01. The steady-state concentration of a drug can be double by:
   a. Doubling the both rate of infusion and concentration of drug.
   b. Doubling the rate of infusion only.
   c. Doubling the loading dose but maintaining the infusion rate.
   d. Tripling the rate of infusion.
   e. Duadrupling the rate of infusion.
   **Key: b**

02. Phase II reactions of a drug biotransformation:
   a. Decreases its water solubility.
   b. Includes activity of cytochrom P-450.
   c. Usually leads to inactivation of the drug.
   d. Does not include acetylation.
   e. Occur at the same rate in adults and the new born.
   **Key: c**

03. Half-life of a drug may be helpful to determine:
   a. Dosage schedule of the drug.
   b. Level of absorption.
   c. Distribution into different body systems.
   d. Rate of absorption through GIT.
   e. Time to get the steady state.
   **Key: e**

**Topic Specification:** General Pharmacology (MCQ 1 – 3)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.

04. A 3 year old child has been admitted to emergency with suspicious of atropine overdose as there are:
   a. Abdominal cramps.
   b. Increased gastric secretion.
   c. Increased cardiac rate.
   d. Papillary constriction.
   e. Increased urinary frequency.
   **Key: c**

05. Epinephrine does not cause increase concentrations of:
   a. Glucose in blood.
   b. Lactate in blood.
   c. Free fatty acids in blood.
   d. cAMP in heart muscle.
   e. Triglycerides in fat cells.
   **Key: e**

**Topic Specification:** Autonomic Nervous System (MCQ 4 – 6)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.
06. A 50 year old patient is having propranolol due to his cardiac problems but his physician now wants to stop this drug; which of the following is the most important reason for this step?
   a. Familial tremor.
   b. Partial AV heart block.
   c. Mild hypertension.
   d. Angina pectoris.
   e. Supraventricular tachycardias.
   **Key: b**

   **Topic Specification:** Sedative-Hypnotics/ Anxiolytics (MCQ 7 – 9)

   **Reference:** Lippincott’s Pharmacology, 3rd Ed.

07. A young man of 24 years is suffering from Generalized Anxiety Disorder; which drug may be preferred for his problem?
   a. Zolpidem.
   b. Buspirone.
   c. Midazolam.
   d. Triazolam.
   e. Phenobarbital.
   **Key: b**

08. Which of the following statements best describes the mechanism of action of benzodiazepines?
   a. Benzodiazepines activate GABA\textsubscript{B}-receptors in the spinal cord.
   b. They inhibit GABA-transaminase leading to increased levels of GABA.
   c. They block glutamate receptors in hierarchical neuronal pathways in the brain.
   d. Benzodiazepines increase the frequency of Cl\textsuperscript{-}-channels opening which are coupled to GABA\textsubscript{A} receptors.
   e. They are direct-acting GABA receptor agonists in the CNS.
   **Key: d**

09. Which of the following drugs when used for prolonged period in the maintenance treatment of tonic-clonic seizures can lead to increased metabolism of warfarin like drugs?
   a. Phenobarbital.
   b. Meprobamate.
   c. Chlordiazepoxide.
   d. Triazolam.
   e. Zolpidem.
   **Key: a**

   **Topic Specification:** Skeletal Muscle Relaxants & Drug Acting on CNS (MCQ 10 – 12)

   **Reference:** Lippincott’s Pharmacology, 3rd Ed.
10. Characteristics of non-depolarizing neuromuscular blockade include which of the following?
   a. Block of post-tetanic potentiation.
   b. Histamine blocking action.
   c. Poorly sustained tetanic tension.
   d. Significant muscle fasciculations during onset of block.
   e. Stimulation of autonomic ganglia.
   Key: c

11. Which of the following drugs given preoperatively is used to prevent postoperative pain caused by succinylcholine?
   a. Dantrolene.
   b. Tubocurarine.
   c. Diazepam.
   d. Lidocaine.
   e. Baclofen.
   Key: b

12. With prolonged use in seizure states, which of the following drugs can cause coarsening of facial features, hirsutism, gingival hyperplasia and osteomalacia?
   a. Valproic acid.
   b. Carbamazepine.
   c. Ethosuximide.
   d. Phenytoin.
   e. Gabapentin.
   Key: d

Topic Specification: Analgesics; NSAIDS (MCQ 13 – 15)
Reference: Lippincott’s Pharmacology, 3rd Ed.

13. Only Aspirin can:
   a. Reduce fever.
   b. Irreversible inhibit its target enzyme.
   c. Prevent episodes of gouty arthritis with long term use.
   d. Reduce the risk of colon cancer.
   e. Selectively inhibit the COX-2 enzyme.
   Key: b
14. **Indomethacin is preferred over Colchicine for Acute Attack of Gout because it is:**
   a. Less likely to cause gastrointestinal bleeding.
   b. Less likely to cause diarrhea.
   c. Less likely to cause acute renal failure.
   d. More likely to reduce inflammation.
   e. More likely to prevent further acute attacks.
   **Key: b**

15. **Which of the following drugs is used in the treatment of rheumatoid arthritis?**
   a. Naproxen.
   b. Allopurinol.
   c. Colchicine.
   d. Sulfinpyrazone.
   e. Leflunomide.
   **Key: a**

**Topic Specification:** Analgesics; Opioids (MCQ 16 – 18)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.

16. **The most dangerous adverse effect by using Fentanyl patches is:**
   a. Diarrhea.
   b. Relaxation of respiratory muscles.
   c. Hypertension.
   d. Respiratory depression.
   e. Skin reactions.
   **Key: d**

17. **Morphine should be used with extreme caution in all of the following conditions but not in:**
   a. Biliary tract surgery.
   b. Pulmonary edema.
   c. Last stage of labor.
   d. Hypothyroidism.
   e. Adrenal insufficiency.
   **Key: b**

18. **A 35 year old patient complaining of severe pain along the right side of the jaw and face; the best choice for this neuralgic pain is:**
   a. Methadone.
   b. Ibuprofen.
   c. Carbamazepine.
   d. Lorazepam.
   e. Amphetamine.
   **Key: c**

**Topic Specification:** Local Anesthetics (MCQ 19 – 21)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.
19. Which of the following local anesthetics is used exclusively for its good surface activity and low toxic potential:
   a. Cocaine.
   b. Benzocaine.
   c. Bupivacaine.
   d. Procaine.
   e. Lidocaine.
   **Key: b**

20. Which of the following drugs can cause methemoglobinemia when used in larger doses for regional anesthesia?
   a. Cocaine.
   b. Lidocaine.
   c. Bupivacaine.
   d. Procaine.
   e. Prilocaine.
   **Key: e**

21. Epinephrine added to a solution of lidocaine for local anesthesia will:
   a. Cause cyanosis locally.
   b. Increase the risk of convulsions.
   c. Increase the duration of local anesthesia.
   d. Increase the absorption of lidocaine.
   e. Decrease the heart rate when absorbed.
   **Key: c**

**Topic Specification:** General Anesthetics (MCQ 22 – 24)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.

22. Which of the following inhalational anesthetic agents is having fastest onset of action?
   a. Nitric oxide.
   b. Isoflurane.
   c. Nitrous oxide.
   d. Enflurane.
   e. Nitrogen dioxide.
   **Key: c**

23. To attempt reduction of a dislocated shoulder joint when Ketamine is used alone it will cause:
   a. Respiratory depression.
   b. Skeletal muscle rigidity.
   c. Hypotension.
   d. Bradycardia.
   e. Analgesia.
   **Key: e**
24. Which of the following drugs produces respiratory depression and so reversed by flumazenil?
   a. Fentanyl.
   b. Propofol.
   c. Ketamine.
   d. Midazolam.
   e. Enflurane.

   Key: d


Reference: Lippincott’s Pharmacology, 3rd Ed.

25. Cephalosporins show their antimicrobial action by:
   a. Binding to cytoplasmic receptor proteins.
   b. Inhibition of beta-lactamases.
   c. Inhibition of transpeptidation reactions.
   d. Interference with the synthesis of ergosterol.
   e. Inhibition of the synthesis of precursors of peptidoglycans.

   Key: c

26. The most appropriate drug regimen for empiric treatment of Gram-negative bacilli in blood is:
   a. Ampicillin plus sulbactam.
   b. Aztreonam.
   c. Cefazolin.
   d. Imipenem plus cilastatin.
   e. Ticarcillin plus clavulanic acid.

   Key: b

27. A BDS student while answering the question about ciprofloxacin gave various statements; which of the following statements was rejected by the examiner?
   a. Clinical antagonism occurs when used with Co-trimoxazole.
   b. Post-antibiotic effects are similar to aminoglycosides.
   c. It is active against most of the middle-ear infecting organisms.
   d. It may be used for urinary tract infection.
   e. During treatment tendinitis and tendon rupture may occur.

   Key: a

Topic Specification: Antimicrobials Inhibitors Protein Synthesis (MCQ 28 – 30)

Reference: Lippincott’s Pharmacology, 3rd Ed.

28. The mechanism underlying the resistance of G +ve organisms to macrolides is:
   a. Decreased drug permeability of the cytoplasmic membrane.
   b. Methylation of binding sites on the 50-S ribosomal subunit.
   c. Decreased activity of uptake mechanism.
   d. Formation of estrases that hydrolyze the lactone ring.
   e. Formation of acetyl transferase that inactivates macrolides.

   Key: b
29. **Doxycycline is:**
   a. Bactericidal.
   b. Not excreted in the feces.
   c. Having a short elimination half-life.
   d. Not effective in lyme disease.
   e. Not as effective as tetracycline against H. pylori.
   **Key: e**

30. **Neomycin, an aminoglycoside is:**
   a. Least nephrotoxic.
   b. Metabolized by hepatic enzyme.
   c. Used in hepatic coma.
   d. A drug of choice in Rocky Mountain Spotted fever.
   e. An adjunct in treatment of tuberculosis.
   **Key: c**

**Topic Specification:** Antifungals/ Antivirals/ Anticancers (MCQ 31 – 33)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.

31. **The toxic effect of amphotericin B which definitely require reduction of dose is:**
   a. Myelosuppression.
   b. Hepatitis.
   c. Renal Toxicity.
   d. Hypotension.
   e. Infusion-related adverse effects.
   **Key: c**

32. **Which of the followings is useful topically for genital herpes infection?**
   a. Acyclovir.
   b. Amantadine.
   c. Ritonavir.
   d. Trifluridine.
   e. Foscarnet.
   **Key: a**

33. **Acute hemorrhage cystitis is a common toxic effect seen with:**
   a. Vincristine.
   b. Tamoxifen.
   c. Doxorubicin.
   d. Cyclophosphamide.
   e. Fluorouracil.
   **Key: d**
34. A young girl of 20 years has taken a suicidal overdose of Digoxin, the drug of choice in her treatment will be:
   a. Lidocaine.
   b. Phenytoin.
   c. Digoxin antibodies.
   d. Potassium chloride.
   e. Magnesium sulfate.
   **Key: c**

35. A 45 year old patient developed severe thrombocytopenia due to unfractionated heparin so the best alternative anticoagulant will be:
   a. Lepirudin.
   b. Abciximab.
   c. Urokinase.
   d. Plasminogen.
   e. Vit. K₂.
   **Key: a**

36. A 30 year old male suffering from cerebral edema will be best treated with:
   a. Furosemide.
   b. Amiloride.
   c. Ethacrynic acid.
   d. Mannitol.
   e. Acetazolamide.
   **Key: d**

**Topic Specification:** Drugs Acting on CVS/ Blood; Diuretics (MCQ 34 – 36)

**Reference:** Lippincott’s Pharmacology, 3rd Ed.

37. While prescribing a treatment to a young female patient suffering from peptic ulcer associated with H. Pylori the gastroenterologist will neglect:
   a. Tetracycline.
   b. Vancomycin.
   c. Amoxicillin.
   d. Metronidazole.
   e. Clarithromycin.
   **Key: b**

**Reference:** Lippincott’s Pharmacology, 3rd Ed.
38. A 35 year old lady who is on anticancer therapy is now suffering from severe nausea and vomiting; which of the following drugs is having most effective antiemetic actions in this case?
   a. Dexamethasone.
   b. Levodopa.
   c. Apomorphine.
   d. Sucrulfate.
   e. Omeprazole.
   **Key: a**

39. Which of the following is a prophylactic antiasthmatic agent that stabilizes mast cells:
   a. Ipratropium.
   b. Prednisone.
   c. Terbutaline.
   d. Cromolyn.
   e. Aminophyllin.
   **Key: d**

**Topic Specification:** Dental Antiseptics & Disinfectants (MCQ 40 – 42)

**Reference:** Pharmacology and Therapeutic for Dentistry by Yagiela, Dowd, Neidle, 5th Ed.

40. A senior dental surgeon is very much concerned about the systemic effect of the topically-used drugs for plaque prevention; which of the following drugs will least be considered by him due to the same reason?
   a. Vancomycin.
   b. Bacitracin.
   c. Polymyxin – B.
   d. Clarithromycin.
   e. Kanamycin.
   **Key: d**

41. Peppermint is least useful in:
   a. Gingivitis.
   b. Periodontitis.
   c. Young children.
   d. Dental gum.
   e. Antiseptic gel.
   **Key: c**

42. Clove oil:
   a. Can not be used as temporary filling material.
   b. Has no anti-inflammatory effect.
   c. Can not increase bleeding when applied.
   d. Has antifungal activity also.
   e. Can not be used as mouth rinse.
   **Key: d**
43. Eugenol when sealed in a root canal preparation leads to severe tissue damage:
   a. Without pain as it has analgesic effect.
   b. Without pain as it has local anesthetic effect.
   c. Because it has corrosive effect.
   d. With local bleeding also.
   e. With severe pain so needs an oral analgesic also.
   **Key: a**

44. Which of the following statements is least related to Chlorhexidine (0.2%)?
   a. It is useful in reducing plaque formation.
   b. It can cause staining of the teeth.
   c. There is increased formation of calculi.
   d. Alteration in taste perception is also observed.
   e. It is not effective in gingivitis.
   **Key: e**

45. Which of the following statements is rarely seen with Azadirachta Indica (Neem):
   a. Can be used in toothpaste.
   b. Shows antimicrobial activity.
   c. Has mild abrasive effects.
   d. Can not inhibit plaque formation.
   e. Can have some antiseptic effects also.
   **Key: d**