³		
	D Raised protein levels	E Neutrophil's count raised to 90,000/mm ³			
37	A 35 years old lady is suffering from fever, headache, vomiting and neck rigidity due to rupture of epidermoid cyst in the subarachnoid space. Which of the following is the most probable diagnosis?				
	<input checked="" type="checkbox"/> A Chemical meningitis	B Drug induced meningitis	C Immunologic meningitis		
	D Parasitic meningitis	E Rickettsia meningitis			
38	CT scan findings of a 12 years old child show brain abscess. Which of the following is not the predisposing conditions?				
	A Anatomic anomalies	<input checked="" type="checkbox"/> B Blood dyscrasias	C Neurosurgery		
	D Penetrating cranial trauma	E Pyogenic extra-neural infections			
39	A 2-year-old child presents with fever, headache, prostration, and nuchal rigidity. The CSF is cloudy, and microscopic examination reveals innumerable neutrophils. The CSF protein is increased, and glucose is decreased. The most likely etiologic agent is which organism?				
	A Escherichia coli.	B Group B streptococci.	<input checked="" type="checkbox"/> C Hemophilus influenzae.		
	D Streptococcus pneumoniae.	E Staphylococcus aureus			
40	A 70-year-old man presents with loss of memory for recent events. He has no history of substance abuse He has forgotten his grandchildren's names, and he has been unable to manage his personal finances. Also, he has lost his way while driving to familiar locations. Which of the following is the most likely diagnosis?				
	<input checked="" type="checkbox"/> A Alzheimer disease	B Creutzfeldt-Jakob disease	C Huntington disease		
	D Parkinson disease	E Wernicke-Korsakoff syndrome			
	In glioblastoma multiforme, which of the following molecular findings would support a primary, rather than secondary, tumor origin?				
	A p53 mutation	B MGMT promoter methylation	C 1p19q translocation		
	<input checked="" type="checkbox"/> D EGFR mutation	E NF2 mutation			

42

A 68-year-old man presents with increasing headache and "clumsiness" on the left side over the past two months. On examination he had left pronator drift and 4/5 weakness in left extremity muscles, and moderate sensory loss in the left extremities. MRI shows a large infiltrating lesion centered in the right parietal cortex and expanding the corpus callosum, surrounded by edema. The most likely histologic appearance of this tumor is:

- | | | | | | |
|---|------------------------------------------------------------------------|---|------------------------------------------------------------|---|--------------------------------------------------|
| A | fibrillary cells with true ependymal rosettes | B | Glial cell proliferation | C | nuclear pleomorphism, necrosis, multiple mitoses |
| D | primitive cells resembling cerebellar granular cells, numerous mitoses | E | E.spindled cells arranged in sheets and whorls, no mitoses | | |

FORENSIC MEDICINE

43 A 35-year-old man got a new job that was extremely stressful. He began to have anxiety and panic episodes. As a result, he took benzodiazepine from a co-worker to help him cope with his anxiety and panic attacks, but he accidentally overdosed. His colleague brought him to ER within 15 minutes. As a doctor which antidote would you give to this patient?

- | | | | | | |
|---|---------------|---|------------|---|------------|
| A | Acetaminophen | B | Flumazenil | C | Nalorphine |
| D | Naloxone | E | Zolpidem | | |

44 A person who was given a barbiturate overdose, experienced giddiness, ataxia, slurred speech, delirium, and excitement, but as the poisoning progressed, the person became hypotensive, hypothermic, and cyanotic, with an abnormal breathing pattern. In the advanced stages of barbiturates poisoning, what form of abnormal respiratory pattern is commonly seen?

- | | | | | | |
|---|---------------------|---|--------------------|---|-------------------------|
| A | Apneustic breathing | B | Biots breathing | C | Cheyne-Stokes breathing |
| D | Hyperpnea breathing | E | Kussmaul breathing | | |

45 A woman with many comorbidities leads a stressful life that disrupts her sleep. To get some restful sleep, she decided to take Chloral hydrate as a hypnotic. She overdosed on Chloral Hydrate as she was unaware of the dosage. Her attendants rushed her to the emergency room, where she was given a stomach wash. What should be used for chloral hydrate poisoning during gastric lavage?

- | | | | | | |
|---|----------------|---|--------------------|---|------------------------|
| A | Alkali | B | Charcoal powder | C | Potassium permanganate |
| D | Saline washing | E | Sodium bicarbonate | | |

46 An officer in charge of a police station was called for an immediate response in a public park for a person who was suspected to be mentally ill and needed to be taken to a safe place for evaluation and possible care. How much detention time should not exceed in such cases?

- | | | | | | |
|---|--------------|---|-------------------|---|------------------|
| A | One week | B | Seventy-two hours | C | Thirty-six hours |
| D | Twelve hours | E | Twenty-four hours | | |

47 A married couple had a tense life going on. The wife in the relationship is a chaste but the husband not only assaults her as well but also asks her questions regarding any extra-marital affairs. What is the suffering of the husband in this case?

- | | | | | | |
|---|-------------------------|---|------------------------|---|-------|
| A | Auditory hallucinations | B | Confabulations | C | Fugue |
| D | Delusions of infidelity | E | Delusions of influence | | |

48 A male of middle age had a major problem regarding constant idea occurring in his mind with irresistible force. The person is unable to drive away the said idea from his mind. What is the diagnosis in this case?

- | | | | | | |
|---|-----------|---|---------|---|-----------|
| A | Delusion | B | Impulse | C | Intellect |
| D | Obsession | E | Thought | | |

49 A married couple was living a stressful life due to many domestic problems. The husband was of view that the wife is attempting to kill him by slow poisoning; however, in reality there wasn't any such scenario. What type of delusion does the husband have?

- | | | | | | |
|---|-------------|---|-----------|---|---------|
| A | Erotomaniac | B | Grandiose | C | Jealous |
| D | Persecutory | E | Somatic | | |

50 Provision of guidance, education, rehabilitation after care and preventive measures in the community (Family, home, workplace or educational institutions etc.). comes under which section of mental health act?

- | | | | | | |
|---|------------|---|------------|---|-----------|
| A | Section 7 | B | Section 8 | C | Section 9 |
| D | Section 10 | E | Section 11 | | |

A mentally ill person was caught by the police for his vague actions in the community park. In urgent admission for assessment, what is the period of detention?

- | | | | | | |
|---|----------|---|----------|---|----------|
| A | 12 hours | B | 24 hours | C | 48 hours |
| D | 72 hours | E | 01 week | | |

- 52 A father brought his son to the doctor with a chief complaint that he calls an Air Conditioner as a Television and falsely interprets an object with its real existence. What is the suffering of the son?
 A Delusion B Delirium C Illusion
 D Psychosis E Schizophrenia
- 53 A father brought her daughter in a state of complete suppression of speech, movement and action with no disturbance of consciousness. What is the name of this condition?
 A Fugue B Shock C Stupor
 D Trance E Twilight state
- 54 A mentally retarded person was brought to you for mental age assessment. Upon examination of skills the person was socially and vocationally enough. Your assessment was that he can minimally self-support himself. You put him under category of feeble morons. According to the assessment What is the person's mental age?
 A 2 years old B 3 years old C 4 years old
 D 5 years old E 6 years old
- 55 A young male was brought to the emergency department with pin-point pupil, moist, perspiring skin and with peculiar alcoholic smell. Which of the following is characteristics breathing will be recorded in the said poisoning?
 A Fast breathing B Fast – Absent breathing C Fast – Slow – Absent breathing
 D Slow breathing E Slow – Fast breathing
- 56 A young cachexic male was autopsied in the Department of Forensic Medicine, KMC, Peshawar. The examination findings revealed, non-specific asphyxia signs, cyanosed face, and froth from mouth/nose with intense black PM Lividity. Which type of poisoning is this?
 A Amitriptyline B Amphetamines C Belladonna
 D Dhatura E Opium
- 57 A traveller during recreational trip was swimming on a beach. After one hour of swimming he noticed sudden muscular pain, stiffness of neck and limb gridle. What is the diagnosis in this case of poisoning?
 A Elapids B Octopus C Sea snake
 D Stingray E Vipers
- 58 A person felt some grains of sand lying under the skin or some small insects creeping on the skin giving rise to itching sensation. Which poisoning causes this condition?
 A Alcohol withdrawal B Cocaine poisoning C Morphine poisoning
 D LSD E Organophosphorus poisoning
- 59 The defense based on insanity is an ordinary practice in court of law, wherein the accused is given the relief. In which one of the following circumstances, the defense based on Mc Naughton rule cannot be applied?
 A Defect of reason B Knowledge that act was wrong C Nature of act
 D Negligence E Quality of act
- 60 A dead body was recovered from Margalla Hills, in post-mortem examination Black resinous traces were found on hands and mouth, which are similar to that of Curare. What is the fatal dose of this poison?
 A 10-20 mg B 30-60 mg C 80-100 mg
 D 1 gm E 2 gm

COMMUNITY MEDICINE

In an outbreak of food poisoning in a union council of 3500 population, 30 cases of food poisoning had occurred after attending a wedding ceremony with 6 deaths. What is the case fatality rate in this scenario?

- A 10% B 20% C 30%
 D 40% E 50%

A researcher looked at accuracy of the breast cancer self-examination (BSE) in diagnosing breast cancer as compared to mammography and he found that mammography is more accurate in identifying true positives. How would you express this epidemiologically?

- Mammography should be adopted as the only method of screening for breast cancer B Predictive value of BSE is more or less the same as that of mammography C Sensitivity of BSE is more than its specificity
 Sensitivity of mammography is more than that of BSE E Sensitivity of BSE is same as that of mammography

63 The Occurrence of cancer was identified between April 1991 and July 2002 for 50,000 troops who served in the first Gulf War (ended April 1991) and 50,000 troops who served elsewhere during the same period. What is the epidemiological study design in this scenario?

- A Case control study B Cohort study C Cross sectional study
D Quasi experimental study E Randomized control trial

64 The Serum cholesterol levels for three groups of people in a community were recorded in 2020. The mean cholesterol levels of the groups were compared. Which of the following test of significance would you employ to determine whether the measurements were significantly different or not?

- A Analysis of variance B Chi square test C Pearson's r
D Regression analysis E Student's t test

65 A public health expert wants to study the load of hypertension in Abbottabad district to establish special screening and treatment services. Which study design is more useful for this?

- A Case control study B Case report C Cohort study
 D Cross sectional study E Experimental study

66 Errors and bias are common in any significance testing and one may commit either Type-1 error or Type-II error. Which one of the following specifies Type 1 error?

- A Accepting false null hypothesis B Accepting true null hypothesis C Either one can be accepted or rejected
 D Rejecting false null hypothesis E Rejecting true null hypothesis

67 Crude rates are easy to calculate and consist of crude birth rates and crude death rates. What will be the denominator for calculation of crude birth rate?

- A Birth rates minus death rates B Mid-year population C Number of live births in area
D Population at risk E Total births (Live+still) in the area

68 An epidemiologist calculates the relative risk to show the association of tobacco dip (Naswar) with submandibular gland carcinoma. What does this rate indicate?

- A It is the ratio of risk of disease for those exposed and those not exposed to a particular risk factor B Risk cannot be greater than 1 C Shows the percentage contribution that a risk factor makes towards the occurrence of disease
D Shows the relationship between a disease and a factor assumed to influence the occurrence of that disease E Shows the relationship between two variables as the risk factor of disease

69 A research study was conducted to determine the most common age of patients with colorectal cancer which was found out to be 58 years. The researchers published the data graphically. What would be the most likely shape of this frequency distribution?

- A Bell shaped Gaussian curve B Bimodal distribution C Negatively skewed
D Positively skewed E Straight line

70 The number of attacks of angina per year in a sample of 50 men with a history of myocardial infarction, aged 50-80 years is an example of which type of variable?

- A Nominal variable B Qualitative continuous variable C Qualitative discrete variable
D Quantitative continuous variable E Quantitative discrete variable

Two groups of patients 100 each, undergoing surgery was given antibiotic A and B respectively. After follow up, 20 patients in group A developed infection and 5 in group B. Which type of study is this?

- A Case control study B Cross sectional study C Cohort study
 D Non randomized trial E Randomized Trial

As a medical student, you were assigned a research project. In medical statistics, which p value is considered significant?

- A $P < 1.00$ B $P < 0.5$ C $P > 0.5$
 D $P < 0.05$ E $P > 0.05$

73 A researcher conducted a study to determine the association between lung cancer and smoking. The main disadvantage of this study design is recall bias. Which type of study design was adopted?

- A Case control B Cohort study C Correlation study design
D Cross sectional study design E Randomized control trials

74 In a normal distribution curve, 95 % confidence interval falls within which category?

- A + 1 Standard deviation of the mean B + 2 Standard deviation of the mean C + 3 Standard deviation of the mean
D + 4 Standard deviation of the mean E + 5 Standard deviation of the mean

75 Chi square is one of the tests of significance used for hypothesis testing. On which type of data we apply Chi square test?

- A Quantitative B Continuous C Discrete
D Categorical E Confounder

76 The number of newly diagnosed cases of breast cancer per 100,000 women during a given year is expressed as:

- A Incidence B Prevalence C Proportion
D Rate E Ratio

77 A researcher wants to perform screening for undiagnosed, undetected cases of hepatitis B, and carriers of disease by rapidly applying tests and procedures. What will happen if the cutoff point is raised in screening tests?

- A Sensitivity increases and specificity decreases B Sensitivity decreases and specificity increases C Sensitivity and specificity both will increase
D Sensitivity and specificity both will decrease E Sensitivity and specificity will remain same

78 A researcher is interested in recording the number of individuals in a particular geographic region who have a common cold at some point during the month of February 2015. Which of the following measures of morbidity would be most appropriate in answering this question?

- A Cumulative Incidence B Incidence Density C Incidence risk
D Period prevalence E Point Prevalence

79 A researcher wants to establish cause effect relationship between diabetes and risk factors. What type of study he will do?

- A Prospective studies B Retrospective studies C Experimental studies
D Cross sectional studies E Case studies

80 In epidemiological association, there are chances of bias and errors, thus high-quality design and methods are used to deal with such outcomes. In order to find association between the number of parity and the Down's Syndrome; What type of variable, maternal age would be?

- A Confounding variable B Constant variable C Dependent variable
D Independent variable E Outcome variable

81 A town whose population is 20,000, 70% are Muslims, 20% Christians, 10% Hindus. If a researcher wants to take 10% of population for his study in that area, Which one of the following is the best sampling technique?

- A Cluster sampling B Purposive sampling C Simple random sampling
 D Stratified random sampling E Systematic random sampling

82 In our community, coronary heart disease (CHD) and Diabetes are emerging public health problems, which needs early diagnosis and prompt treatment. For early identification of cases, which one of the following is the most economical method of screening?

- A High risk screening B Mass screening C Multi phasic screening
D Prescriptive screening E Prospective screening

Fourth year medical students were engaged in a research study to find the co-relation between smoking and lung cancer. While setting objectives for their study, which of the following characteristic of objectives should be kept in mind?

- A Complex B Costly C Independent of time
D Measurable E Over-ambitious

In a study, the hypothesis was stated as "Increased levels of glycosylated hemoglobin levels for prolonged periods of time in diabetic individuals increase the risk for myocardial infarction". In this study, which one of the following statements fits the above-mentioned hypothesis?

- | | | | | | |
|---------------------------------------|-------------------------------------------------------|---|------------------------------------------------------|---|-------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> A | It is an assumption made before the start of research | B | It is a conclusion drawn before start of research | C | It shows that this hypothesis and null hypothesis are identical in this study |
| D | It shows significance level | E | It shows that the above statement is a tested theory | | |

85 Estimation of magnitude of health problem is required for future planning and administrative purposes. Which of the following rate a public health officer will calculate for this purpose?

- | | | | | | |
|---|-----------|---------------------------------------|------------|---|--------|
| A | Birth | B | Death | C | Growth |
| D | Incidence | <input checked="" type="checkbox"/> E | Prevalence | | |

86 The Government wants to collect morbidity data for districts in order to allocate resources equitably. However, it does not have sufficient human resource and time to conduct a detailed survey. Which one of the following indicators can the government obtain quickly from District hospitals to know about morbidity status?

- | | | | | | |
|---|------------------------------------------------|---------------------------------------|-----------------------------------------------|---|---------------------------------------------|
| A | Monthly expenditure of the hospital | <input checked="" type="checkbox"/> B | Total bed occupancy of a hospital in a month | C | Total deaths in admitted patients per month |
| D | Total number of deliveries performed per month | E | Total number of surgeries performed per month | | |

87 In analytical studies, we develop association between risk factors and a disease. Which of the following in case control studies ascertains whether there is an association between exposure status and occurrence of disease?

- | | | | | | |
|---|-------------------|---------------------------------------|---------------|---|------------------------------|
| A | Attributable risk | <input checked="" type="checkbox"/> B | Odds ratio | C | Population attributable risk |
| D | p-value | E | Relative Risk | | |

VERTICAL INTEGRATION

88 Emotional intelligence is characterized by which one of the following?

- | | | | | | |
|---|----------------------------------|---------------------------------------|-------------------------------|---|------------------------|
| A | Better interpersonal skills | B | Good sense of humor | C | High abstract thinking |
| D | High critical thinking abilities | <input checked="" type="checkbox"/> E | Proficient in problem solving | | |

89 When the group disagrees over how the work should get done. The type of conflict experienced by this group is _____ conflict.

- | | | | | | |
|---|----------------------|---|-----------------------|---------------------------------------|-----------------------|
| A | Process conflict | B | Relationship conflict | <input checked="" type="checkbox"/> C | Task related conflict |
| D | Traditional conflict | E | Un-explainable | | |

90 An 80-year-old female patient with atrial fibrillation came to ER with right sided weakness for the last 1 hour. Her past medical history includes transient ischemic attack, hypertension and diabetes. She was taking warfarin which she stopped after a fall one month back. Her examination showed weakness in both upper and lower limbs on right side. A CT scan head showed no intracranial bleed. What is the likely diagnosis?

- | | | | | | |
|---------------------------------------|----------------------|---|------------------------|---|-------------------|
| A | Bacterial meningitis | B | Encephalitis | C | Intracranial mass |
| <input checked="" type="checkbox"/> D | Ischemic stroke | E | Tuberculous meningitis | | |

91 A 19-year-old female student living in college hostel presented to ER with 1 day history of fever and headache. On physical examination, her temperature was 39.1 Degree Celsius and her heart rate was 124/min. She was toxic. She had neck stiffness and there were small, purple and non-blanching petechiae on both her legs. Lumbar puncture showed elevated opening pressure, elevated protein, pleocytosis and low glucose. What is the likely diagnosis?

- | | | | | | |
|---|------------------------|---------------------------------------|--------------------------|---|-------------------------|
| A | Fungal meningitis | <input checked="" type="checkbox"/> B | Meningococcal meningitis | C | Subarachnoid hemorrhage |
| D | Tuberculous meningitis | E | Viral Encephalitis | | |

A 20-years-old female patient presented with weakness in both lower limbs which initially started as numbness in toes. She had diarrhea two weeks back, which resolved by itself. On examination, power was 0/5 in lower limbs and deep tendon reflexes were absent in lower limbs. What is the treatment of choice?

- | | | | | | |
|---|----------------|---|---------------------------------|---------------------------------------|----------------|
| A | Antibiotics | B | Antiviral | <input checked="" type="checkbox"/> C | Plasmapheresis |
| D | Spinal surgery | E | Thiamine and B12 administration | | |

8 A 79-year-old stumbled and sustained a minor head injury 2 weeks ago. He had become increasingly confused, drowsy and unsteady. He had fluctuating GCS scale. He was using warfarin for Atrial fibrillation. What is the most likely diagnosis?

- A Cerebellar hemorrhage B Epidural hemorrhage C Extradural hemorrhage
 D Subarachnoid hemorrhage E Subdural hemorrhage

94 A man of 65 years was brought by his family for having lost his way back home several times. He could not recall the events for the past few months. On examination his pulse rate is 70/min regular and blood pressure (BP) 150/90mm Hg. What is the likely diagnosis?

- A Alzheimer disease B Cerebro vascular disease C Depression
 D Hepatic encephalopathy E Parkinson disease

95 A 45-year-old man presented with recurrent transient ischemic attacks. He had progressive memory loss and right sided monoplegia (right upper limb). On examination, his blood pressure was (BP) 170/100 and pulse rate was 100/min irregularly irregular. His Temperature was 98°F. What is the diagnosis?

- A Alzheimer disease B Encephalitis C Multi infarct dementia
 D Parkinsonism E Prion disease

96 A young man of 40 years had recurrent episodes of involuntary movements of the whole body with loss of consciousness for the last one year. He had mouth frothing and urinary incontinence during the episode. He was hemo dynamically stable. What is the diagnosis?

- A Intoxication B Migraine C Psychogenic non epileptic attacks
 D Seizure disorder E TIAs

97 An 8 years old boy was brought by his family for episodes of mental disconnection but no involuntary movements. These episodes occurred briefly for a few seconds and increased in severity with the passage of time. What is the diagnosis?

- A Atonic seizures B Absence seizures C Metabolic encephalopathy
 D Psychogenic attacks E TIAs

98 A 23-years-old female was brought by her brother to medical emergency with lower limbs weakness for last 3 days. She had also pain and numbness in lower limbs. She was also complaining of retention of urine for last 1 day. She gave no history of fever or any other illness in past 1 month. Her upper limbs were completely normal. Clinical examination showed signs of upper motor neuron lesion in lower limbs and sensory level at T4. What is the most probable diagnosis?

- A Guillen Barre Syndrome B Multiple sclerosis C Poliomyelitis
 D Pott's Disease E Transverse myelitis

99 A 40-years-old female presented with one year history of on and off blurring of vision on hot summer days. Now she is complaining of pins and needle sensations in the right hand and weakness of the left leg for the past 03 days. What is the most likely diagnosis?

- A Ischemic Stroke B Multiple Sclerosis C Oligodendroglioma
 D Transverse Myelitis E Trauma to Cervical Cord

100 A 20-years-old girl was brought to medical emergency with slowly progressing ascending paralysis of lower limbs for last one week. Clinical examination showed pulse 110/min, BP 100/70 and Respiratory rate 22/min. Power in lower limb was 0/5 and upper limbs 1/5. Reflexes were absent and planters were down going. She was treated for Acute upper respiratory tract infection a week ago. What is the diagnosis?

- A Guillen Barre Syndrome B Hypokalemic Periodic Paralysis C Poliomyelitis
 D Spinal shock after trauma E Transverse Myelitis

101 A 25-years-old man who is Driver by profession and has cannabis abuse for the last 15 years, presented with a serious suicidal attempt from which he survived and remained admitted in ICU for a week. On mental state examination you found that he is still having serious suicidal ideations because of underlying severe depression episode for which he is already taking Fluoxetine 40 mg and Lithium 800 mg per day. He lives alone and although willing to take treatment but he doesn't want to stay longer in psychiatry unit. Which of the following will be your next strategy for treatment of this acutely suicidal patient?

- A Add small dose of anti-psychotic and discharge B Add Tricyclic antidepressant and Discharge C Give advice to stop cannabis and Discharge
 D Give electro-convulsive therapy if he consents E Start CBT (Cognitive Behavior Therapy)

2 A 22 years old man presented to your clinic with increased talk, dis-inhibited behavior, Grandiose delusions, over-religiosity and inability to sleep for the last one month. He sometimes smokes cigarettes and cannabis also. He had similar episode a few years ago and got better with Valproate sodium which he continued for several months. What is the most probable Diagnosis in this case?

- A Cannabis dependence
- B Cannabis intoxication
- C Epilepsy
- D Manic episode
- ~~E Schizophrenia~~

3 20 years medical student experiences episodes of sudden extreme anxiety with palpitations, restlessness, sweating, body tremors and impending fear of death, which lasts for 20 to 30 minutes and spontaneously recovers without any medication. The frequency of these episodes is gradually increasing without any apparent stressful event. He is appearing in exams next week and has studied well. His symptoms are well explained by which of the following condition?

- A Death phobia
- B Dissociative disorder
- C Malingering
- D Panic disorder
- E Thyrotoxicosis

4 A patient who believes that people can actually put their thoughts into his mind is called as:

- A Brain washing
- B Delusion of control
- C Mind reading
- D Thought broadcast
- E Thought insertion

A school Teacher who has chronic daily headache without any vomiting and his Neuroimaging is clear. He is also suffering from increased intra-ocular pressure and Glaucoma. He requests you for prophylactic treatment for his headache. Which of the following will be avoided in this patient?

- A Paracetamol
- B Propranolol
- C Pzifen
- D Tricyclic antidepressants
- ~~E Topiramate~~

106 A young lady who developed severe headache was given narcotic analgesics for pain relief. She recovered quickly with that and would use the same medicine without any prescription. Gradually she increased the amount of that narcotic analgesic as the same amount of medicine would not give her relief from pain. This phenomenon is called as:

- A Dependence
- B Desensitization
- C Habituation
- D Intoxication
- E Tolerance

107 A 45-years-old man is brought with overdose of some drug of abuse. The family doesn't know which drug he is using now a days. On examination you found pin-point pupils, over sedation, dry mouth and shallow breathing. The most likely overdose is because of which drug?

- A Alcohol
- B Cannabis
- C Cocaine
- D Methyl phenidate
- ~~E Opioids~~

108 Depression is a common disorder affecting everyone in different stages of life. Mild depression may not need any medication but if the patient has moderate or severe symptoms most of the times on most of the days, he will need to be treated. The symptoms must persist for at least what certain amount of time before we can diagnose it as Depressive episode?

- A At least six months
- B At least six weeks
- C At least one month
- D At least one week
- E At least two weeks

109 A young girl, age 19 years, presented to hospital with impulsivity, self-injurious behavior, mood swings and Benzodiazepine overuse. She says that everyone dislikes her and nobody is sincere to her. Her elder sister adds that she behaves this way since her late childhood and has gradually lost all her friends because of her un-predictable behavior. She is most likely suffering from which of the following?

- A Adolescence crisis
- B Bipolar affective disorder
- C Delusional disorder
- D Drug addiction
- E Personality disorder

A young patient of 30 years presented to neurosurgery OPD with complaints of pain lower back for the last one month. Which was associated with urinary and bowel incontinence. Patient was also having weakness in both lower limbs and was walking with support. On examination patient was having mixed upper motor neuron signs in both lower limbs and power in both L1 was 4/5. Which level of spinal cord might be involved?

- A Cauda equine region
- B Cervical cord
- C Conus area
- D Dorsal cord
- E Lumbar Cord

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- A Cauda equine region
- B Cervical cord
- C Conus area
- D Dorsal cord
- E Lumbar Cord

111	An old lady aged 60 years presented to emergency department with history of sudden onset of weakness of right side associated with dysphasia. She was also having weakness on left side of face. On examination right planter was upgoing. Where do you think the pathology in brain is?					
	A	Left brain stem	<input checked="" type="checkbox"/>	B	Left Parietal region	
				C	Rightbrain stem	
	D	Right Parietal region	<input type="checkbox"/>	E	Left Temporal region	
112	An 11-year-old male child presented to OPD with gait disturbance for the last 1 day. He had chickenpox one month back. On examination, he has both truncal and limbs ataxia with associated dysarthria. What is the most likely diagnosis?					
	<input checked="" type="checkbox"/>	A	Acute cerebellar ataxia	B	Chorea	
				C	GullianBarre Syndrome	
	D	Polio Myelitis	<input type="checkbox"/>	E	Transverse Myelitis	
113	A 05 years old unvaccinated child presented to emergency department with complaints of high grade fever for the last 3 days associated with headache and vomiting. On examination temperature 102°F, pulse 130/Min, BP 90/60mmhg. Kernig's and Brudzinski's signs are positive. CSF analysis shows WBC= 1800 with 90% neutrophils 10% lymphocytes, proteins 350mg/dl, Glucose 30mg/dl. What is the most likely diagnosis?					
	<input checked="" type="checkbox"/>	A	Bacterial meningitis	B	Brain abscess	
				C	Tuberculous Meningitis	
	D	Viral encephalitis	<input type="checkbox"/>	E	Viral meningitis	
114	A 2 years old male child presented to the emergency department with high grade fever and runny nose for the last 1 day. In the emergency department, the child developed generalized clonic seizure lasting for 3 minutes. After 20 minutes, the child became fully conscious. He was developmentally normal. Physical examination showed fever of 102°F and clear rhinorrhea. No signs of meningeal irritation and rest of the systemic examination was unremarkable. What is the most likely diagnosis?					
	<input checked="" type="checkbox"/>	A	Complex febrile seizures	B	Meningoencephalitis	
				C	Simple febrile seizures	
	D	Status epilepticus	<input type="checkbox"/>	E	Viral encephalitis	
115	An 8 years old child weighing 13 kg has presented with 1 month history of fever and positive signs of meningeal irritation. CSF examination shows: Protein = 800 mg/dl, glucose = 30 mg/dl; Cell count = 300, Lymphocytes = 90 %; Neutrophils = 10 %. What is the most likely diagnosis?					
	A	Bacterial meningitis	<input type="checkbox"/>	B	Brain Abscess	
				C	Fungal meningitis	
	D	Tuberculous meningitis	<input checked="" type="checkbox"/>	E	Viral meningoencephalitis	
116	An 8 years old male child was brought to the OPD with 03 months' history of gait problem with frequent falls. He was born to consanguineous parents by NVD at term with immediate cry. His development was normal. One of his 12 years old brother is bed ridden for the last 03 years, who was previously normal. On examination, high stepping gait, down going planters, diminished deep tendon reflexes, wasted distal limbs were found. His higher mental functions and cerebellar examination are normal. What is the most likely diagnosis?					
	A	Guillan Barre Syndrome	<input type="checkbox"/>	B	Hereditary sensory motor neuropathy	
				C	Spinal Cord Tumor	
	D	Spinal muscular atrophy	<input checked="" type="checkbox"/>	E	Transverse myelitis	
117	Pre anesthetic medication is given to:					
	A	To control patient co-morbidity	<input type="checkbox"/>	B	To decrease duration of surgery	
				C	To decrease pain during surgery	
	<input checked="" type="checkbox"/>	D	To make anesthetic procedure safe and pleasant	E	To maintain Blood Pressure	
118	All of the following are stages of anesthesia except:					
	A	Analgesia	<input type="checkbox"/>	B	Excitement	
				<input checked="" type="checkbox"/>	C	Hyperthermia
	D	Modularly paralysis	<input type="checkbox"/>	E	Surgical anesthesia	
119	Which of the following is correct about drug succinylcholine?					
	A	Analgesic	<input type="checkbox"/>	B	Anti-cholinesterase	
				<input checked="" type="checkbox"/>	C	Depolarizing
	D	Non-Depolarizing	<input type="checkbox"/>	E	Sedative	
120	A 06 year old child was brought to the emergency room who while playing in the street at night was bitten on his forearm and face by a known rabid dog. The bite was category III type as classified by World Health Organization (WHO). Which of the following human diploid cell culture intramuscular dosage schedule would you follow?					
	A	0, 1, 3, 7, 14 day	<input type="checkbox"/>	B	0, 3, 5, 7, 14 day	
				C	0, 3, 7, 9, 14 day	
	<input checked="" type="checkbox"/>	D	0, 3, 7, 14, 28 day	E	0, 7, 14, 28, 60 day	