

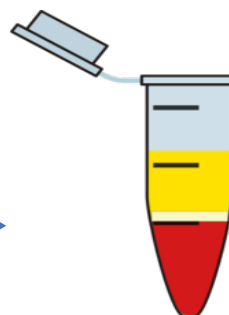
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The blood sample you are about to work on was collected in a **purple-top tube**



**Blood with  
Anticoagulants**

Centrifuge at  
**3000 rpm** for  
**10 minutes**



Plasma

Buffy coat (WBCs and platelets)

RBCs

2

.....ml Plasma + ..... ml saturated **NaCl** solution

Add an **equal volume** of saturated NaCl to the plasma

Centrifuge at 5000 rpm/10 min

Transfer the supernatant into another test tube

Dissolve the precipitate in 1 ml 0.9% saline

.....ml supernatant + ... ml saturated **ammonium sulphate** solution

Centrifuge at 3500 rpm /10 min

Transfer the supernatant in to another

**Biuret test**  
1 ml + 1ml Biuret

Dissolve the precipitate in 2ml 0.9% saline

Divide the filtrate into **2 tubes**

**Biuret test**  
1 ml + 1ml Biuret  
(Tube A)

**Heat Coagulation Test**  
(Tube B) 1 ml + drops of 2M  
acetic acid

**Salting out**  
(Tube A) Add solid  
ammonium sulphate

**Heat Coagulation Test**  
(Tube B)

**Fill in the blanks:**

- The main proteins present in plasma are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
- Saturated NaCl will precipitate first \_\_\_\_\_, since it is \_\_\_\_\_ in its mwt.
- Saturated ammonium sulphate will later precipitate \_\_\_\_\_
- The protein remaining in the final supernatant is \_\_\_\_\_
- All experiments conducted on the precipitates and the supernatant proves that the nature of them are \_\_\_\_\_

**Answer the following question:**

**Knowing that the serum contains active thrombin. Explain why the addition of fibrinogen will result in the formation of clot.**

**Explain the reason behind the usage of different saturated salt solutions to precipitate plasma proteins.**