

Date Name Group

Instructions and lab report form for the practical lesson on biochemistry

Topic: Isolation of DNA

Task 1: Determination of blood group by hemagglutination test

Principle:

Results and conclusion:

Anti-A	Anti-B	Blood group

Task 2: Isolation of DNA from buccal smear using phenol-chloroform

Principle:

Task 3: Determination of concentration and purity of DNA

Principle:

Results:

A₂₆₀:

A₂₈₀:

A₃₂₀:

Purity of DNA:

Calculate the ratio $(A_{260} - A_{320}) / (A_{280} - A_{320})$.

$(A_{260} - A_{320}) / (A_{280} - A_{320}) = \dots\dots\dots$

For pure DNA the ratio is 1.8.

Concentration of DNA:

Concentration of DNA can be estimated for the light path 0.5 mm as follows:

$$w (\mu\text{g/ml}) = 20 \times 62.9 \times (A_{260} - A_{320}) - 20 \times 26 \times (A_{280} - A_{320})$$

$$w (\mu\text{g/ml}) = \dots\dots\dots = \dots\dots\dots \mu\text{g/ml}$$

Conclusion: