

THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

BWS14 X

Standard X

5. SOLDIERS OF DEFENSE

1. Listen to the conversation....



- a. How blood clotting becomes a defense mechanism ?
- b. The changes that take place during blood clotting is given below, arrange them in order.

◆ Prothrombin in plasma  $\xrightarrow[\text{Calcium, Vitamin K}]{\text{Thromboplastin}}$  Thrombin

- ◆ Tissues and platelets at the site of the wound degenerate to form the enzyme called Thromboplastin.
- ◆ The red blood cells and platelets get entangled in the network of fibrin fibres to form the blood clot.

◆ Fibrinogen  $\xrightarrow{\text{Thrombin}}$  Fibrin fibres

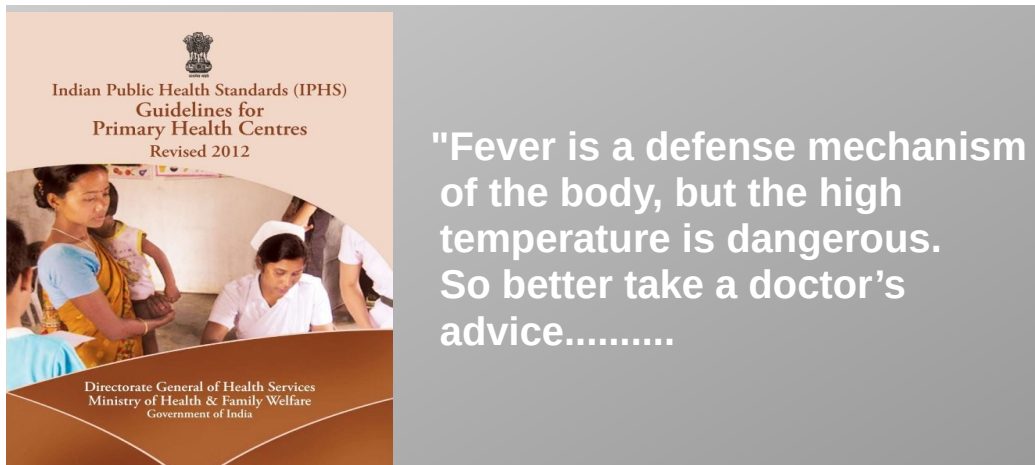
- c. Name the vitamin and mineral involved in blood clotting.

2. “ A black mole on the right wrist, A scar on the left elbow“  
 These are the two identification marks given by Anitha a 10<sup>th</sup> std student.

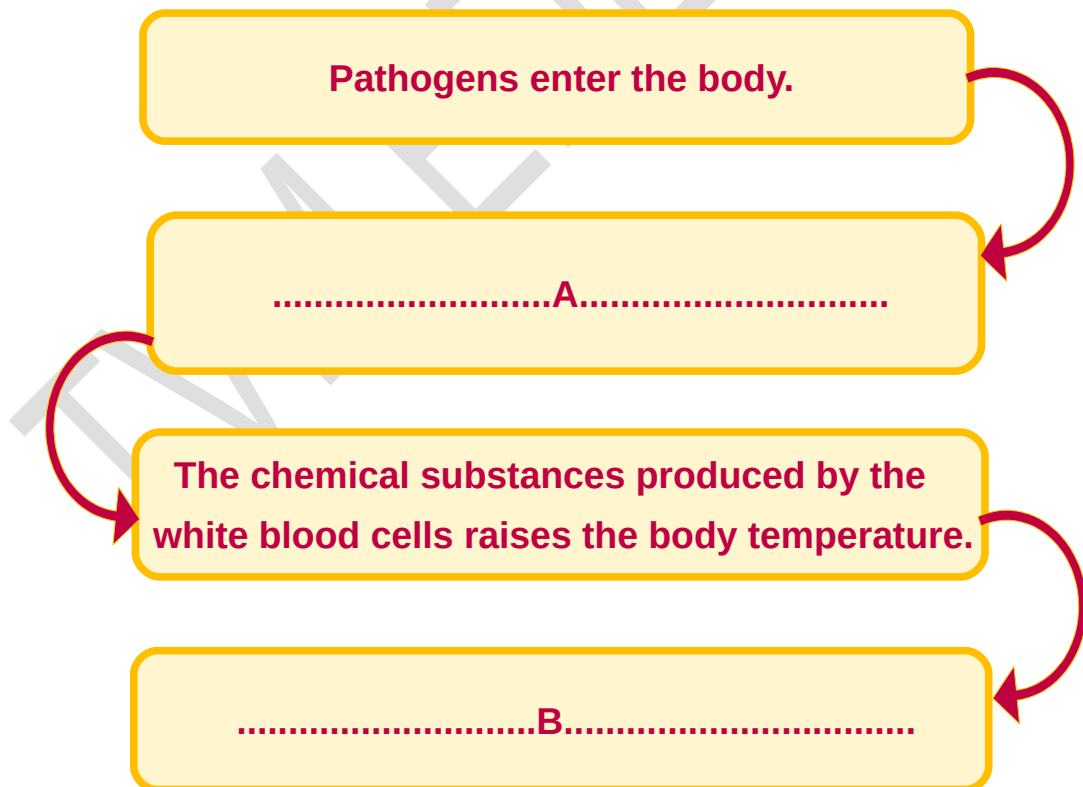
- a. Why did the wound scar remain permanently on her elbow ?
- b. The scars do not remain in most cases of wounds. Why ?

## BIOLOGY

3. This is a poster seen by Manu during a health centre visit. Analyse the given statement and answer the following questions.

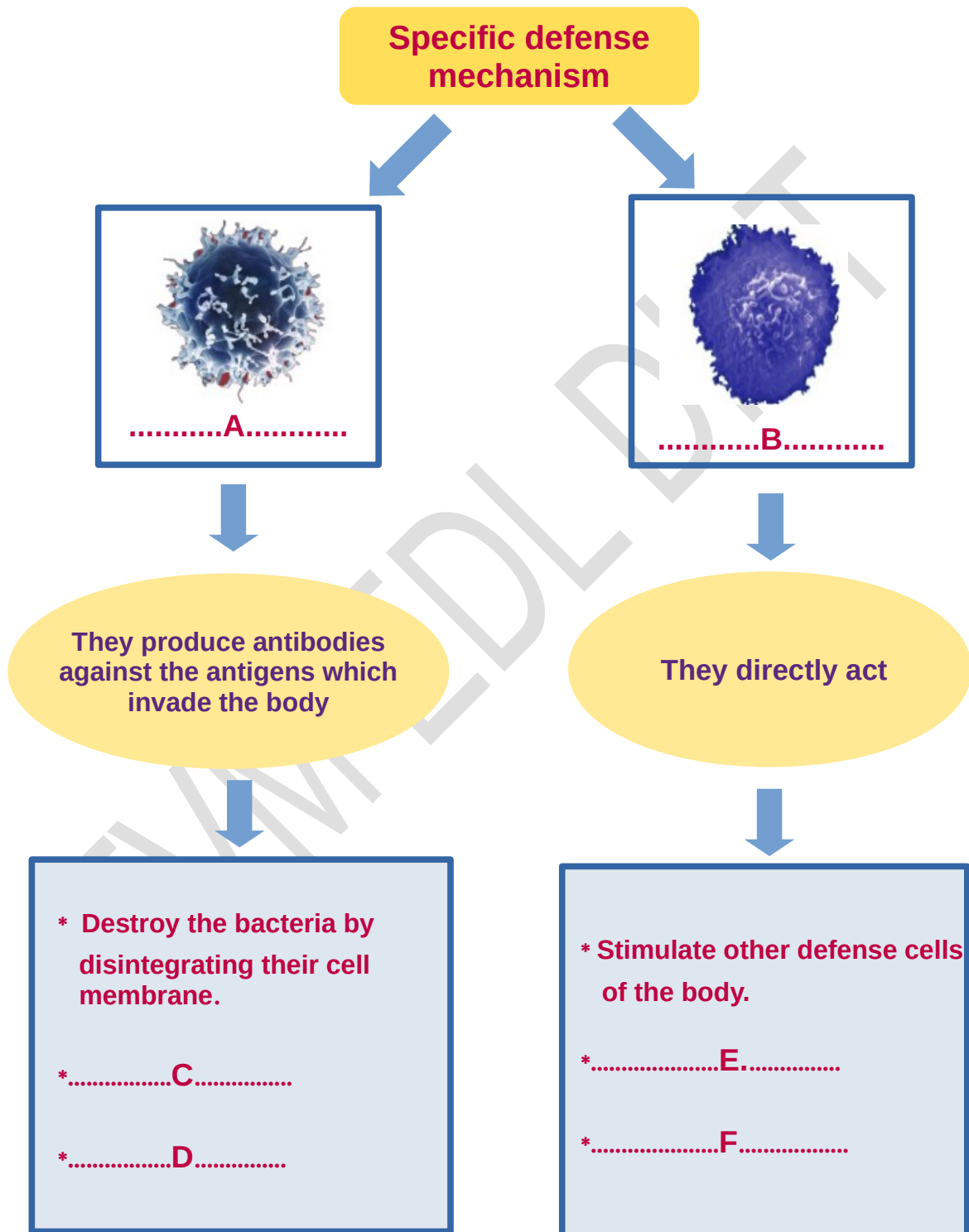


- a. Why do we take medicines when we have fever? Why should we consult a doctor ?
- b. How is the rise in body temperature beneficial to body ?
- c. Complete the following flow chart based on this.



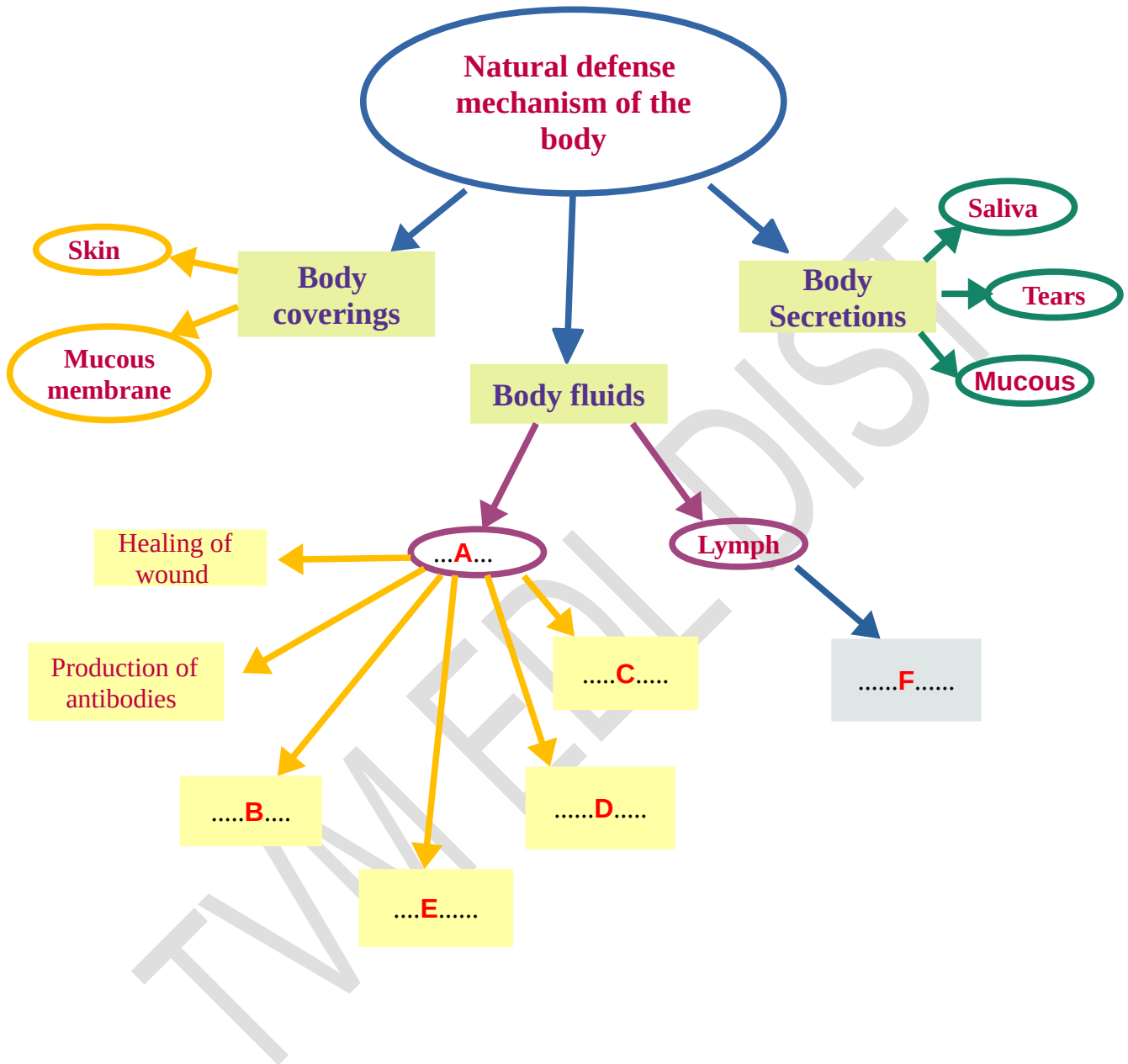
## BIOLOGY

4. a. What is specific defense mechanism ? Name the blood cells that participate in this. Where are these cells formed ?
- b. Complete the following flowchart.



# BIOLOGY

5. Based on the natural defense mechanism of the body complete the following illustration.

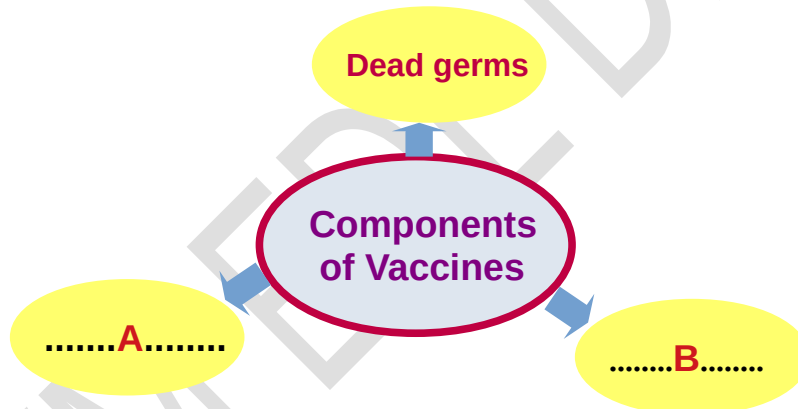


## BIOLOGY

6. The picture given below shows the importance of immunization.



- a. What is immunization ?
- b. Complete the word sun showing the different components of vaccines.



c. Complete the given table showing the vaccines to be given to a child in time.

Vaccine	Disease
B.C.G	.....(i).....
.....(ii).....	Polio
Pentavalent	.....(iii).....
.....(iv).....	.....(v).....
T.T	.....(vi).....