1. Which of these abbreviations indicate that a drug is to be administered at regularly spaced intervals during each 24 hour period?
   a. q 12h
   b. qid
   c. q 6h, prn

2. How many milligrams are equivalent to 0.045 grams?
   a. 4.5
   b. 45
   c. 450

3. Which of these doses is the smallest?
   a. 0.1 gm.
   b. 0.01 mg.
   c. 10 mg.

4. A 3 ml syringe illustrated below contains the amount of solution indicated by the arrows. How many milliliters of solution does the syringe contain?
   a. 1.03
   b. 1.3
   c. 1.6

5. A child is to receive amoxicillin (Amoxil) 60 mg po. The medication is supplied as an oral suspension containing 125 mg per 5ml. How many millimeters should the child receive?
   a. 1.2
   b. 2.4
   c. 25

6. A patient is to receive cephalexin (Keflex) 1 gm po. Keflex is available as 250 mg tablets. How many tablets should be administered?
   a. 1
   b. 2
   c. 4

7. A patient is to receive cyanocobalamin (Vitamin B\textsubscript{12}) 30 mcg IM. Vitamin B\textsubscript{12} is available in 100 mcg per ml. How many millimeters should be administered?
   a. 0.1
   b. 0.3
   c. 3.0

8. Penicillin G sodium for injection contains 250,000 units per millimeter. How many units would there be in 2.5 ml?
   a. 575,000
   b. 625,000
   c. 675,000
9. A patient is to receive meperdine (Demerol) hydrochloride 75mg and atropine sulfate 0.3 mg IM preoperatively. Demerol is available in a prepackaged syringe containing 100 mg per ml. Atropine is available in a vial containing 0.4 mg per ml. If the two drugs were combined in the same syringe for administration, how many millimeters would be given?

   a. 1.05  
   b. 1.5    
   c. 2.0

10. A patient is to receive 500 ml of IV fluid in 3 hours. The infusion pump should be set to deliver how many millimeters per hour?

   a. 83  
   b. 138  
   c. 167

11. A patient is to receive 300 ml of IV fluid during a 2 1/2 hour period. The intravenous setup delivers 15 drops per milliliter. The drip mechanism should be regulated to deliver approximately how many drops per minute?

   a. 10  
   b. 20  
   c. 30

12. A patient is to receive 1,000 ml of IV solution over 8 hours. Four hours later, 620 ml remain. The infusion set delivers 15 drops per milliliter. To receive the remaining fluid within the prescribed time period, the set should deliver how many drops per minute?

   a. 39  
   b. 62  
   c. 100

13. A patient is to receive gentamicin sulfate (Garamycin) 75 mg IV in 100 ml diluent over one hour. The intravenous setup delivers 60 drops per milliliter. How many drops per minute should the patient receive?

   a. 60  
   b. 75  
   c. 100

14. A patient is to receive digoxin (Lanoxin) 0.35mg IV. Lanoxin is available in a prepackaged syringe containing 0.5 mg per 2ml. How many millimeters should be administered?

   a. 0.75  
   b. 1.25  
   c. 1.40
15. A U-100 insulin syringe is illustrated below. The arrow indicates the level to which the syringe has been filled with insulin injection (regular Insulin) labeled 100U per ml. How many units of insulin are in the syringe?

- a. 3.3
- b. 33
- c. 36

16. Which of these is a major principle of pain management and should guide nursing action when administering prescribed analgesics to patients?

- a. The patient in pain is the authority about the pain experience.
- b. The patient with acute pain experiences more pain than one with chronic pain.
- c. The patient with psychogenic pain does not experience real pain.

18. An older adult patient who is receiving a large-volume intravenous infusion of 5% glucose in water develops tachycardia and dyspnea. Which of these nursing measures is indicated first?

- a. Checking the infusion site for signs of infiltration
- b. Decreasing the rate of the infusion
- c. Monitoring oral fluid intake

19. Trimethobenzamide hydrochloride (Tigan) suppositories are prescribed for a patient to control nausea and vomiting. The nurse should use which of these measures when administering the Tigan suppository?

- a. Having the patient take slow, deep breaths during insertion
- b. Asking the patient to assume a lithotomy position for insertion
- c. Checking the patient’s vital signs prior to insertion

20. Which of these ideas should be included in the instructions given to a patient who is taking an antihypertensive drug such as atenolol (Tenormin)?

- a. If dizziness occurs as a side effect, schedule drug administration to allow for a half hour rest after ingestion.
- b. Should any dizziness occur, skip the next dose to determine if it is drug related.
- c. Report any dizziness, as a dosage change may be indicated.
21. A patient diagnosed with hypothyroidism is started on levothyroxine sodium (Synthroid) daily. At which of these times should Synthroid be scheduled for administration?
   a. Before breakfast
   b. With lunch
   c. At bedtime

22. A patient is receiving aminophylline IV for treatment of bronchospasm. In addition to respiratory rate and volume, which of these assessments is essential?
   a. Temperature
   b. Pulse rate
   c. Urinary output

23. A recently hired nurse is administering medications to residents in a long-term care facility where identification wristbands are not used. The nurse does not know many of the residents. Which of these actions would most safely ensure that they receive the correct medications?
   a. Ask the residents their names prior to drug administering.
   b. Call out the full name of each resident.
   c. Have a staff member who knows the residents identify them by name.

24. A major advantage of the patient controlled analgesia (PCA) pump is that
   a. The nurse’s assessments of the patient’s pain can be safely performed at less frequent intervals
   b. The nurse and the patient are provided with a record of how much medication is used
   c. The patient’s pain relief is more sustained

25. A patient has an order for acetylsalicylic acid (Aspirin) 0.6 gm po q 4h prn for temperature of 102°F (39°C) or greater. The patient’s temperature at 8 AM is 102.4°F (39.1°C) and the nurse administers Aspirin. It is essential for the nurse to record the time of the Aspirin administration and the
   a. Patient’s temperature at 9 AM.
   b. Expected outcome of the medication.
   c. Patient’s pulse and blood pressure.

26. A patient’s family member requests that the patient be given a prescribed narcotic analgesic. The nurse prepares the medication for administration but the patient refuses to take it. Which of these actions by the nurse would be appropriate?
   a. Encourage the patient to reconsider taking the medication.
   b. Label the medication and replace it for use at a later time.
   c. Discard the medication in the presence of a witness and chart the action.
27. When administering a medication to a patient via nasogastric tube, the nurse should take which of these actions?
   a. Depress the bulb of the syringe to facilitate the flow of the medication.
   b. Avoid the addition of water into the syringe to prevent unnecessary dilution of the medication.
   c. Hold the syringe high enough to allow the medication to flow in by gravity.

28. Which of these steps is appropriate when administering heparin sodium subcutaneously?
   a. Use a 22-guage, 1-inch needle when preparing the injection.
   b. Aspirate after insertion to check for entry into a blood vessel.
   c. Apply gentle pressure to injection site for 5 to 10 seconds without massage.

29. Which of these instructions is appropriate to give to a patient who has angina pectoris and is to take sublingual nitroglycerin (Nitrostat) as needed?
   a. “If pain isn’t relieved after one tablet dissolves, wait one half hour and take a second tablet.”
   b. “If pain isn’t relieved after one tablet dissolves, you may take another tablet.”
   c. “If pain isn’t relieved after one tablet dissolves, next time start by taking two tablets.”

30. A patient is to receive antitubercular therapy at home. Which of these ideas should be included in the instructions for this patient?
   a. Take the drugs as ordered by the physician.
   b. Limit contacts with family members to short periods.
   c. Eat foods that are especially high in iron.

31. When administering eye drops to a patient, the nurse should place the medication in the lower conjunctival sac to
   a. Reduce systemic absorption of the medication.
   b. Increase circulation to the area.
   c. Prevent injury to the cornea.

32. A patient is receiving 1,000 ml of 5% glucose and 0.45% normal saline with 40 mEq of potassium chloride. It is most important for the nurse to monitor the patient’s
   a. Pulse rate.
   b. Daily weight.
   c. Skin turgor.
33. A patient is to receive 20 units of isophane (NPH) insulin and 10 units of insulin injection (Regular Insulin). Which of these techniques should the nurse use when preparing the injection?
   a. Draw up each insulin in a separate syringe.
   b. Withdraw the NPH insulin first and then the Regular Insulin in the same syringe.
   c. Withdraw the Regular Insulin first and then the NPH insulin in the same syringe.

34. A nurse is preparing to administer antibiotic drops in a patient’s left ear. In which of these positions should the patient be placed?
   a. High-Fowler’s.
   b. Right side-lying.
   c. Prone.

35. A patient is to take prednisone 10 mg po qid. The nurse should schedule this medication to be administered
   a. Before meals and at bedtime.
   b. Every six hours.
   c. After meals and at bedtime.

36. A patient is to use miconazole nitrate (Monistat) vaginal suppositories for three consecutive days. Which of these instructions should the nurse give the patient?
   a. “Insert the Monistat one finger length into the vagina.”
   b. “Use a non-medicated douche before inserting the Monistat.”
   c. “Store the Monistat at room temperature for easier use.”

37. When a patient is receiving morphine sulfate for pain control, the patient is likely to have
   a. A hyperactive cough reflex.
   b. Decreased intestinal motility.
   c. A widening pulse pressure.

38. Antibiotic therapy should be carried out for the prescribed length of time for which of these reasons?
   a. To prevent the occurrence of superinfections.
   b. To encourage the development of antibodies.
   c. To eradicate the targeted organism.

39. A patient who is taking gentamicin sulfate (Garamycin) should be assessed for
   a. Acoustic nerve damage.
   b. Hypertension.
   c. Hypoglycemia.

40. A patient will be discharged on rifampin (Rifadin) and isoniazide (INH) for treatment of tuberculosis. Which of these questions should the nurse include in the discharge assessment?
   a. “Do you wear soft contact lenses?”
   b. “Do you wear a hearing aid?”
   c. “Do you wear dentures?”
41. Sulindac (Clinoril), which is used for long-term symptomatic treatment of arthritis has a long half-life, which causes the drug to
   a. Produce fewer side effects.
   b. Be more fully metabolized in the liver.
   c. Have a prolonged duration of action.

42. A patient who is taking an antihypertensive drug such as clonidine hydrochloride (Catapres) is likely to have which of these side effects?
   a. Excessive tearing.
   b. Constipation.
   c. Increased sexual desire.

43. Because of the action of the diuretic hydrochlorothiazide (HydroDIURIL), a patient receiving this drug should be given which of these instructions?
   a. “Include potassium-rich foods in the diet.”
   b. “Restrict sodium intake to a minimum.”
   c. “Avoid eating high-fiber foods.”

44. A patient is being treated for angina pectoris with nifedipine (Procardia). Which of these side effects is likely to occur?
   a. Petechiae.
   b. Peripheral edema.
   c. Retinal detachment.

45. Lidocaine (Xylocaine) hydrochloride is used therapeutically to
   a. Induce alterations in the autonomic regulation of the heart.
   b. Slow myocardial muscle cell repolarization.
   c. Control ventricular irritability.

46. A patient who has recently started on quinidine sulfate therapy is to be discharged. Which of these ideas should be included in the instructions the nurse gives the patient?
   a. Notify the physician if feelings of faintness occur.
   b. Increase the intake of fruit, fruit juices, and milk.
   c. If nausea occurs, take one dose of a sodium bicarbonate antacid such as Alka-Seltzer.

47. In which of these ways does tolbutamide (Orinase) achieve its desired effect?
   a. It promotes conversion of glucose to glycogen.
   b. It stimulates pancreatic beta cells to release insulin.
   c. It enhances the passage of glucose across cell membranes.

48. A patient is receiving isophane (NPH) insulin at 7 AM each morning. Which of these instructions should the nurse emphasize?
   a. “Have a snack in the midafternoon.”
   b. “Be sure to eat lunch by noon.”
   c. “Eat breakfast immediately after giving your injection.”
49. Folic acid is useful in the treatment of megaloblastic anemia, since its action is to
   a. Increase white blood cell life span.
   b. Stimulate red blood cell production.
   c. Produce hemolysis of abnormal platelets.

50. Which of these drugs may be used in conjunction with antipsychotic drugs such as fluphenazine hydrochloride (Prolixin) and haloperidol (Haldol) to relieve the extrapyramidal side effects of the antipsychotics?
   a. Levodopa (Larodopa),
   b. Benztropine mesylate (Cogentin).
   c. Methocarbamol (Robaxin).

51. Patients who have been abusing amphetamines or cocaine are likely to display which of these symptoms when these drugs are abruptly withdrawn?
   a. Dryness of mouth.
   b. Depression.
   c. Pedal edema.

52. A patient who is receiving chemotherapy for a malignancy is to receive filgrastim (Neupogen), a colony stimulating factor. The purpose of Neupogen is to
   a. Stimulate the metabolism of T cells in the lymph nodes.
   b. Regulate the production of neutrophils in the bone marrow.
   c. Increase the destruction of monocytes in the liver.

53. A patient is receiving the antineoplastic drug methotrexate (Amethopterin) and is taking leucovorin calcium (Calcium Folenate). The purpose of the Calcium Folenate is to
   a. Protect normal cells from the effects of Amethopterin.
   b. Increase the duration that Amethopterin remains active.
   c. Potentiate the action of Amethopterin.

54. Cyclophosphamide (Cytoxan), and antineoplastic, has which of these effects?
   a. It depresses the white blood cell count.
   b. It increases the rate at which platelets multiply.
   c. It causes local irritation when given intravenously.

55. Elderly patients are particularly prone to developing which of these adverse effects as a result of receiving alprazolam (Xanax)?
   a. Urinary retention.
   b. Disorientation.
   c. Muscular rigidity.

56. Methocarbamol (Robaxin) is a centrally acting skeletal muscle relaxant that has which of these side effects?
   a. Lightheadedness.
   b. Jaundice.
   c. Pedal edema.
57. A patient has received flurazepam hydrochloride (Dalmane) for sleep. Because of the effect of this drug, which of these nursing measures would be appropriate?

   a. Observing the patient for signs of widening pulse pressure
   b. Encouraging the patient to sleep in semi-Fowler’s position.
   c. Keeping a night light on in the patient’s room.

58. When anticonvulsive medications such as phenytoin (Dilantin) sodium are stopped, the patient is at risk for the development of

   a. A severe hypoglycemic reaction.
   b. A cerebral vascular occlusion.
   c. Status epilepticus.

59. A patient who has chronic renal failure is to start on recombinant human erythropoietin (Epogen) for which of these purposes?

   a. To neutralize the iron-binding factor in the red blood cells.
   b. To decrease the possibility of red blood cell clumping.
   c. To stimulate red blood cell production.

60. A patient who is taking all of the following drugs complains of having a sore throat. For which of these drugs is a sore throat considered a side effect?

   a. Indomethacin (Indocin).
   b. Digoxin (Lanoxin).
   c. Chlorpromazine Hydrochloride (Thorazine).

**THIS IS THE END OF THE TEST.**