

INTEGUMENT IN VERTEBRATES

Introduction:

The integument is the covering of the body. The term integument includes the skin or cutis and its derivatives. Since the integument lies in direct contact with the external environment,

Integument consists of two parts:—
an outer epidermis and a deep-lying dermis or corium. The epidermis is of ectodermal origin while the dermis is of mesodermal origin. The epidermis is relatively thin and dermis is usually much thicker. Each of the layer is formed of several kinds of cells. Both epidermis and dermis may be involved in the skin derivatives such as scales, hairs, feathers, bony plates, etc.

General structure of skin :-

Epidermis :-

The epidermis is the outer thin layer of skin which forms a continuous epithelium over the entire body.

The epidermis divided into two sub layers - an outermost layer of dead cells called stratum corneum and an inner layer of cubical cells which lies just above the dermis. The inner layer of epidermis is called Malpighian layer or stratum germinativum.

Dermis:-

This layer of skin in most vertebrates is largely composed of fibrous connective tissue and contains different varieties of cell elements. The dermis is richly supplied with blood vessels, lymphatics and nerves.

The dermis lies immediately beneath the epidermis.

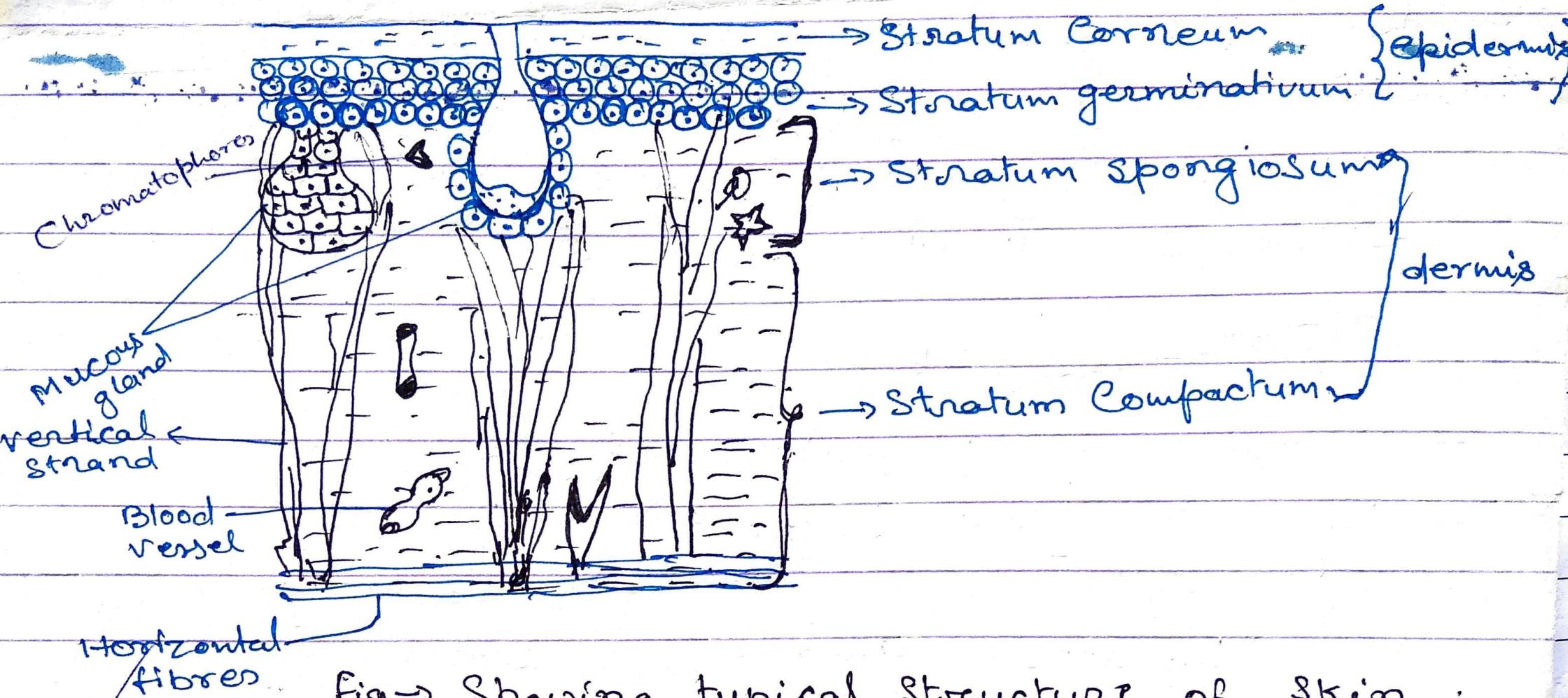


Fig → Showing typical structure of skin

Integument in different classes of vertebrates

Fishes