Module 6 · Assignment 6

Due on 2021-09-26, 23:59 IST

Week 6: Assignment 6

We have decided to reduce the assignment's pass mark.

As per current norms you have not satisfied this assignment.

1. Determine the precise capacity of a shower (in liters per hour) if the capacity of the bucket is 45 liters and the average cycle time is found to be 30 seconds. The bucket fills in 1.5 seconds and the specific gravity of the bucket's contents is 1.3. The shower effective flow rate is 0.8 liters per second.

2. The power is increased.

3. A road is planing to excavate 60 million tons of rock with a stripping ratio of 1:10 to prepare the roadbed. If the stripping ratio is altered to 1:8, what will be the difference in the amount of rock to be mined?

4. A road and effective flow rate of 1650 mm is observed. What should be the back pressure, the number of channels required for both scenarios?

5. A road and effective flow rate of 1650 mm is observed. The back pressure should be 0.15 bar. Which of the below-mentioned equations is correct, if \( P = \frac{T}{9}(\frac{L}{h})^2 \)?

6. The damper delivery time of a shower is 0.125 minutes. If damper cycle time is 26 minutes and number of damper operated at this shower is 5, then find out the damper waiting time (in minutes) at this damper.

7. In the context of a surface mining method, transportation system, which one of the below is not a continuous mode of transportation system?

8. Pick up the correct statement.

9. Pick up the correct statement.

10. Pick up the correct statement.

11. Pick up the correct statement.