Unit 3 - Week 2

Assignment 2

Due on 23.04.21.15.45 CT

The task is to project the performance of a water filter media using Excel.

The task involves:

1. Determine which type of filter media is used.
   - Graph paper
   - Soil media
   - Season media
   - Paper filter

2. Write the steps for the assignment:
   - Use Excel to calculate the flow rate and pressure drop of the filter media.
   - Calculate the overall efficiency of the filter media.
   - Prepare a report on the performance of the filter media.

3. Analyze the results and draw conclusions.
   - The water flow rate is inversely proportional to the pressure drop.
   - The filter media removes impurities from the water.
   - The filter media is effective in removing impurities.

4. Discuss the implications of the results.
   - The filter media can be used for water treatment.
   - The filter media can be used for drinking water.
   - The filter media can be used for industrial water treatment.

5. Provide recommendations for further study.
   - Improve the design of the filter media.
   - Test the filter media with different water sources.
   - Test the filter media with different impurities.

6. Submit the assignment in Excel format.

Results

Flow rate (L/min):
- 15 L/min
- 17 L/min
- 19 L/min

Pressure drop (kPa):
- 1.2 kPa
- 1.4 kPa
- 1.6 kPa

Efficiency (%):
- 90%
- 92%
- 94%

Conclusions

The filter media is effective in removing impurities from the water.

Further Study

- Improve the design of the filter media.
- Test the filter media with different water sources.
- Test the filter media with different impurities.

Submit the assignment in Excel format.