

BLESSED VICTOR'S .S.S



E.O.T ONE COMPETENCE BASED ASSESSMENT EXAMINATIONS

Class	Sign
S. 5	

Student's Name:

BIOLOGY

Paper 1

2 hrs

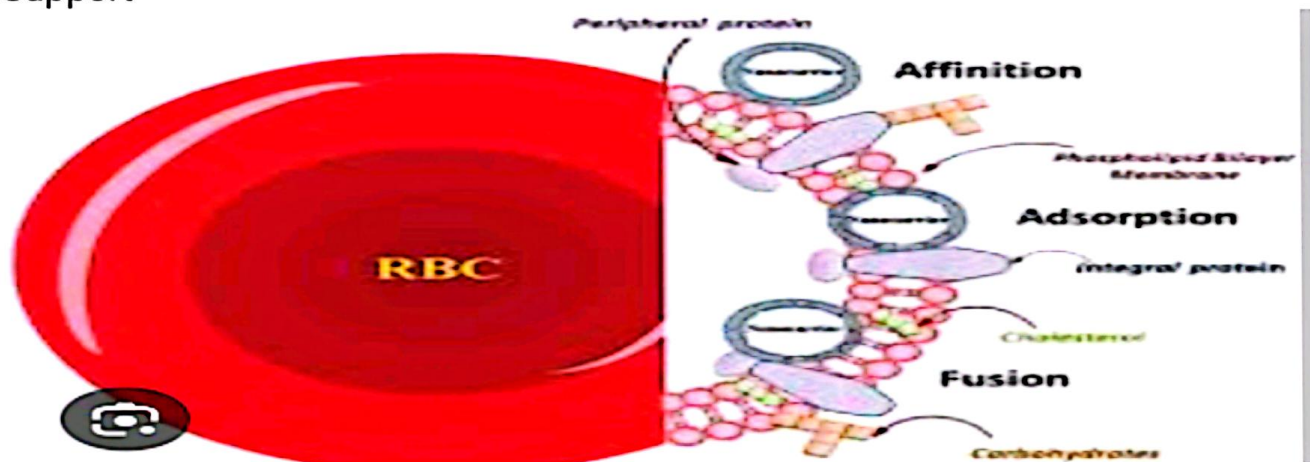
INSTRUCTIONS

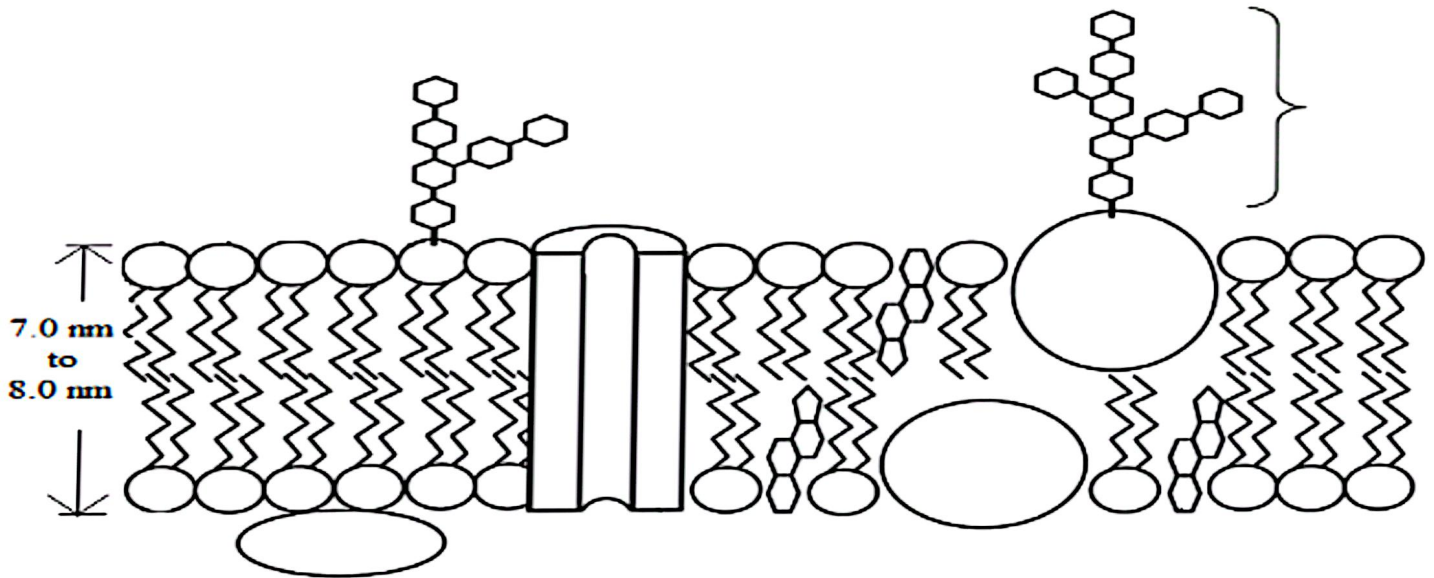
- ❖ *This paper consists of ONE section*
- ❖ *Attempt all items*

ITEM 1

Ambrose has a laboratory since he studied to be a lab technician ,he took a sample of blood from a patient intending to carry out a CBC test(complete blood count) but on his way to a haematology machine he initially carried out microscopic work instead,he observed blood cells but was then interested in their membranes ,to find out whether they have perforations or not

Support





Task

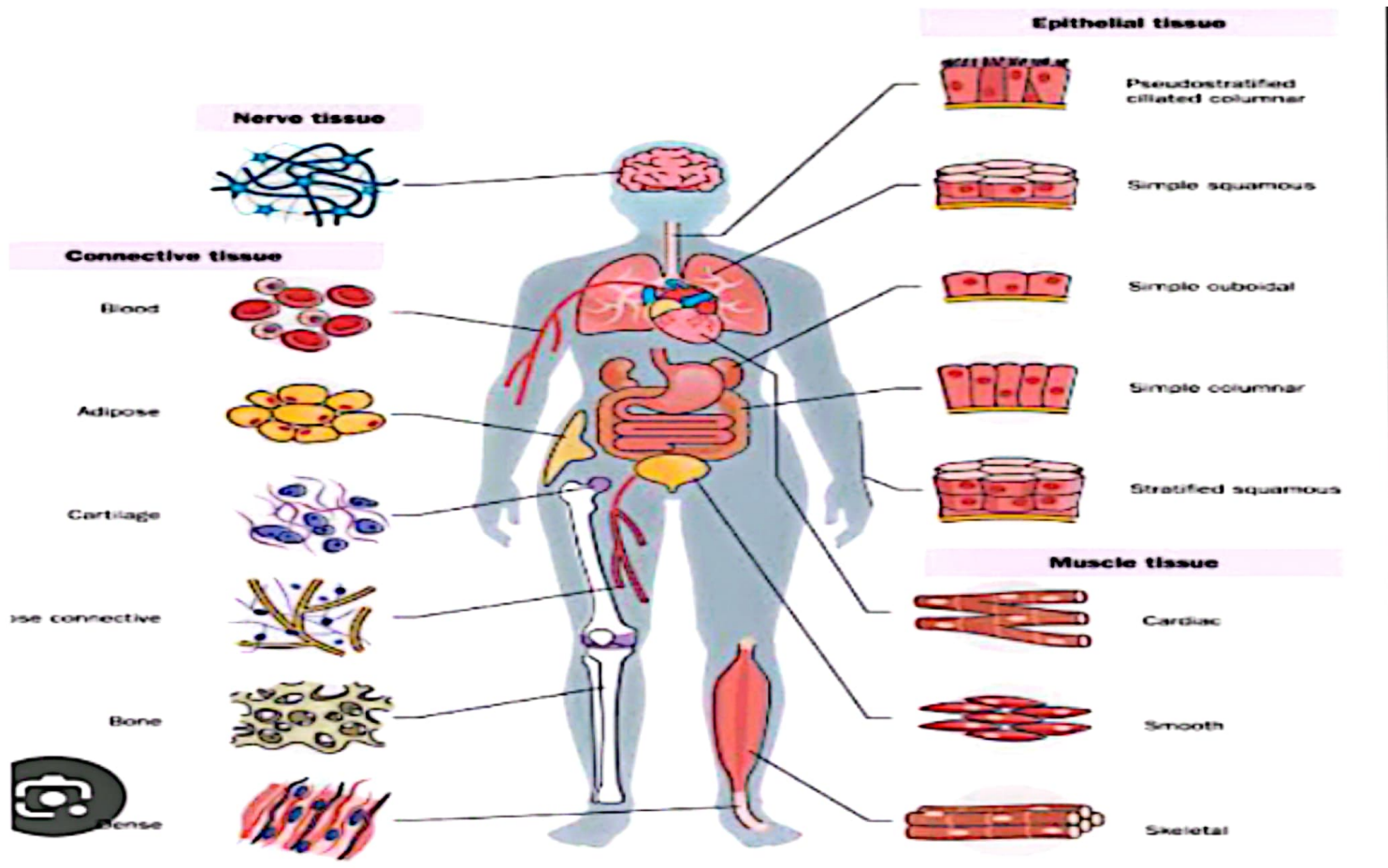
- (i) Describe the membrane structure Ambrose viewed according to the fluid mosaic model
- (ii) Why is the cell membrane Ambrose saw referred to as
 - (a) Fluid
 - (b) mosaic
- (iii) how are the phospholipid bilayer in Ambros' s cell modified to perform their roles
- (iv) Identify roles of proteins in the cell membrane .

ITEM 2

During the recent kabaka run , "mpuuga" was knocked by a free moving object and then taken to hospital for check ups , during the exercise the doctor observed that,

One of his calf muscles , left lower limb bone , lower buccal cavity muscles , oesophagus , kidney tubules , external skin one in palm and the fore head had issues , blood was also flowing out through blood vessels

Support



Task

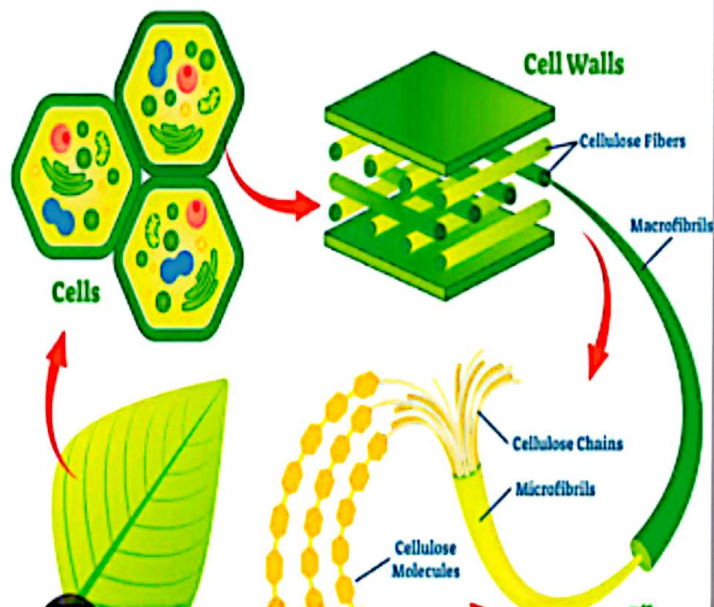
- identify the specific tissues affected
- how are the identified tissues adapted to their functions
- Using an illustration describe the structure of the tissues in one of the mentioned organs
- How can the doctor stop bleeding.

ITEM 3

Water is of use almost in all organisms for example plants use water in the manufacture of organic molecules called glucose which is converted to cellulose, some animals don't have the ability to digest cellulose

Support





Task

- (i) why do you think water is widely used in organisms
- (ii) Explain how a sugar molecule is converted to cellulose (illustrations necessary)
- (iii) Identify the properties of cellulose

END