MCQS Deputy Drug controller BS-18 (DTL & CDCO OFFICE mix)

Dated: 22-10-17 Answer only with statements

DDC for CDCO Portion: Ph.Chemistry, Pharmacognosy, Pharmacology & pharmaceutics)

DDC for DTL portion: Pharmaceutics only.

NOTE: Here we continue with those mcqs that were remembered and there are some mcqs which were not the part of these tests but nts has picked those in many tests.

1. Morphine : True alkaloid
2. Ephedrine : Proto alkaloid
3. Family of squill : Liliaceae
4. Family of Glycerrhiza Glabra : Leguminaceae
5. Midazolam : Benzodiazepine
6. Phenobarbital : Barbiturate
7. RLD : Reference listed Drug
8. Nialamide : MAOI
9. Elimination of a drug is the vol of drug free per unit : Time
10. Benzoin acts as : Antiseptic and analgesic
11. Pharmacokinetics : what the body does to the drug
12. Mikhail invented : chromatography
13. Cinchona : quinoline alkaloid
14. Styrax : viscid,liquid,white

15. Small drug molecules move across the cell membrane: more easily as compared to larger drug molecules
16. Autocoids : near the site of synthesis
17. Hydrolysis of glycosides give : aglycone
18. Senna : purgative
19. Oleic acid : poly unsaturated fatty acid
20. Most widely used alkaloid : codeine
21. Paints : liquids
22. Ketose sugar : dihydroxyacetone
23. Glucose : not a ketose sugar
24. Urea : osmotic diuretic
25. Carbamazepine : iminostilbenes
26. Lavender oil : ester vol.oil
27. Creosote : phenol vol.oil
28. Pilocarpine : imidoxile amide
29. Lipids are: **organic compounds** that are fatty acids or their derivatives and are insoluble in water but **soluble in organic solvents**.
30. Astringents:
    - are locally applied solutions
    - Precipitate protein.
    - Reduce cell permeability.
    - cause constriction
    - reduce secretions,
    - Antiperspirants.
31. Calcium hydroxide solution: a reactant and an alkalizer.

32. Drug degradation: in suspension or solid dosage forms occurs much more slowly than degradation in solution form.
33. Drug degradation : 1st order reaction
34. Aromatic waters : are clear, **saturated aqueous solutions of volatile oils** or other aromatic or volatile substances
35. Kb : is the molal boiling point elevation constant
36. The colligative properties of a solution: **depend on the total number of ionic and nonionic solute molecules in the solution**.
37. The boiling point: is the temperature at which the vapor pressure of a liquid equals an **external pressure of 760 mm Hg**.
38. The vapor pressure: **is the pressure at which equilibrium is established between the molecules of A in the liquid state and the molecules of A in the gaseous (vapor) state in a closed, evacuated container.**
39. Weak electrolytes: **(e.g., aspirin, atropine) are partially ionized in water**.
40. Strong electrolytes: **(e.g., sodium chloride, hydrochloric acid) are completely ionized in water at all concentrations.**
41. Estradiol : Nonelectrolyte
42. Sucrose : Nonelectrolyte
43. glycerin, urea : Nonelectrolyte (not in these tests but remember)
44. Saturated solutions: are solutions that, at a given temperature and pressure, contain **the maximum amount of solute that can be accommodated by the solvent.**
45. In a first-order reaction, : the rate depends on the first power of the concentration of a single reactant.

46. The liquid droplet: is known as the dispersed, internal, or discontinuous phase.
47. Carboxymethylcellulose: is **anionic and is usually used to increase viscosity.**
48. **Cold cream : is a w/o emulsion** that is prepared by melting white wax, spermaceti, and expressed almond oil together; adding a hot aqueous solution of sodium borate; and stirring until the mixture is cool.
49. **Vanishing cream: is an o/w emulsion** that contains a large percentage of water as well as humectant (e.g., glycerin, propylene glycol) that retards moisture loss. An excess of stearic acid in the formula helps form a thin fi lm when the water evaporates.
50. **Soft gelatin capsules:** are usually prepared by the **plate process or by the rotary or reciprocating die process.**
51. **Common disintegrants include:**
    - cornstarch and potato starch,
    - starch derivatives (e.g., sodium starch glycolate),
    - cellulose derivatives (e.g., sodium carboxymethylcellulose, croscarmellose sodium),
    - Clays (e.g., Veegum, bentonite), and cation exchange resins.
52. **Capping:** is the partial or complete separation of the top or bottom crown from the main body of the tablet.
53. **Lamination:** is separation of a tablet into two or more distinct layers. Th ese problems are usually caused by entrapment of air during processing.
54. **Picking:** is removal of the surface material of a tablet by a punch.

55. **Sticking:** is adhesion of tablet material to a die wall. These problems are caused by excessive moisture or the inclusion of substances with low melting temperatures in the formulation. c.
56. **Mottling:** is unequal color distribution, with light or dark areas standing out on an otherwise uniform surface. This problem occurs when a drug has a different color than the tablet excipients or when a drug has colored degradation products. Colorants solve the problem but can create other problems.
57. Facilitated diffusion : is also a carrier-mediated transport system. However, facilitated diffusion occurs with (i.e., in the direction of) a concentration gradient and **does not require energy**.
58. **Polymorphism** is the ability of a drug to exist in more than one crystalline form.
59. First-pass effects : presystemic elimination
60. **Relative bioavailability (RBA)** is the systemic availability of the drug from a dosage form as compared to a reference standard given by the same route of administration
61. **Bioavailability studies are performed** : **for both approved active drug ingredients and therapeutic moieties not yet approved for marketing by the FDA**
62. **Biopharmaceutics** is the science that examines this interrelationship of **the physicochemical properties of the drug,** the dosage form in which the drug is given, and the route of administration on the rate and extent of systemic drug absorption.

63. **Fluid extracts:** are liquid extracts of vegetable drugs that contain alcohol as a solvent, preservative, or both**.**
64. **Tinctures**: are alcoholic or hydroalcoholic solutions of chemicals or soluble constituents of vegetable drugs.
65. **Spirits, or essences,** are alcoholic or hydroalcoholic solutions of volatile substances that contain **50% to 90% alcohol.**
66. **Water** is the most commonly used vehicle for drug solutions.
67. The USP recognizes **seven types of water** for the preparation of dosage forms.
68. **Commonly used antioxidants include**
    - ascorbic acid,
    - butylated hydroxyanisole (BHA),
    - butylated hydroxytoluene (BHT),
    - propyl gallate,
    - sodium bisulfite,
    - sodium sulfite,
    - the tocopherols
69. **Esters** usually undergo hydrolytic reactions that cause drug instability.
70. **An emulsion** is a heterogeneous system that consists of at least one immiscible liquid that is intimately dispersed in another in the form of droplets. **The droplet diameter usually exceeds 0.1micrometer.**
71. **A suspension** is a two-phase system that is composed of a solid material dispersed in an oily or aqueous liquid**. The particle size of the dispersed solid is usually greater than 0.5micrometer.**
72. **Buffer action** is the resistance to a change in pH.

73. **Buffer capacity** is the ability of a buffer solution to resist changes in pH.
74. **The smaller the pH** change caused by addition of a given amount of acid or base, the greater the buffer capacity of the solution
75. **Triple point,** do all three phases exist in equilibrium. **(The triple point for water is 0.01°C and 6.04 □ 10□3 atm).**
76. **Molarity (M)** is the expression of the number of moles of solute dissolved per liter of solution. It is calculated by dividing the moles of solute by the volume of solution in liters.
77. **The normality (N)** of a solution is the number of gram-equivalent weights (equivalents) of solute per liter of solution.
78. **Molality (m)** is the moles of solute dissolved per kilogram of solvent.