Pharma

1. ***Enumerate drugs used in treatment of absence and mention MOA of 1st line drug ?***
2. ***Mention MOA and 2 side effect of phentoin , carbamazepine ?***
3. ***Mention lines of treatment of status epilepitcus ? مهم جدا***
4. ***Mention 2 drugs that are safe in pregnancy ?***

MCQ

1. A 6-year-old girl and her mother come to see you because the girl's teacher observed episodes of staring and inability to communicate. These episodes last 3-5 seconds and occur 10-20 times during the school day. An EEG shows synchronized three-per-second spike-wave discharges generalized over the entire cortex. Which antiepileptic medication would you try first in this young girl? *A. Phenytoin* *B. Clonazepam* *C. Primidone* *D. Carbamazepine* *E. Ethosuximide*	***E***
2. Of the list below, which is the safest antiepileptic drug to take during pregnancy? *A. Sodium valproate.* *B. Carbamazepine.* *C. Lamotrigine.* *D. Phenytoin.* *E. Midazolam.*	***C***

3. A 26-year-old woman discovered she was unexpectedly pregnant. She had been regularly taking an oral contraceptive medication for several years. Two months earlier, she was diagnosed with complex partial seizures and started the prescribed therapy. Which of the following drugs was she most likely taking? *A. Lamotrigine* *B. Valproic acid* *C. Clonazepam* *D. Gabapentin* *E. Levetiracetam* *F. Carbamazepine*	***F***
4. A 36-year-old woman recently diagnosed with simple partial seizures started a therapy with lamotrigine. Which of the following adverse effects is most likely to occur during the therapy? *A. Macrocytic anemia* *B. Hallucinations* *C. Liver cirrhosis* *D. Pancreatitis* *E. Lupoid syndrome* *F. Erythematous skin rash*	***F***
5. The mechanism of antiseizure activity of carbamazepine is: *(A) Block of sodium ion channels* *(B) Block of calcium ion channels* *(C) Facilitation of GABA actions on chloride ion channels* *(D) Glutamate receptor antagonism* *(E) Inhibition of GABA transaminase*	***A***

6. A 32-year-old woman complained to her physician that two breakthrough seizures occurred last week. One month earlier the woman was diagnosed with simple partial seizure and started treatment with an antiepileptic drug. The physician increased the dose of the drug, thinking that the decreased effect was most likely because the drug is a potent enzyme inducer and can induce its own metabolism. Which of the following drugs did the patient most likely take? *A. Valproic acid* *B. Carbamazepine* *C. Lamotrigine* *D. Ethosuximide* *E. Clonazepam*	***B***
7. The mechanism of anti-seizure activity of carbamazepine is: *A. Block of sodium ion channels* *B. Block of calcium ion channels* *C. Facilitation of GABA actions on chloride ion channels* *D. Glutamate receptor antagonism*	***A***
8. A 37-year-old woman was at a routine neurology clinic visit. The woman had a long history of refractory grand mal epilepsy. She was being treated with several drugs, but with poor results. The neurologist decided to prescribe phenytoin. Blockade of which of the following types of ion channels is most likely to mediate the therapeutic efficacy of the drug in the patient's disease? *A. Na+ channels in the resting state* *B. Na+ channels that open and close at high frequency* *C. Na+ channels that open and close at low frequency* *D. K+ channels in a resting state* *E. K+ channels that open and close at high frequency* *F. K+ channels that open and close at low frequency*	***B***

9. Which statement concerning the proposed mechanisms of action of anticonvulsant drugs is most accurate? *A. Benzodiazepines facilitate glutamate-mediated inhibitory actions* *B. Ethosuximide selectively blocks potassium ion (K+) channels in thalamic neurons* *C. Phenobarbital produces a selective blockade of calcium ion (Ca2+) channels* *D. Phenytoin prolongs the inactivated state of the Na+ channel* *E. Zonisamide blocks voltage-gated K+ channels*	***D***
10. Which drug used in management of seizure disorders is most likely to elevate the plasma concentration of other drugs administered concomitantly? *A. Carbamazepine* *B. Clonazepam* *C. Phenobarbital* *D. Phenytoin* *E. Valproic acid*	***E***
11. With chronic use in seizure states, the adverse effects of this drug include coarsening of facial features, hirsutism, and gingival hyperplasia. *A. Carbamazepine* *B. Ethosuximide* *C. Phenytoin* *D. Tragabine*	***C***

12. Which statement about phenytoin is accurate? *A. Displaces sulfonamides from plasma proteins* *B. Drug of choice in myoclonic seizures* *C. Half-life is increased if used with phenobarbital* *D. Isoniazid (INH) decreases steady-state blood levels of phenytoin* *E. Toxic effects may occur with only small increments in dose*	***E***
13. Ethosuxamide can be used for the treatment of: *a) Generalized tonic clonic seizures* *b) Absence seizures* *c) Complex seizures* *d) Myoclonic seizures* *e) Focal seizures*	***B***
14. Ali, a 10-year-old boy, is having difficulty in learning at school. He has short lapses of awareness with eyelid fluttering that occur every 5-10 minutes. Which of the following drugs would be effective, has the no disadvantage that it causes sedation & tolerance? *a) Buspirone* *b) Ethosuxamide* *c) Clonazepam* *d) Valproic acid* *e) Lamotrigine*	***B***
15. One of following is characteristic of both phenytoin and Carbamazepine: *a) Inhibition of hepatic cytochrome P450* *b) First-order elimination at high therapeutic doses* *c) Enhances the effects of oral contraceptives* *d) Safe to use in pregnancy* *e) Prevent sodium influx through fast sodium channels*	***E***

16. A 20-year-old man with absence seizures is treated with ethoximide. Which of the following is the principle mechanism of action of ethoximide? *a) Calcium channel blockade.* *b) Chloride channel opening.* *c) Increase in GABA.* *d) Increase K-channel permeability.*	***A***
17. Epileptic seizures are not controlled by: *a) Clonazepam* *b) Carbamazepine* *c) Phenytoin* *d) Levodopa*	***D***
18. The most probable mechanism of anticonvulsant action of phenytoin is: *a) Facilitation of GABAergic inhibitory transmission* *b) Hyperpolarization of neurones* *c) Interaction with Ca2+ channels to promote Ca2+ influx* *d) Prolongation of voltage sensitive neuronal Na+ channel inactivation*	***D***
19. Sodium valproate should be used with caution in young children because they are particularly at risk of developing the following adverse effect: *a) Hepatitis* *b) Loss of hair* *c) Anorexia* *d) Tremor*	***A***

20. A 53-year-old woman with seizure disorder, bipolar disorder, and trigeminal neuralgia presents to her primary care physician for follow-up and treatment. She has no new complaints. Which of the following medications may serve to treat all of her earlier mentioned problems? *a) Carbamazepine* *b) Ethosuximide* *c) Felbamate* *d) Gabapentin* *e) Lacosamide*	***A***
21. A 15-year-old boy presents to clinic for follow-up for his tonic-clonic seizures. He reports that he has not had a seizure in the past 6 months. However, he has been more tired recently and is unsure why. A complete blood count is performed and shows megaloblastic anemia. The physician told the patient that this was most likely a side effect of his antiseizure medication. What is the most likely medication he was taking? *a) Carbamazepine* *b) Ethosuximide* *c) Phenobarbital* *d) Phenytoin* *e) Valproic acid*	***D***
22. The following adverse effect(s) of phenytoin is/are related to high plasma drug concentration: *a) Ataxia* *b) Hirsutism* *c) Gum hyperplasia* *d) All of the above*	***A***

23. Which of the following antiepileptic agents, used for trigeminal neuralgia, is considered primary treatment of all seizure types except absence? *a) Carbamazepine* *b) Ethosuximide* *c) Valproic acid* *d) Diazepam*	***A***
24. The drug of choice for trigeminal neuralgia is: *A. Aspirin* *B. Imipramine* *C. Carbamazepine* *D. Valproic acid*	***C***
25. A young male patient suffers from a seizure disorder characterized by tonic rigidity of the extremities followed in 15-30 s of tremor progressing to massive jerking of the body. This clonic phase lasts for 1 or 2 min, leaving the patient in a stuporous state. Of the following drugs, which is most suitable for long-term management of this patient? *A. Clonazepam* *B. Ethosuximide* *C. Felbamate* *D. Valproate* *E. Pregabalin*	***D***
26. Which drug used in the maintenance treatment of patients with tonic-clonic or partial seizure states increases the hepatic metabolism of many drugs including both phenytoin and warfarin? *(A) Buspirone* *(B) Clonazepam* *(C) Eszopiclone* *(D) Phenobarbital* *(E) Triazolam*	***D***

27. For which of the following drugs used to manage epilepsy does a small change in its bioavailability result in a disproportionate increase in its blood levels and toxicity? *A. Carbamazepine* *B. Diazepam* *C. Ethosuximide* *D. Phenytoin* *E. Valproic acid*	***D***
28. A 25-year-old woman with myoclonic seizures is well controlled on valproate. She indicates that she is interested in becoming pregnant in the next year. With respect to her anti-epilepsy medication, which of the following should be considered? *A. Leave her on her current therapy.* *B. Consider switching to lamotrigine. medication.* *C. Consider adding a second antiepilepsy* *D. Decrease her valproate dose.* *E. Stop the drug suddenly.*	***B***
29. The molecular mechanism underlying antiepileptic effects of carbamazepine and phenytoin is best described by which one of the following statements? *A. Inhibiting low-threshold Ca 2+ ion channels* *B. Prolonging the inactivation of the Na + ion channel* *C. Potentiating the release of GABA by inhibiting GABA reuptake* *D. Increasing the release of GABA by vesicular fusion* *E. Blocking glutamate receptor excitation*	***B***

30. Gabapentin has which mechanism of action? *A. Inhibits monoamine oxidase* *B. Has an agonist effect at dopamine receptors* *C. Increases Na + channel inactivation* *D. Blocks reuptake of neurotransmitters* *E. Inhibit Ca channel*	***E***
31. Which of the following drugs has the least sedating effect, while effective in managing partial seizures: *A. Phenytoin* *B. Primidone* *C. Carbamazepine* *D. Phenobarbital* *E. Ethosuximide*	**C**
32. Which is the safest antiepileptic drug to take during pregnancy? *A. Sodium valproate.* *B. Carbamazepine.* *C. Lamotrigine.* *D. Phenytoin.* *E. Midazolam.*	**C**
33. A 45-year-old man with a history of alcohol abuse was brought to the emergency department after having a seizure. The patient had a witnessed seizure lasting approximately 10 minutes. Upon arrival, he was found to be in status epilepticus. What is the first drug of choice? *A. Phenobarbital.* *B. Lorazepam.* *C. Lamotrigine.* *D. Valproate.*	***B***

34. A 29-year-old woman is being treated with valproic acid for simple partial seizures. She is at risk for developing a rise in her plasma…… *A. calcium.* *B. hepatic transaminases.* *C. blood urea nitrogen (BUN).* *D. potassium.* *E. glucose.*	***B***
35. Patient treated with phenytoin for tonic-clonic seizures. His drug plasma concentration is in the low therapeutic range, and he is still having occasional seizures. His dose is increased slightly. Within 2 weeks he is ataxic, lethargic, and has nystagmus. A repeat of his plasma concentration shows that he is now slightly above the upper limit of the therapeutic range. The reason for the dramatic rise in his plasma concentration following a modest increase in his dose is most likely because of: *A. renal failure.* *B. liver failure.* *C. zero order elimination.* *D. metabolic acidosis.* *E. poor GI absorption of Ca..*	***C***
36. A 29-year-old woman is being treated with valproic acid for simple partial seizures. She is at risk for developing a rise in her plasma…… *A. calcium.* *B. hepatic transaminases.* *C. blood urea nitrogen (BUN).* *D. potassium.* *E. glucose.*	***B***

37. What is a significant potential side effect of vigabatrin? *A) Weight gain* *B) Vision loss* *C) Liver toxicity* *D) Sleep disturbances*	***B***
38. Vigabatrin primarily works by: *A) Enhancing GABA activity* *B) Inhibiting monoamine oxidase* *C) Blocking sodium channels* *D) Increasing dopamine levels*	***A***
39. Tiagabine primarily acts by: *A) Inhibiting GABA reuptake* *B) Blocking sodium channels* *C) Enhancing glutamate release* *D) Inhibiting dopamine receptors*	***A***