



- Notes :
1. All questions carry equal marks.
 2. Illustrate your answers wherever necessary with the help of neat sketches.
 3. Q. No. 1 is compulsory & solve **any four** from remaining.

1. Solve **any four**. 16
 - a) Describe the types of sieves.
 - b) Write note on filter aid & filter media.
 - c) Give official standards for powder.
 - d) Give factors influencing solid mining.
 - e) Short note on Bernoulli's theorem.
2. Define mining. Describe the mechanism of liquid-liquid and describe mining devices with flow pattern. 16
3.
 - a) Classify size reduction equipment and explain principle, construction, working & uses of ball mill. 8
 - b) Define centrifugation. Classify centrifuge, give applications of centrifugation. 8
4. Describe the construction and working of Belt conveyor system for solid transport. 16
5.
 - a) Describe theory of filtration along with the factors influencing filtration. 8
 - b) Give types of filtration & describe meta filter. 8
6. Explain jet mixer & air jet mixer. 16
7. Write a short note on **any four**. 16
 - a) Reynolds theory.
 - b) Fluid static
 - c) Simple manometer
 - d) Rotex Screen
 - e) Draw a neat sketch of sigma blade blender and give its working.
