Bleeding and Coagulation time:

Bleeding time: it is a test for:

a- capillary response to injury.
b- platelet function:

1- stick to each other and form pluge (aggregate).
2- breake and release thromboplastine.

So the bleeding time is defined as the time taken for a standard skin wound to stop bleeding upon vessel injury, platelets adhere and form a haemostatic platelet pluge. bleeding time measures the ability of these platelets to arrest bleeding and therefore measures platelet number and function.

Bleeding time performed as a screening procedure used to detect both congenital and acquired disorders platelet function. so the duration of bleeding from standard puncture wound of the skin is a measure of the function of platelets as well as the integrity of the vessel wall. there are several methods of performing the bleeding time:

1- Duke method.
2- IVY method.

1-Procedure of Duke method:

a- Clean the lobe of the ear or tip of a finger with alcohol and let dry.
b- For ear-glass slide is placed behind the ear lobe and held firmly in place this provided a firm site for incision.
c- Discard the glass slide if ear lobe has been incised.
d- Pierce the ear lobe (or tip of a finger) with the lancet making the incision 3mm deep start the stopwatch.
e- Bloot the blood with the filter paper at regular 30 second intervals.

move the filter paper so that each drop touches a clean area do not touch the incision with the filter paper.
f- When the filter paper no longer shows singe of blood stop the stopwatch and record the time, normal values of 1 to 5 minutes.
2-Procedure of IVY method:

a- Place a blood pressure cuff on the patients arm above the elbow. 
   inflate the cuff and maintain pressure at 40mm Hg.
b- Cleanse the outer surface of the patients arm with alcohol .the area 
   should be free of all superficial veins.
c- Holding the skin tightly make three small punctures about 3mm deep 
   and 1.5cm a part start the stopwatch.
d- Bloot the blood at regular 30 second intervals with the filter paper 
   .move the filter paper so that each drop of blood touches a clean area. 
   Do not touch any of the incision with the filter paper.
e- When the filter paper no longer shows signs of blood ,stop the 
   stopwatch.
f- The average of the times for bleeding to stop from the three puncture 
   sites is record as the bleeding time .normal values of 1 to 6 minutes.

Coagulation time:

It is the time required for blood to clot without the presence of any 
substance .

Capillary tube method.

Procedure:

a- Clean your finger with spirit and allow the spirit to dry.
b- Pricked the finger by lancet .remove the first drop of blood.
c- Squeeze the finger to obtain a larger drop of blood and fill the capillary 
   tube with blood.
d- The capillary tubes are sealed plasticine and immersed in water bath at 
   37centegrate.
e- After one minute start breaking small pieces of the capillary tube every 
   30 second until a fibrin thread is seen between the two broken ends.
f- By these methods the normal clotting time is 5 to 10 minutes at 37 
   centegrate.