FAQs

grinding and mixing

1. Grinding is one of the most
   a) Energy efficient unit operation.
   b) Ecofriendly unit operation
   c) Energy in efficient unit operation

2. The objective of grinding is/are
   a) To reduce the bulk for ease of storage and transportation
   b) To increase the reactivity by increasing the surface area
   c) Both (a)and (b)

3. In addition to increasing the surface area grinding
   a) Decreases the diffusional distance also
   b) Increases the diffusional distance also
   c) Does not alter the diffusional distance

4. Cryogrinding or low temperature grinding involving liquid nitrogen is employed.
   a) To make the fibrous material brittle facilitating grinding.
   b) To absorb the frictional heat and retain the volatiles.
   c) Both (a)and (b)

5. What is the major force/action involved in Jaw crusher.
   a) Compression.
   b) Impact.
   c) Attrition

6. What is the major force/action involved in Pin mill.
   a) Compression

b) Impact

c) Attrition

7. What is the major force/action involved in disc mill.

a) Impact

b) Attrition

c) Cutting

8. What is the major force/action involved in knife cutter

a) Cutting

b) Impact

c) Compression

9. Sphericity of pepper is.

a) ‘0’

b) 0.5

c) ~1

10. ‘Sphercity’ indicate the raw material.

a) How much close to circular shape.

b) How much close to spherical shape.

c) How much close to a cylindrical shape.

11. Rittinger’s law holds good for size reduction

a) From large size to medium size.

b) From medium size to small size.

c) From small size to very small size.

12. Drawback of Kick’s law is that it assumes energy consumption to be

a) Depend on size of feed and final size.

b) Independent on size of feed and final size.

c) Does not consider the size of the feed and final size.

13. Jaw crusher is designed by analogs with human jaw and hence

a) Both jaws move during crushing.

b) Only one jaw moves during crushing.

c) One jaw moves always while the other moves intermittently.

14. In Ball mill the size reduction occurs due to

a) Impact of the metal spheres.

b) Attrition between particles and metal spheres.

c) Both (a)and (b)

15. A knife cannot cut proper even batter when it is applied in horizontal position while it cuts easily when applied in vertical position because

a) In the former case the area over which the force applied was high.

b) In the former case the area over which the force applied was Low.

c) Both (a)and (b)