Suggested questions in industrial pharmacy/Randa Mansour

1. A powder population in which the mode, mean and median particle size are equal is said to be:
2. Monosized.
3. **Normally distributed.**
4. Positively skewed.
5. Negatively skewed.
6. Concerning the fracture behavior of powders, choose the correct statement:
7. Plastic materials fracture easily.
8. Elastic materials fracture easily.
9. **Brittle materials fracture easily.**
10. Tough materials fracture easily.
11. The factor of greatest importance in the operation of the ball mill is:
12. **The speed of rotation.**
13. The amount of material in a mill.
14. The diameter of the balls.
15. The diameter of the mill.
16. A mix where the probabilityof selecting a particular type of particle is the same at all positions in the mix, and is equal to the proportion of such particles in the total mix is called:
17. Perfect mix.
18. **Random mix.**
19. Estimated acceptable standard deviation mix.
20. Ideal mix.
21. Which of the following is not a consequence of bad powder flowability:
22. Variation in tablet weight.
23. Variation in drug content.
24. **Enhanced segregation.**
25. Capping or lamination of tablets.
26. The following equipment can be used for mixing, granulation and drying:
27. Nauta mixer.
28. Spray drier.
29. **Fluidized bed drier**
30. High speed mixer granulator.
31. The fowling drier depends on the principle of lyophilization:
32. Fluidized bed drier.
33. Spray drier
34. Microwave drier.
35. **Freeze drier.**
36. The equilibrium moisture content of a solid:
37. Is the unbound easily removable water associated with the solid.
38. Can be removed be extended drying time
39. **Can be removed by reducing the relative humidity of the ambient air.**
40. Can be removed by increasing the drying temperature.
41. Concerning the flowability of powders:
42. Cohesive powders have bad flow and low values of angle of repose.
43. Spherical particles have bad flow compared to irregularly shaped particles.
44. **Coarser particles have lower specific surface area than finer particles thus their flow is better.**
45. The packing geometry of the particles does not affect the flow characteristic.
46. The powder flow can be improved by all of the following except:
47. Granulation.
48. Addition of glidants.
49. Using spray dried excipients
50. **Increasing moisture content.**
51. Rationale for granulation of powders include all of the following except:
52. To prevent segregation of the constituents of the powder mix
53. To improve the flow properties of the mix
54. To improve the compaction characteristics of the mix
55. **To decrease the bulk density of the powder.**
56. A binder solution is used in the production of tablets via:
57. Direct compaction.
58. Dry granulation.
59. **Wet granulation.**
60. b and c.
61. The main bonding mechanism in the dried granule produced by wet granulation is:
62. Interfacial forces in mobile liquid films within the granules.
63. **Solid bridges of the crystallized binder.**
64. Adhesion and cohesion forces in the immobile liquid films.
65. Mechanical Interlocking.
66. The granulation of powders will produce:
67. **Narrow size distribution range of larger sizes.**
68. Narrow size distribution range of smaller sizes.
69. Wide size distribution range of larger sizes.
70. Wide size distribution range of smaller sizes.
71. The quality attributes a tablet include:
72. The Mechanical strength.
73. The content uniformity,
74. The release of the drug in terms of tablet disintegration and drug dissolution.
75. **All of the above.**
76. The following type(s) of tablet excipient is mismatched with its function:
77. Magnesium stearate/ lubricant.
78. Lactose, Sucrose/ filler.
79. Starch, Na carboxymethylcellulose/ disintegrant.
80. **Colloidal silica, Talc/ binder.**
81. The following are means used to achieve a slow, controlled release of the drug from tablets:
82. Dissolution-controlled release systems and Erosion-controlled release systems.
83. Osmosis-controlled release systems and Ion exchange control
84. Diffusion-controlled release systems ( Matrix or reservoir)
85. **All of the above.**
86. Which of the following types of tablets must be swallowed intact:
87. Disintegrating tablets.
88. **Extended release and enteric coated tablets.**
89. Lozenges and conventional tablets.
90. Tablets with nonfunctional coatings.
91. Which of the followingis a water-insoluble polymer:
92. **Hydroxypropyl methylcellulose.**
93. Ethylcellulose.
94. Ammonio methacrylate copolymers.
95. Polyvinylpyrrolidone.
96. Gelatin is the primary constituent of hard and soft gelatin capsules. It is obtained:
97. Synthetically.
98. **Naturally from hydrolysis of collagen which is obtained from animals skins and bones.**
99. Naturally from hydrolysis of collagen which is obtained from plant origin.
100. Naturally from hydrolysis of collagen which is obtained from seaweeds.