TENDER HEART HIGH SCHOOL

CLASS - 8 **DATE** - 10.02.2025

SUBJECT - BIOLOGY **TEACHER** - Nidhi Rana

CHAPTER - 13 SKIN

The following lesson is for Class - 8 for the subject of Biology Topic Temperature regulation by skin which is covered in Chapter 13 Skin 'The Jack of all trades' starting on Page No 127 of your text book titled 'Concise Biology - Selina Publications and is being submitted to you on **10.02.2025**

So dear students kindly open your Page No 132 of your text book as I am going to explain you - how the skin helps in the process of temperature regulation. The principal heat regulating centre is located in the hypothalamus, of the fore brain.

IN Cold weather - when the temperature outside the body is low, the blood vessels in the body get narrow or constricted This phenomenon is called vasoconstriction Now because the blood vessels have constricted the blood supply to the skin is reduced and sweat glands secrete less sweat Also because the surface area of constricted blood vessels is less hence there is less loss of heat by convection, conduction and radiation also less loss of sweat through vapourisation of sweat During vasoconstriction the person looks pale / bluish because blood vessels have constricted hence less blood supply to the skin Vasoconstriction is a natural method to conserve body heat. Muscular activities like shivering, rubbing of hands

generate heat in the body.

IN HOT WEATHER When outside temperature is high or during strenuous physical exercise ie. When there is overproduction of heat in the body, the blood vessels in the skin dilate or becomes widened. This phenomenon is called vasodilation Vasodilation results in greater loss of heat by radiation etc. and also by vapourisation of sweat because the blood vessels have dilated and the surface area of blood vessels has increased. Also sweat is produced in large quantity due to rich supply of blood to the skin. Evaporation of this sweat gives cooling effect to the body.

HEAT STROKE OR SUNSTROKE

It is a condition in which sweat production is unable to keep pace with its evaporation in very hot winds. Sunstroke may lead to rise in the body temperature or fever.

- Drinking lot of water and taking a little more of salt in summer is a good precaution against heatstroke

This finishes with the Chapter 13 Skin.
All children may please go through the detailed explanation and are required to answer the following home assignment questions in their notebooks

HOME ASSIGNMENT

Q1. Answer the following Review questions given at the end of the Chapter 13 Skin
D Long Answer Type - Q No 2 & 3
E Structured / Application Type Q No 2.