

Question 21 (8 marks)

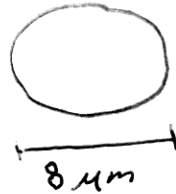
Describe a first-hand investigation used to estimate the size of red blood cells on a prepared microscope slide.


8

Red Blood Cell.

In your description include:

- a list of equipment used;
- a safety precaution needed;
- the step-by-step method used;
- a scaled diagram of a red blood cell.



- Doughnut shape 
- No nucleus.

Equipment: • Microscope • Slide of red blood cell
• Micro grid or clear plastic ^{ruler} ~~netto~~ with mm marks.

Safety: - operating with glass ie slide, microscope lenses
thus care needs to be taken to prevent breakages. If a
breakage occurs it should be carefully cleaned/cleared immediately.

Method: 1) Place micro grid on microscope view platform.

2) Focus on grid using low power line an edge of the
grid with edge of the field of view. Count squares visible
in the field of view.

3) Repeat process for the power magnification intended to use
to view blood cell. Record visible micro grid squares &
calculate diameter of field of view.

4) Remove micro grid and replace with red blood cell
slide. Focus on cells with low power and move up the
magnification maintaining cells in field of view.

5) ~~once~~ Once you have reached the desired magnification
count the number of cells across the diameter
of the field of view.

6) ~~total~~ Divide this number of cells by the diameter of
the field of view at that magnification and you
should have an approximate cell size.

Note: Be careful of the cell orientation when you
are doing this. ie: is the cell vertical or horizontal.