

English

1. The primary requirement for a drug to cross the blood-brain barrier is:

- (A) Hydrophilicity
- (B) Large molecular size
- (C) Lipophilicity
- (D) High plasma protein binding

Correct Option(s): C

English

2. Which drug is known for causing a "disulfiram-like reaction" when taken with alcohol?

- (A) Metronidazole
- (B) Tetracycline
- (C) Penicillin
- (D) Chloramphenicol

Correct Option(s): A

English

3. Which of the following drugs is used to treat gout?

- (A) Colchicine
- (B) Methotrexate
- (C) Topotecan
- (D) Vincristine

Correct Option(s): A

English

4. Warfarin is monitored by which test?

- (A) Bleeding time
- (B) Thrombin time
- (C) Prothrombin/INR
- (D) APTT

Correct Option(s): C

English

5. Which antibiotic inhibits cell wall synthesis?

- (A) Clindamycin
- (B) Ciprofloxacin
- (C) Amoxicillin
- (D) Erythromycin

Correct Option(s): C

English

6. Glutathione is:

- (A) An essential peptide for detoxification
- (B) A thiol-containing antioxidant
- (C) A non-essential amino acid used in formulations
- (D) A tripeptide of cysteine, glutamate, and glycine

Correct Option(s): D

English

7. The function of t-RNA is:

- (A) Replicating DNA
- (B) Translating RNA into the language of protein
- (C) Degrading proteins
- (D) Synthesizing mRNA

Correct Option(s): B

English

8. What is SMON syndrome related to?

- (A) Chlorpromazine
- (B) Ranitidine
- (C) Quiniodochlor
- (D) Ephedrine

Correct Option(s): C

English

9. Which drug is a selective serotonin reuptake inhibitor (SSRI)?

- (A) Amitriptyline
- (B) Fluoxetine
- (C) Diazepam
- (D) Phenobarbital

Correct Option(s): B

English

10. Tyndalization refers to:

- (A) Heating at 80°C for 1 hour on three successive days
- (B) Heating the medium at 72°C for 15 seconds
- (C) Heating the medium at 68.2°C for 30 min
- (D) Heating the medium at 115°C for 30 min

Correct Option(s): A

English

11. Which of the following is directly titrated with acid?

- (A) Phenobarbitone
- (B) Phenytoin
- (C) Sulfapyrazone
- (D) Aminophylline

Correct Option(s): D

English

12. Which of the following is a protease inhibitor used in HIV treatment?

- (A) Lamivudine
- (B) Zidovudine
- (C) Ritonavir
- (D) Tenofovir

Correct Option(s): C

English

13. Gum Hypertrophy is the side effect of:

- (A) Barbiturate
- (B) Alprazolam
- (C) Diazepam
- (D) Phenytoin

Correct Option(s): D

English

14. A back titration method is used in the assay of:

- (A) Acetaminophen
- (B) Caffeine
- (C) N-acetyl salicylic acid
- (D) Ibuprofen

Correct Option(s): C

English

15. Which of the following is a secondary messenger?

- (A) Acetyl Choline
- (B) NADPH
- (C) Glucose
- (D) cAMP

Correct Option(s): D

English

16. Which drug is used to treat malaria in pregnant women ?

- (A) Tetracycline
- (B) Sulfoxide
- (C) Chloramphenicol
- (D) Chloroquine

Correct Option(s): D

English

17. Osmotic pressure of human blood is:

- (A) 7.6 bar
- (B) 4.1 bar
- (C) 6.1 bar
- (D) 9.0 bar

Correct Option(s): A

English

18. Cis and trans stilbenes are:

- (A) Geometrical isomers
- (B) Conformational isomers
- (C) Enantiomers
- (D) Diastereomers

Correct Option(s): D

English

19. Which of the following is a beta-adrenergic blocker?

- (A) Lisinopril
- (B) Propranolol
- (C) Losartan
- (D) Amlodipine

Correct Option(s): B

English

20. Which drug is used to reverse opioid overdose?

- (A) Naltrexone
- (B) Buprenorphine
- (C) Methadone
- (D) Naloxone

Correct Option(s): D

English

21. Increases in creatinine kinase indicate:

- (A) Myocardial infarction
- (B) Nerve damage
- (C) Stroke
- (D) Cirrhosis

Correct Option(s): A

English

22. N-acetyl glucosamine and N-acetyl muramic acid are components of:

- (A) Fungi
- (B) Viruses
- (C) Gram-negative bacteria
- (D) Gram-positive bacteria

Correct Option(s): D

English

23. Hausner's ratio refers to:

- (A) Ratio of two polymorphs in API
- (B) Moisture content of powder
- (C) Partition coefficient
- (D) Flowability and compressibility of powder

Correct Option(s): D

English

24. What is the correct IR absorption range for the N-H bond?

- (A) 2700 - 2800 cm^{-1}
- (B) 3300 - 3400 cm^{-1}
- (C) 1450 - 1600 cm^{-1}
- (D) 1000 - 1200 cm^{-1}

Correct Option(s): B

English

25. Which of the following is a steroidal glycoalkaloid?

- (A) Ginkgo biloba
- (B) Solanum
- (C) Bramhi
- (D) Chirata

Correct Option(s): B

English

26. The therapeutic range of digoxin is:

- (A) 5-10 ng/mL
- (B) 1-2 ng/mL
- (C) 2-4 ng/mL
- (D) 0.5-1.5 ng/mL

Correct Option(s): D

English

27. Which route has the highest bioavailability?

- (A) Oral
- (B) Subcutaneous
- (C) Intramuscular
- (D) Intravenous

Correct Option(s): D

English

28. The daily iron requirement in pregnant women is -----per day

- (A) 10-15 mg
- (B) > 20 mg
- (C) < 10 mg
- (D) 15-20 mg

Correct Option(s): B

English

29. Which is the principle involved in Karl Fischer titration?

- (A) Oxidation of I₂ in water by pyridine
- (B) Reduction of I₂ by SO₂ in the presence of water
- (C) SO₂ in pyridine presence acts as a reducing agent
- (D) Reduction of SO₂ by pyridine

Correct Option(s): B

English

30. Which compound acts as an enzyme inhibitor by binding to the active site?

- (A) Allosteric inhibitor
- (B) Non-competitive inhibitor
- (C) Competitive inhibitor
- (D) Suicide inhibitor

Correct Option(s): C

English

31. What is the antidote for paracetamol poisoning?

- (A) Leucine
- (B) Proline
- (C) Glycine
- (D) N-Acetyl cysteine

Correct Option(s): D

English

32. What is the volume of distribution (V_d) formula?

- (A) $V_d = C_0 / \text{Dose}$
- (B) $V_d = CL / t_{1/2}$
- (C) $V_d = (CL \times t_{1/2}) / 2$
- (D) $V_d = \text{Dose} / C_0$

Correct Option(s): D

English

33. The vagal nerve is called as

- (A) 1st Spinal Nerve
- (B) 10th Cranial nerve
- (C) 5th Spinal nerve
- (D) 6th Cranial nerve

Correct Option(s): B

English

34. The ideal BMI is:

- (A) 20-25
- (B) < 20
- (C) 25-30
- (D) >30

Correct Option(s): A

English

35. The role of borax in cold cream is:

- (A) Antimicrobial agent
- (B) In-situ emulsifier
- (C) Micelle-forming agent to dissolve skin lipids
- (D) Provides fine particles to polish skin

Correct Option(s): B

English

36. Which drug is known for causing "red man syndrome"?

- (A) Clarithromycin
- (B) Vancomycin
- (C) Ciprofloxacin
- (D) Amoxicillin

Correct Option(s): B

English

37. The normality of concentrated HCl is approximately:

- (A) 11.7N
- (B) 7.4N
- (C) 10.0N
- (D) 5.5N

Correct Option(s): A

English

38. Which enzyme is inhibited by aspirin?

- (A) Lipase
- (B) Amylase
- (C) COX
- (D) Acetylcholinesterase

Correct Option(s): C

English

39. Which of the following is used in enteric coating?

- (A) HPMC
- (B) PVP
- (C) CAP
- (D) HPC

Correct Option(s): C

English

40. The most stable conformation in mono-substituted cyclohexane is:

- (A) Boat
- (B) Equatorial
- (C) Chair
- (D) Axial

Correct Option(s): B

English

41. Which neurotransmitter is primarily involved in Parkinson's disease?

- (A) GABA
- (B) Dopamine
- (C) Serotonin
- (D) Adrenaline

Correct Option(s): B

English

42. Which of the following is an example of a zero-order reaction?

- (A) Penicillin degradation
- (B) Alcohol elimination
- (C) Radioactive decay
- (D) Hydrolysis of sucrose

Correct Option(s): B

English

43. The inverse agonist of BZD chloride ion channel receptor is

- (A) Flumazenil
- (B) Diazepam
- (C) Carbamazepine
- (D) Beta carboline

Correct Option(s): D

English

44. What decreases the solubility of gelatin capsules?

- (A) Alcohol
- (B) Water
- (C) Formalin
- (D) Acetic acid

Correct Option(s): C

English

45. The mechanism of action of omeprazole is:

- (A) Antacid
- (B) Proton pump inhibitor
- (C) H₂ receptor antagonist
- (D) Anticholinergic

Correct Option(s): B

English

46. Thioglycolic acid is used in cosmetics as:

- (A) Fragrance
- (B) Epilatory preparation
- (C) Polymorph inhibitor
- (D) Depilatory preparation

Correct Option(s): D

English

47. Which drug is a selective α_1 adrenergic blocker?

- (A) Prazosin
- (B) Salbutamol
- (C) Atenolol
- (D) Propranolol

Correct Option(s): A

English

48. What type of spectroscopy measures protein and peptide interactions?

- (A) MALDI
- (B) IR Spectroscopy
- (C) Mass Spectroscopy
- (D) AAS

Correct Option(s): A

English

49. Folate deficiency is caused by:

- (A) Warfarin
- (B) Cimetidine
- (C) Methotrexate
- (D) Acetaminophen

Correct Option(s): C

English

50. The antidote for methanol poisoning is:

- (A) Folic acid
- (B) Fomepizole
- (C) Naloxone
- (D) Vitamin C

Correct Option(s): B