

Blood :-

- ⇒ Liquid connective tissue.
- ⇒ Average adult healthy person 4-6 lit.
(6-10% of body weight)
- ⇒ Specific gravity = 1.06
- ⇒ pH value = 7.35 - 7.45
= 7.4 (Slightly alkaline)
- ⇒ Colour
Oxygenated blood - Bright red.
Deoxygenated blood - Purple.
- ⇒ Taste - Salty in taste.

Function:

Regulatory :-

⇒ Temperature.

⇒ Buffer solution. (pH-change resist)

Excretory :-

⇒ Excretory products are collected from different

Parts & make to reach organ of elimination.

Nutritive - Nutrient materials.

Transportation - Hormones etc.

Respiratory

Protective - Immune system
build up.

Blood

Formed element

or

Solid component

or

Blood cell (40-45%)

Liquid component

or

Plasma (55-60%)

R.B.C.

or

Erythrocyte

W.B.C.

or

Leucocyte

Platelets

or

Thrombocyte

Cell | Corpuscle — Modification in cell to perform some function.

"All corpuscles are cells but all cells are not corpuscle!"

R.B.C.

myosin thick

⇒ Matured mammalia R.B.C. is enucleated (non-nucleated)

↓
Absence of nucleus.

⇒ Shape - Biconcave in shape.

Spectrin & Actin

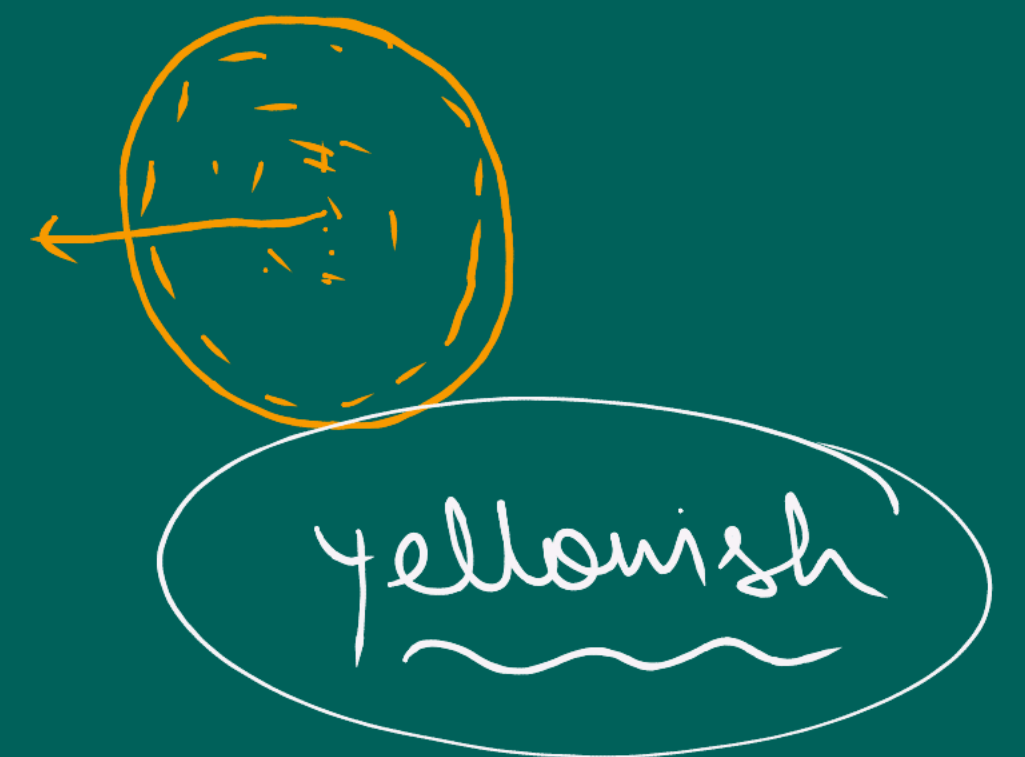
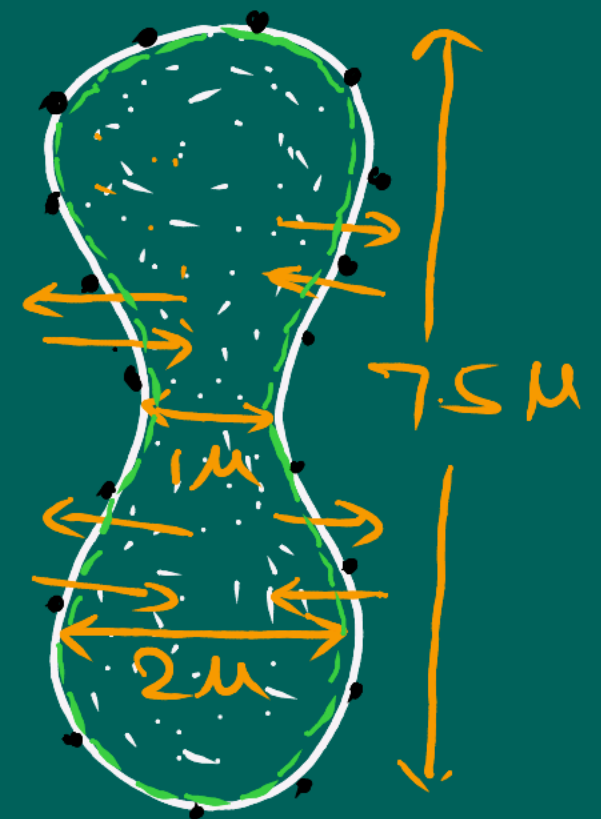
Spherocytosis - Biconcavity of R.B.C. is lost.

⇒ outer surface - Glycophorin (Antigen to determine blood group.)

Number - 4.5 - 5 million/mm³

Life span - 120 days (4 months - 16 weeks)

Function :- It carries "Haemoglobin"
↳ Respiratory Pigment



Haemoglobin !

It carries oxygen - oxyhaemoglobin.

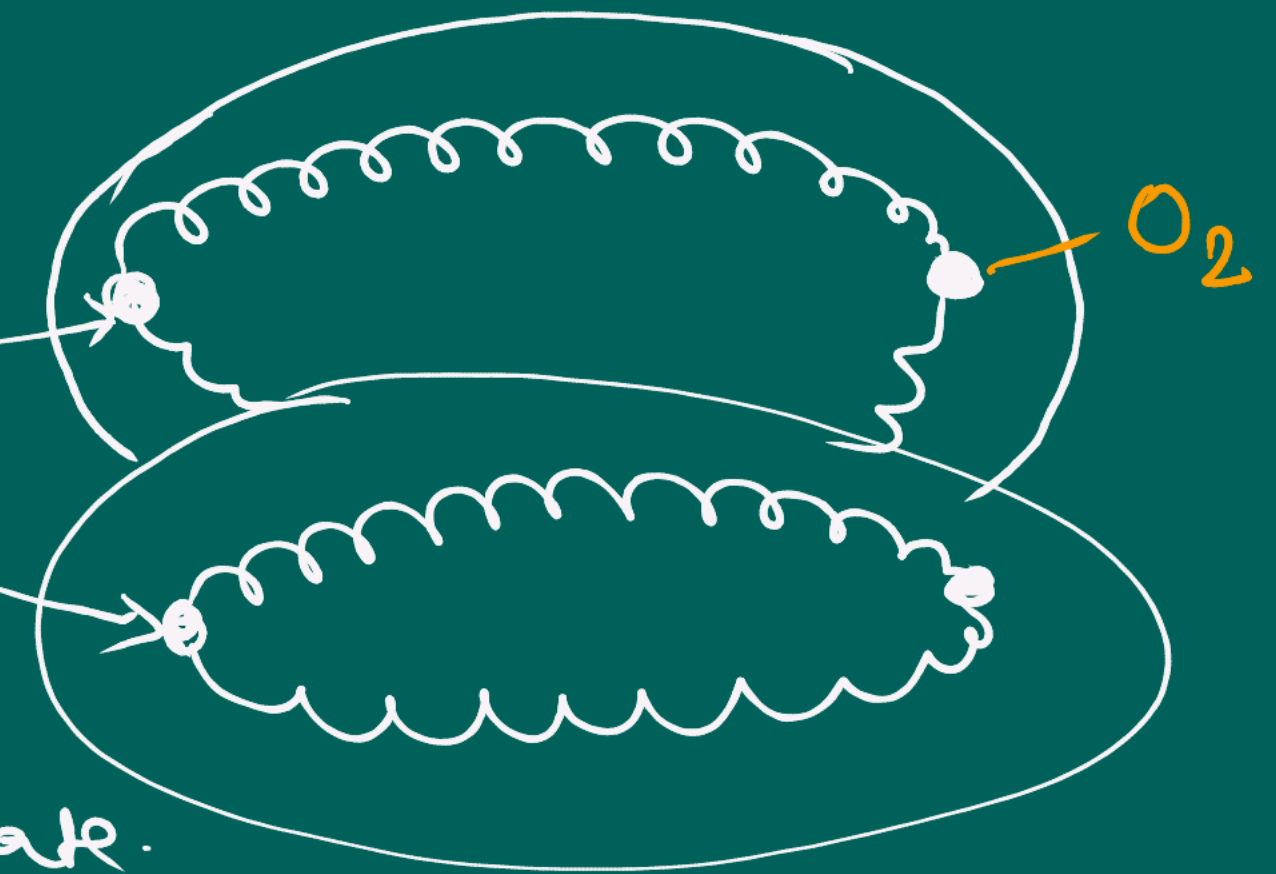
It carries carbon dioxide

↳ carb-amino haemoglobin.

'Fe' ↳ Ferrous state (Fe^{2+})

1 molecule of Hb = 4 molecules
of oxygen

Haeme



Methomoglobin - It maintains iron ferrous state.

Methomoglobinemia