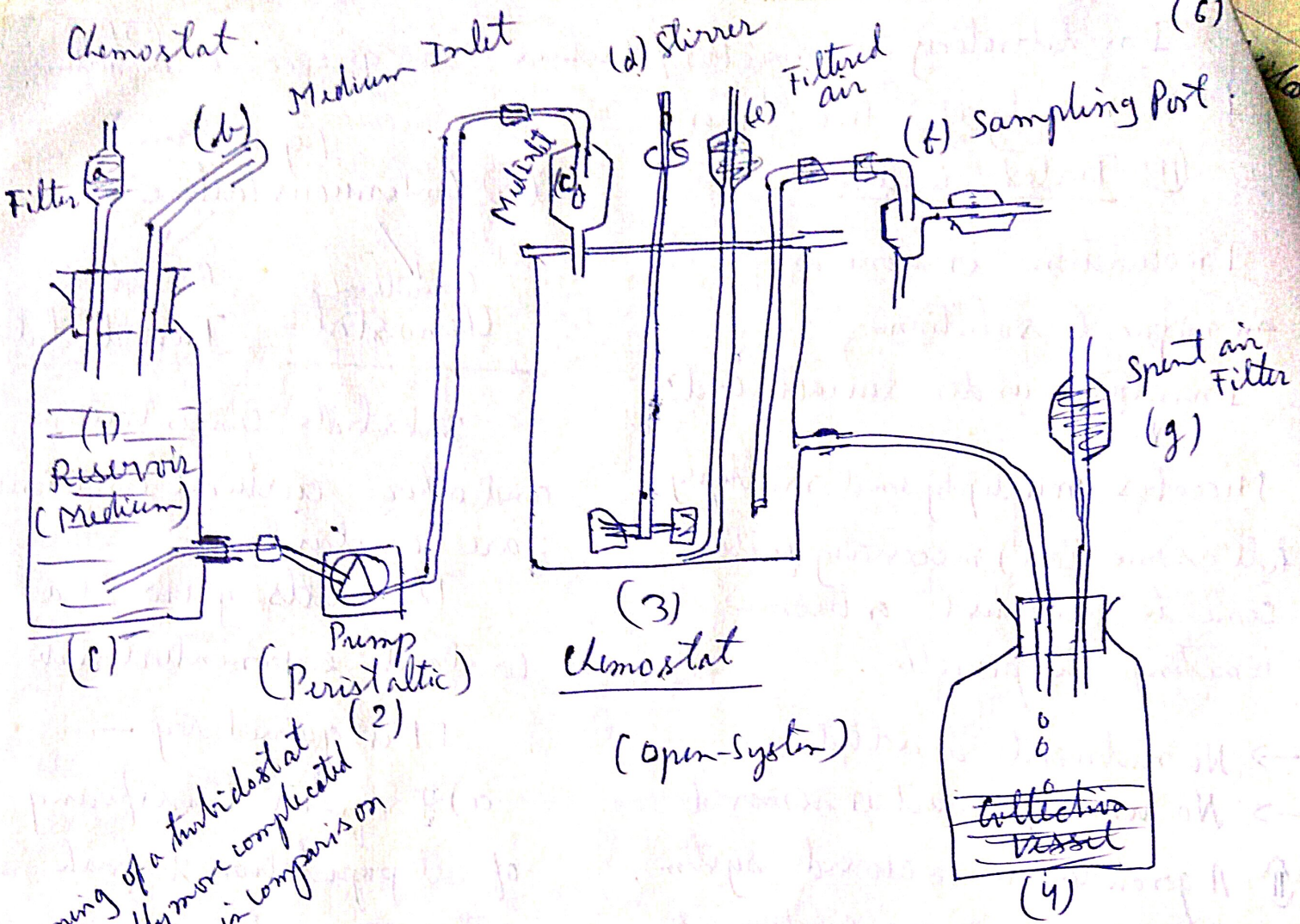
Chemostat.



Running of a turbidostat is technically more complicated and demanding in comparison to chemostat.

Supply nutrient medium at a constant rate

Forced aeration and mechanical stirring to ensure optimal oxygen supply and equal distribution of nutrient throughout culture.

⟹ Let

Volume of culture vessel is V. litre.

Rate of Medium supply (f) = (l/h)

Then dilution rate is $D = f/V$ = Volume change per hr.

D = Volume change per hour.

Initial no. of Bact. cells $X = g/l$ were unable to grow. They would be washed out of culture vessel with a wash out rate

$$D \cdot X = \frac{dx}{dt}$$