Term	Topic content
Skin *(cutis)*	covers the entire surface of the body and transfers to the mucous membrane in the areas of natural openings i.e. mouth, nose, urinary tract and anus. The total area of the skin is 1.5 m^2 There are many folds, depressions, elevations on the surface of the skin. The skin is striated with furrows of different texture, which divide the surface into a number of fields, mostly triangular or diamond- shaped. Rough skin furrows include facial wrinkles, folds of the palms, scrotal folds and furrows on the extensor surfaces of the joints. The color of the skin is defined as flesh-colored. It includes colors of all tissues that compose the skin and mainly depends on the color of blood in the capillary vessels and skin pigment. Healthy skin is dull in appearance.
Morphology of skin and its appendages	The skin consists of three layers i.e. the epidermis, dermis and subcutaneous tissue (hypodermis). These layers differ in embryonic origin: the epidermis is derived from ectoderm, while dermis and hypodermis from mesoderm. Important anatomical constituents of skin include its appendages, which consist of sweat, sebaceous glands, hair and nails. **Epidermis.** Histologically epidermis *(epidermis)* is presented by keratinized stratified squamous epithelium. There are five layers of cells separated from the dermis by basement membrane. Directly on the membrane there is a layer of cylindrical cells located palisade and perpendicular to it. This layer is called the basal or primary *(stratum basale),* as well as malpighian *(germinal),* as this is the place, where mitotic cell division that ensures epidermis regeneration takes place. Above the basal layer there is a ribbed layer *(stratum spinosum)* containing several rows of polygonal cells that are becoming flatter progressively as they are approaching the next layer. Granular layer *(stratum granulosum)* is represented by one or two (sometimes four) rows of elongated spindle-shaped cells located along the surface of the skin. The cell nuclei are poor in chromatin and therefore are bright. The protoplasm contains keratohyalin grains, keratin precursor protein grains and grains of main keroid of skin and its appendages. These layers of the epidermis are sometimes combined under the name of Malpighian layer. Translucent layer *(stratum lucidum)* is located above the

	granular layer and consists of one or two rows of flat non-nuclear cells. Protoplasm of these cells contains a protein eleidin, which is an intermedium in the formation of keratin. Horny layer *(stratum corneum)* is the most superficial layer of the epidermis consisting of flat thin horny plates that lie on the top of each other in several rows. Horny plates are completely dead cells that have lost their nuclei. Keratinization is achieved by substituting the protoplasm with keratin protein. The thickness of the horny layer in different parts of the skin varies greatly. Maximum thickness of the horny layer is on the palms and planta. On the surface of this layer, homy plates are less dense and exfoliate gradually. Their gradual exfoliation occurs constantly and is called physiological desquamation. The epidermis enters dermis with more or less developed processes called dermal ridges. Derma enters the space between the crests of the epidermis with projections, which are called dermal papillae. **Dermis.** Under the epidermis there is the second layer of the skin called the actual skin or dermis *(derma).* It is rich for connective tissue fibers, which form bundles interwoven in different directions. There are rather few cells in the connective tissue of the dermis (fibroblasts, fibroclasts, melanocytes, macrophages, mast cells, mesenchymal cells). There are three types of connective tissue fibers, which include collagen, elastic and argentophilic fibers. The gaps between fiber bundles are filled with the main amorphous substance, which plays an important role in metabolism and in the protective functions of the skin. Argentophilic fibers form the basement membrane at the boundary between the epidermis and dermis, cover sebaceous and sweat glands, hair follicles and skin muscles with fine reticulum. By weaving in different directions, collagen and elastic fibers continuously distribute in the dermis, thereby dividing dermis into two layers - papillary and reticular. Papillary dermis is located immediately below the epidermis. The bundles of connective tissue fibers in the papillary layer are quite thin and interweave in different directions. Many bundles are perpendicular to the skin surface and enter the papillae. Reticular layer of the dermis consists of thicker fiber bundles, which when combined, form a dense reticulum. Much of these bundles are parallel to the skin surface. Such structure of the dermis ensures its great strength and elasticity. The thickness of dermis in different areas of the skin varies

	from 0.5 to 4 mm. Dermis with no clear boundaries moves into the subcutaneous fat layer (hypodermis). **Hypodermis.** The subcutaneous fat layer (subcutaneous adipose tissue, hypodermis) *(hypoderma)* also consists of bundles of interwoven connective tissue fibers. These bundles are the continuation of connective tissue bundles of the dermis; they are loose and form glomerular reticulum *(retinaculum cutis).* The nests of these reticulum contain fat lobules i.e. accumulation of fat cells. Subcutaneous fat layer plays an important role in fat metabolism being one of the most important depots of fat in the body. The thickness of hypodermis in different parts of the body is not the same, thus it is more significant in the abdomen, thighs and buttocks. Dermis and hypodermis are scattered with different cells, which in various stages of differentiation, are divided into connective tissue cells and white blood cells. Dermis and hypodermis include skin glands, hair, as well as blood vessels, nerves and muscles. **Blood and lymphatic vessels in the skin.** The skin has a well-developed system of blood vessels. Blood vessels in the skin can make up to 1/5 of the total human body blood mass. In the process of circulation in the body, that is regulated by central nervous system, the skin acts as one of the major depots. Arterial trunks penetrate into the subcutaneous fat layers from deeper located tissues. Here, they give branches that feed the hypodermis and at the border of dermis form arterial plexus, which is called deep dermal spider veins. From deep dermal spider veins there are vessels that rise up into the dermis. From these vessels and deep dermal spider veins there are arterial branches feeding dermis, sweat and sebaceous glands, hair, muscles and nerves. On the border of the papillary and reticular layers there is the second arterial plexus called superficial skin spider vein. Therefrom arteriole goes into every single papilla. Terminal arterial branches are divided into skin capillaries, which gradually merge with each other and give rise to the skin veins. Venous skin vessels run parallel to the blood vessels. The lymphatic system of the skin begins with intercellular gaps of epidermis and numerous lymph slots of dermis. Lymphatic vessels are located along blood vessels. Lymphatic vessels, like blood vessels, form superficial and deep spider veins. Skin blood vessels can quickly change their clearance, which means that they can expand or narrow

	reflectory under the influence of stimulation of nerve endings, which can be caused by the action of heat, cold, mechanical action (friction, hit) and chemicals. Reflectory expansion or narrowing of blood vessels can also occur due to a variety of neuropsychiatric emotions i.e. joy, fear, anger etc. **Nervous system of the skin.** Nerves form the main plexus in the subcutaneous layer, wherefrom numerous trunks, which give rise to new plexus, go to derma. Particularly dense plexus is formed in the papillary layer. Nerve fibers extending therefrom, give rise to numerous nerve endings in the connective tissue and in the epidermis, thus making the skin sensitive. In the subcutaneous fat layer there are Pacinian and Ruffini's corpuscles; in the papillary dermis there are Meissner's, Golgi-Mazzoni's corpuscles and Krause's bulbs and in the epidermis there are MerkeFs menisci. In addition to the sensory nerves there are secretory glands and nerve plexuses in the skin, which are located along the vessels. ***Pacinian corpuscle*** (Lamellar corpuscles) is a complex encapsulated nerve receptor. It consists of the processes of altered cells of ciliated epithelium with sensory cilia, which are in contact with cell membrane of nerve process end. Cytosomes are separated from contact zone by the capsule consisting of several longitudinally oriented glial cells. Sensory cells cilia are located between external and internal capsule, thus contacting with the inner surface of outer capsule. Pacinian corpuscle acts as: - mechanoreceptor (due to a change of curvature of the outer surface of the capsule, mechanical effect is transmitted to the sensory cells cilia that generate nerve impulses); - chemoreceptor (via sulcate channel that is present in the area of corpuscle pole different substances penetrate into the space between the inner and outer capsules, thus inducing nerve impulses); - baroreceptor (change of blood pressure in the network of blood capillaries in the space between the inner and outer capsule alters the state of the sensory cells, thus inducing nerve impulses). Pacinian corpuscles have a large receptive field, i.e. represent a rough sensitivity. *Meissner's corpuscle* (tactile corpuscles) is a receptor, which is an encapsulated nerve ending present in the skin dermis,

	most often on the tips of fingers, soles, nipples, eyelids, lips and genitals. It is round. In its center there is a gyrate basket of myelin fiber, which passes through the transverse oval cells resembling Schwann's cells of nervous membrane. From the outside the corpuscle is covered with a connective tissue capsule. Meissner's and Pacinian corpuscles belong to receptors that are rapidly adapting, i.e. they fix the skin pressure force. *Ruffini's corpuscle is* a spindle-shaped receptor containing the inner bulb with a dense network of branched nerve cells and supportive lamellocytes. From the outside the corpuscle is covered with a connective tissue capsule consisting of several layers of flattened fibroblasts. Between the inner bulb and the capsule there is a capsule space filled with liquid. Ruffini's corpuscles are skin stretching receptors that are slow to adapt. There is an assumption that they are also heat thermoreceptors. *Golgi-Mazzoni's corpuscles* are thick myelin fibers, «wrapped» around groups of collagen tendinous fibers and surrounded by a connective tissue capsule. Likewise Ruffini's corpuscles, they react to the tension, but their sensitivity threshold is higher. *Tactile MerkeVs meniscus (disk) is* a set of Merkel's cell with nerve ending. Tactile Merkel's cells are round or elongated cells, which are located among the epithelial cells and are larger than the latter. These cells are connected to the epithelial cells by desmosomes and form a contact with reticulated branched nerve endings. Merkel's menisci are slow to adapt (to fix the duration of touch) and have small receptive fields, i.e. fine sensitivity. *Krause's bulbs* are encapsulated nerve endings, which are composed of terminal branches of sensitive nerve fiber, inner glial bulb and outer connective tissue capsule. They are located in the connective tissue of mucous membranes and in the dermis, mainly on the hairless areas. They are considered to be cold thermoreceptors. **Hair.** Hair *(pili)* is divided into: 1) long (head hair, beards, mustaches, armpits hair, hair in the area of external genital organs); 2) setaceous (eyebrows, eyelashes, hair in nose nostrils, in the external ear canal); 3) vellus (in all areas of the skin except for the so-called hair-free sites, in particular on the palms, soles, vermilion zone, nipples, breasts, labia, balanus and the inner layer of the foreskin). The hair consists of the area freely located over the skin i.e. the hair shaft *(scapus)* and the area hidden in the skin i.e. the

	hair root *(radix).* The root ends with extended part, which includes hair follicle, wherefrom the hair grows. From the connective tissue of the dermis the hair follicle is penetrated by dermal papilla, which contains blood vessels that feed the follicle. The hair shaft consists of three layers: the medulla, cortex and cuticle. The medulla is a hair marrow and consists of keratinized polygonal cells. There is no hair marrow in vellus. The cortex is composed of extended cells with elongated nucleus or its fragments. These cells contain pigment melanin that defines the color of the hair. In gray hair pigment is absent, while silver color is achieved by air bubbles that appear in the cortex. The cuticle is the outer layer of the hair represented by plane dead cells, which are arranged in a single layer leaning on one another like shingles. Hair root is located in the hair follicle *(folliculuspili),* which opens as a small hole in the skin *(ostium).* At the boundary of the inner and middle thirds of the hair the hair follicle is entered by excretory duct of sebaceous gland. Hair follicle is composed of connective tissue and epithelial parts. Starting from the confluence of sebaceous glands duct the connective tissue part is the most developed in the lower part of the root. Epithelial portion of the hair follicle represents an invagination of the epidermis. From the skin to the mouth of the excretory ducts of sebaceous glands (so called hair funnel - *infundibulum)* one may clearly see all the layers of the epidermis. Then, horny layer disappears, and funnel epithelium goes into outer root sheath epithelium, which is composed of cells similar to the cells of the basal and spinous layers. From the mouth of sebaceous glands duct and lower between the inner sheath and the hair cuticle there is the inner root sheath. There are three layers of inner root sheath: the inner - the inner root sheath cuticle (one row of dead skin cells), medium - Huxley's layer (one to three rows of semi-dead cells with pyknotic nuclei or completely devoid of them) and external - a layer of Henle (one row of dead skin cells). In the course of desquamation, the cells of all three layers mix with sebum near the mouth of the sebaceous gland. All elements of the component parts of the hair and of the inner root sheath directed to the hair follicle have the cores and at the follicle they blend into the germinal zone of increased cell division, wherefrom the hair grows. Hair life span is from several months to 4 years.

	Skin muscles. Hair is associated with muscular system *(musculi arrectores pilorum)*, which consists of a strip-smooth muscles, one end of which is attached via short tendon to the reticular layer of the dermis, and the other end - to the outer root sheath of hair just below the confluence of sebaceous glands duct. When contracting, muscles raise hair (the effect of the so-called «goose bumps») and, thus squeezing the sebaceous gland, induce the release of their secret. Striated muscles are present only in the face skin *(musculi faciales)* They are called mimic, as their contraction makes face movable and expressive and displays changes in mental state of a person. **Sebaceous glands.** Sebaceous glands *(glandulae sebaceae)* are alveolar glands. They are predominantly open in hair follicles. A small number of sebaceous glands open directly on the surface of the skin i.e. on the balanus, the foreskin, on the labia lips, nipples and lips. By secretion type, sebaceous glands are holocrine, which means that secretion is associated with destruction of adenocytes. In secretory regions, adenocytes are arranged in several rows. External cells make up a germ layer where mitosis takes place and deeper rows' cells accumulating fat droplets are formed. Cell maturation is accompanied by filling of the cell with large drops of fat, by pyknotic changes in the nucleus, which disappears with time, thus resulting in the destruction of the whole cell. Cell fragments, mixed with fat, fill in the gland and secrete via ducts to the skin surface. **Sweat glands.** In terms of structure, sweat glands *(glandulae sudoriferae)* are simple tubular glands, which consist of a long ductless and secretory region, twisted into a ball, located deep in the reticular dermis at the border with subcutaneous fat layer. Terminal sections are lined with cuboidal epithelium, followed by a series of longitudinally arranged contractile cells (myoepithelial cells) which lie on the basement membrane. Duct in the dermis is straight and is lined with two rows of cells, and within the epidermis, it is corkscrew and is an extension of the intercellular spaces of the epidermis. By the type of secretion sweat glands are divided into eccrine (merocrine), in which secretion occurs without destruction of adenocytes, and apocrine, where secretion is accompanied by destruction of the apical parts of adenocytes. Apocrine glands are bigger than eccrine ones, have less tightly curled ball and tend to appear in the hair funnel.

	Eccrine glands are evenly arranged across the whole surface of the skin (to exclude vermilion zone, balanus and the inner layer of foreskin). They secretelubrication for horny layer, are involved in thermoregulation and in the selection of products of nitrogen metabolism. Apocrine glands are found primarily in the armpit, around the anus, on pubis and abdomen skin, below omphalus and on the labia lips. They develop at puberty. The secret of apocrine sweat gland has a specific smell and contains sex attractants (pheromones). **Nails.** Nails *(unguis)* are dense horny quadrate plates located on the back surface of distal phalanges of fingers and toes. They lie on the so-called nail bed. Their purpose is to protect terminal phalanges from damage. The front edge of the nail plate is free, and its rear and side edges are surrounded by skin fold and go deep into it. The upper part of the skin fold comes over the nail plate, thus nail folds (rear and side) are formed. The nail has its body *(corpus unguis)* and the root *(radix unguis).* Nail root is the posterior part of the nail plate, which lies deep in the folds of skin at the back of the rear nail fold. Only a small part of the root of nail protrudes from nail fold in the form of white semilunar area (lunula – *lunula unguis).* It is better seen on the thumbnails. The lunula is covered with thin horn rim i.e. nail skin *(eponychion),* which is a continuation of the rear nail fold. Nail root is located on the back of the nail bed, which is called matrix *(matrix).* Matrix is a place where the nail plate is formed. It consists of epithelial cells in character resembling the cells of basal and spinous layers of epidermis. Spinous layer contains onychoblasts i.e. cells that form the nail and which turn into horny nail plates. Nail plate itself corresponds to translucent and horny layers of the epidermis. Nails grow slower than the hair. In an average, fingernails grow by 1 mm per week, while feet nails by 0.25 mm per week. **Skin Functions.** The state of the skin depends on a number of functions it performs, namely protective, immune, melanin-forming, thermoregulatory, secretory, excretory, metabolic, receptor, sorption, respiratory, repository etc. damage to the tissues and organs, breach of circulatory and metabolic processes therein. These processes are interdependent and interconditioned and reflect reactive properties of the body the latter had acquired in the course of evolution. **Pathological processes that can develop in the epidermis.** There is a number of pathological processes that can develop

	in the epidermis. They include as follows: ***acanthosis,*** which is characterized by increased proliferation of spinous layer cells, that results in elongation and expansion of epithelial ridges; ***acantholysis,*** in which atrophy of intercellular epithelial bridges takes place, a strong connection between epithelial cells is disrupted and the cells easily shift to one another, which leads to the detachment of more or less significant layers of the epithelium. For the first time, acantholysis phenomena have been described in pemphigus by Nikolskyi P; ***hyaline degeneration of cells,*** which is characterized by the appearance of dense homogeneous translucent vitreous substance in the cells that is called the hyaline; ***hyperkeratosis*** as a thickening of the horny layer; ***granulosis*** as a thickening of the granular layer of the epidermis; ***parakeratosis,*** wherein stained nuclei are found in the cells of the horny layer; granular layer is absent; ***epidermis atrophy,*** which is observed in a number of skin diseases. The number of epidermis layers is reduced to a minimum, the cells decrease in volume. Atrophy may extend to the entire epidermis, when there is also an atrophy of epidermis ridges i.e. smoothing of the border between the epidermis and dermis or, of their individual layers. **Fundamentals of diagnostics of cutaneous diseases** As in private life of common people such amongst some doctors subsists thought that diagnostics of cutaneous diseases is not difficult on the ground of showing diseases are located all around the skin. And this is as distinct from therapeutic, surgical, neuralgic and other diseases which are connected with pathology of internal organs. If to say truth this thought is mistaken because of different reasons. Firstly, any cutaneous disease can be limited only by affection of coverlets. For example, during red lupus and series of other dermatosis the functional situation of internal organs in most or a lesser degree and series of other infection diseases is conducted with cutaneous efflorescence. Therefore for making right diagnostics and especially to ascribe good and effective treatment, dermatologist must have a deep knowledge of approximal sciences. The next cause, which can make some complication this is a multiplicity of dermatosis. At the present time in conformity with

	information what was rendered by different authors is about 2 thousands of types of cutaneous diseases. There is upon a lot of different varieties of some dermatosis. There is, for example, the 5 ground forms of eczema, 18 forms of red flat herpes (hyper-keratotics, atrophied, bubble, coral-liked and others). It is conditioned by necessity to do profound differential diagnostics to good subscribe ration therapy. The third cause is conditioned by fair quantity of dermatosis. It can be showed, at the point of view of clinic, as elements of efflorescence. Therefore it is necessary to diagnosis to take into account the color of efflorescence , its form, quantity, addition of secondary infection, typology of evolution etc.) If to take into account all about was said we understand how difficult is diagnostics of internal diseases. Therefore the dermatologist must have a good common and visual memory. When the question is about general symptomotology of cutaneous diseases is possibility to discern subjective and objective symptoms. For number of subjective symptoms can relate those about patient inform personally by reason of filling of its (itch, burning, pain etc.). As regards the objective symptoms its can be discovered by means of inspection of coverlets and using of additional methods of checkup by dermatologist. As subjective symptoms illness can watch anesthesia, hyposthesia, parasthesia (numbing, formication), but some of them can be visualized by doctor (diminution of ability of filling of pain, temperature sensibility and others). It is very important to make inspection all of the coverlets completely in the process of making of objective diagnostics therefore in some causes the illness keeps some staining of disease from doctor (as leavings of chancre on the genitals during auxiliary syphilis or doesn't pay attention to the visualization of peeling amongst finger's spans during epidermiophitia with mycosis). **Stages of diagnostics process** To make a correct creation of diagnostic process are 3 stages: **morphologic**, **clinical, ethnopathogenic.** The morphologic stage is completed by ascertainment of diagnostic which was completed ad interim. It can be put into practice in analytical or synthetic way. First of all in this case is necessary to determine all morphologic elements which are the illness has on hand. Viz is carrying out an analyses. To do it first of all need to

	determine the availability of fact of rising of element above the clinometer of skin or availability of absence of it: has it any emptiness; in what way is going an inverse process of development of element (retrogression) - in the way of complete disappearance or leaving of incrustation being showed, peeling, scar or other. In what follows the development of analyses is putting into practice into the next way. If an element is inflated above the surface of skin it means that the **blemish** is exclusive initial element without of inflating. In this case need to appoint the pattern of this blemish above the surface of skin and if is necessity to find out and to write information about presence of empty in it and in further process to make analyses amongst initial empties and without empties elements. The typology of morphologic process can determine is not only on the base of inspection but with palpation, diascope, erasure and so on. The execution of morphologic stage of diagnostic process into synthetic way is more typical for work of dermatologist which to adhere to a base of science of French institutions. In such way first of all need to inspect in large all efflorescence, determine an interaction of individual elements, their expandability, localization, grouping, mono- or polymorphonism. For example as during pink Gibber's herpes the efflorescence form is oval, is situated on the thorax skin as Langger's lines and as a result seems crow; but during psoriasis the main affection localizes on the elbows, knees, waists. Just so enables to determine correct prudent diagnosis and after that can analyze types of individual efflorescence elements and make an additional methods of inspection. On completion of making of morphologic stage and determination of prudent correct diagnosis can move to the clinical stage of diagnostics process. At this stage first of all is necessary to compare the dates of morphologic analyses with anamnesis of disease. After that can follow additional methods of inspection (diascope, scraping by Krokr, dermagraphism and others). As result we have an possibility in turn except from the prudent diagnosis such diseases which are less possible. This stage of diagnostics is completed with determine of clinical diagnosis (for example: eczema, psoriasis, syphilis and etc.). The most highest stage of diagnostics is aetiopathogenic, which completed by finding of definitive diagnosis. At this stage the form of nosological individuals of diseases are

	determined and their etiological and pathogenetic matter with all features which are typical for organism of individual illness. At the present stage of diagnostics can determine availability of support diseases and the connection their during presence of dermatosis too. It enables to prescribe to complex rational therapy. Therein after we describe approximate oriental drawing of anamnestic inspection of illness who is diseased with allergic dermatosis . To begin the first stage of diagnostic of dermatosis it is necessary to know the typology of elements of efflorescence. The efflorescence can be divided into 2 categories **: primary cells** and **secondary cells**. Primary cells these are visible on the unimpaired surf efflorescence forms which are primary result of pathologic process. Secondary cells develops as a result of evolution of primary cells or as a result of making of course of treatment. It is important to pay attention to such conception as ratio amongst allocation of efflorescence into the primary and secondary cells. This implies that primary cells can play a role of secondary cells in some cases and it means that primary cells cab be as a result of evolution of one element. The secondary cells can be described as primary efflorescence if to say about series of ones diseases. Then, during description of individual cells we will be cite an instance in accordance with which the primary cells play a role of secondary cells and on the contrary. **Blemish** ("makulya"-in Latin) - this is a change of color of skin on the individual part of body. The blemishes can divides into 4 groups: vascular, inflammatory, vascular and non-inflammatory, haemorrhagic and pigmentary. The blemish is single primary cells which is not disposed above the surface of skin. On the clinical point of view all vascular inflammatory blemishes looks like some reddening on the individual parts of skin. But to accordance with hystology they are inflammation dilation of vessels into the derma. **Vascular** inflammatory blemishes differ from others thus at the pushing on its with glass (as diascope, vitrification etc.) they evanesce but can show again after finishing of process of diascope. These blemishes can be different tint of red color – from pink , bright-red to blue-brown during chronic process. Vascular inflammatory blemishes can be irremeable but in some causes on the its places can remain pigmental blemishes or can be covered with scales. In concordance with clinical typology of vascular blemishes

	they can be divided into 2 subspecies (depending upon size): the **erythema** and **roseola**. **Roseola** – this is a blemish of vascular descent in size of about a nail. **Erythema** – this is blemish descent in size of more than nail. Vascular non-inflammatory blemishes can show up as a result of wrong development of blood-vessels into the skin. They can be divided into inborn (vascular nevus) and after-acquired (telangiectasis). The last are firm dilation of vessels which forms as a result of break of process of innervation of capillaries which are disposed skin-deep and shows up of injurious effect climate factors or as result of nervously-reflex excitation. Such blemishes can show up on the face during diseases of lever (workers of foundry industry with hot technological processes, as welders) or as occupational characteristics of disease (as stigma). There are blemishes which are formed as result of extravasation in the skin in consequence of various traumas, higher fragility or penetrability of vessels. It is an haemorrhagic blemish. They cannot disappear during diascope. As a rule such blemishes in a way of changing of color from dark-blue, green to yellow can evanesce. There are 5 subspecies of haemorrhagic blemishes : the PETHEHYA – size of head of math, the purpura – from match's head size to size of nail; the echimosis – from nail's size to size of palm and sigulation - it is a big extravasation. The vibitsesse- is the arcwise extravasation which arise from lashing or cuffing. The fourth group of blemishes it is pigmental which arise from alteration of color of skin's pigment (accretion or reduction). Such blemishes are 3 types: hyperchromic, hypochromic and achromic. The hyperchromic blemishes can be divided into inborn diseases (as pigmental nevus) and acquired diseases. The small parts of hyperpigmentation is called " freckles". Hyperpigmentation inborn blemishes with development of hyperkeratosis is called "lintigo". The big dark parts of skin is called " chloazma". They are arisen from the malfunction of liver or as result of diseases of thyroid gland. The individual category forms the blemishes arise from the injection of coloring agents into the skin into synthetic way (tattooing). The hypochromic blemishes usually form in consequence of evolution of primary or secondary cells and look like parts of skin with reduced number of pigment. The

	achromic blemishes (depigmental blemishes) can be divided into 2 groups: inborn diseases (albinism) and acquired diseases (vatylogo). Its look like individual parts of skin without any presence of pigment. Pigmental blemishes is a good model of ratio of classification of cells into the primary and secondary. Thus hyperchromic blemishes (freckles) or achromic blemishes (albinism, vatylogo) can play a role of primary cells. Hypochromic blemishes, such as after an evolution of urinary blubber, play a role of secondary cells (abscess, papula etc.) ***Nodule*** ("papula" – in Latin)- it is primary non-cavitated cell which is above the surface of skin, has sharp scopes, doesn't pulp into the crinkle of skin being resorbed, doesn't leave any signs or can leave on place a pigment blemish. The nodule has never been as ulcer or scar on place. As provide by histological structure of papula it can be divided into 3 category: epidermal, dermal and epidermodermal. In the epidermal papula (for example during psoriasis) can be observed the initiation of third pathologic processes: hyperkeratosis, parakeratosis and achantosis. As a result of process of keratosis (thickening of corneous coating of epidermis) and process of parakeratosis (absence of cell catenation) the epidermal papula can peel. The akantosis (which is non-uniform distribution of papillas of derma with equal elevation) can be showed up in a way of scraping off. As a result of this process on the surface of papula shows a punctual bleeding. For dermal papula is typical an availability of cellular infiltration into the papillary coating of derma (for example during syphilis). At the expense of it the dermal papula rises above the level of skin. ***Epidermal nodule*** is the mixing of processes which are observed during epidermal and dermal papula (for instance during red flat herpes). At the clinic point of view the nodules are divided into 5 varieties: miliary – size from millet to head of match; urea-liked (lenticular)- size from head of match to 5-copeck coin; coin-liked (nummular)-size from 2-copeck coin to 5-copeck coin; plaque-the big size papulas. There are round, bullet-liked, flat, cone-liked, with correct or incorrect contours. It can be connected with hair follicle , oil-gland, sweat-gland and can be with umbilicate dent into itself , for example during red flat herpes. ***Hump*** - ("tuberkulum" - in latin)-it is primary non-cavitated cell which is above surface of skin, has clear shapes, pulps

	into the crinkle of skin, always leaves ulcer (deep defect of skin) or scar on place. Size of hump from millet to cedar-nut. The hump can be red, light red, yellow-red and other tints of red color. The type of this hump is characterized of pulping into the crinkles of skin and leaving of scar on place. At the point of view of histology the hump is cellular infiltrate into the deep crinkle of derma. ***Node*** ("nodus" - in Latin) –it is primary non-covitated cell, which is above the surface of skin and has clear shapes. The skin intends into the crinkle above the node because the node is cellular infiltrate in hypodermic adipose cellular tissue. Size of node is from pea to hen's egg and more. In most cases node disintegrates and forms an ulcer or scar on place. ***Bladder*** ("urtyka" – in Latin) –it is primary non-covitated cell which is above the surface of skin and has clear cupola-shaped form and doesn't have clear shapes. As a rule often the bladder is itching and doesn't leave any secondary cells on place. The bladder development mechanism is next. As a result of reaction by type " antigen-antibody" (allergic reaction during nettle-rash), toxic irritation (burn with nettle) and irritation with mechanical operation (Winn's symptom during mastocytos) has place degranulation of mastocyts (obese cell) with immunity of active substances (histamine, serotonin and others). As result we have dilation of vessels and during this period can be observed some reddening on the skin. After that is doing a process of increase of transmissivty of vessels and exudation of serous substance. In such way the abscess forms in derma. By sight the bladder will be above the surface of skin. In the middle of the bladder it will been have white color (as a result of pressing and suppuration of vessel) and will be pink about periphery. **Bulla** ("bullya" – in Latin)-it is primary covitated cell which is in epidermis, has round form , is filled with sulfuric substance , is more than head of match. As a in case of evolution of vesicle can form an erosion. Most often the bullas is placed under epidermis. Such bullas is called subepidermal as during red flat herpes. When the bullas is into the basal coating of epidermis is called " interaepidermical "in a consequences of decay of it's cells (for example during pemphigus). The bulla which is under corneous sphere of epidrmis is subcorneal. **Abscess** ("pustula" – in Latin)- it is primary cavitated cell which if filled with pus. The forming of abscesses can suppose different microbe factor. For the most part it is staphylococcus and streptococcus.The abscesses by it's size

	can be divided into 6 types. Abscesses are situated on the surface of skin (within epidermis) and are connected with nothing , size is not less than head of match (is called impetigo) or more than head of match by name " fliktena". If to take as a model the impetigo or fliktena can give a demonstration of ratio of allocation of cells into the primary and secondary. When these cells show on the unaltered skin they can act as primary cells. But as result of evolution of vesicle the impetigo can play a role of secondary cell and as a result of evolution of bulla the fliktena can play a role of secondary cell. As fliktena so as impetigo leaves erosion and pigment on places. The abscess which is connected with nothing and is situated deeply is called "echtyma". As a result of decay of surface of echtyma forms ulcer (deep defect of skin) and always is a scar on place. At in case of connection the abscess with hair follicle it is called " folliculitis" (deep affection of skin) or osteofolliculitis (allocation into the mouth of hair follicle only). Osteofolliculitis is treatable and doesn't leave any signs on place but folliculitis always finishes with scar on a place. The last sixth type of abscess is called "achne". This abscess is connected with oil gland. It is cone-shaped . It can evolve without any signs or as deeply placed can leave a scar on place. **Squama** ("squama"- in Latin)- it is corneous plates which lose a normal touch to one other (parakeratosis) are loosened, colorless, thin and transparent. Under microexamination can observe that they consist of epidermis cells, adipose matters, bacteria and motes. There are little plates squamas (efflorescence-liked), when the squama is very little (as during multicolored herpes). When squamas are big sizes it is active condition of disk-shaped peeling (psoriasis) .The psoriasis is secondary cell but it can act as of primary cell because of showing on the by sight unimpaired skin up (for example ichthyosis). ***Crust***- ("crusta" - in Latin) - it is forming in the issue of drying of serous substance (vesicle, bulla) ,pus, secretion of erosion, ulcers and other defects of skin. The crust is thick, with specified color and light-proof. Crusts can be different colors depending upon which substance it was formed. There are serous, purulent, blood and blending (mixing with matter, blood, motes, squamas and other) types of crust. Sometimes on the such primary cell can be formed multi-layer crust which look like clam-shell. This is a rupiah**.** On the crust's place always leave hypochromic blemishes. At the clinic

	point of view the crust differs from the squama with presence of thickness and absence of transparency . ***Crust-squama*** - it is secondary cell which represent to be a dry purulent contents of phliptenna (big surface pustula). But by typology it shows all indication of crust (dried matter) and squama (thinness and transparency) up. Such cells can observe, for example, during surface chronic steptodermatosis of ankle (differentiation with eczema). ***Erosion*** ("erozio" – in Latin) - it is secondary cell which are surface defect of skin (within of epidermis) of round or oval-shaped. The borders of erosion can be hanging (for example during chancre), undermining (leavings of covering of bulla), regular or sharp in depending on form of previous primary cell. Erosion can be cured of epithelization and doesn't leave any scar on place. With erosion model can demonstrate an effect of relativity of classification on primary and secondary cells. During evolution of papula (papulous syphilid) or bulla an erosion can play a role of secondary cell but during chelit or chankre erosion can act as a primary cell. ***Ulcer*** ("ulcus" – in Latin)-it is deep round or oval-shaped defect of skin. Ulcer it is a result of evolution of deep pastula or nuclear or joint decay. In some cases an ulcer can play a role of primary cell (example of relativity of classification on primary and secondary cells). For instance trophic ulcers which forms as a result of initial necrosis of by sight safe coverlets or as a result of trophic disorder. The borders of erosion can be hanging, undermining, scalloped, regular or zigzag. On the place of ulcer always leaves a scar. ***Abrasion or scratching*** - it is line imperfection of skin as a result of mechanical failure. The abrasion can play as a role of secondary cell so a role of primary cell under injuries of by sight health skin (for example during itching of skin, during mechanical trauma and etc.). There are surface and deep traumas. First doesn't leave any signs on their place. Second always leaves a scar on the place. As a rule the borders of excoriation always is pointed because it intersects a skin's tension lines (Lannger's lines). ***Chap*** ("ragades" – in Latin) –it is secondary cell which form as a result of stretching of skin on the are infiltrated and loosed their tensile ductility parts of skin (dryness of skin). Chaps always are disposed in the lines of Lannger's (stretching of skin) and therefore are equilateral. By that they differ from the excotiation There are surface (within epidermis) which skin over without any signs and deep which

	leave a scar on place (inborn papulous syphilid all around the mouth) ***Cicatrice*** - it is effusing of fibrotic connecting burlap in parallel with fibers on the place of deep crippling of skin.(for example derma, hypodermic adipose cellular tissue). For cicatrice is typical an absence of drawing of skin, hair follicle, oil glands and sweat-glands about the surface of cicatrice. At the clinic point of view there are flat cicatrice (which is suited at the same level with surrounding covering), atrophic (which is situated under the level of skin) and hypertrophic (which is raised above the coverlets), for example keloidical cicatrice. ***Lichenification*** - it is secondary changing of skin which is characterized by 3 criterions: thickening of skin, intension of drawing of skin and hyper-pigmentation. Most of all lichenification forms as a result of constant scratching during chronic processing of itching dermatosis (neurodermatitis, chronic eczema). Lichenification forms following infiltration all spheres of derma and an infiltration is accompanied with achantosis and papillomatosis. ***Vegetation*** - it is accretion of epithelium and pappilas of derma on the surface of some of elements (papula, bottom of ulcer). Clinically the vegetation have the appearance of fiber accretions owing to which the part of skin is unequel, hump-backed, reminds cook's combs. During determination of type of element it is necessary to fix their color and take into account that during various of diseases type of element has different tint of red color- from bronze (during syphilis) or rich-red (during psoriasis) to blue tints of red color during red flat herpes. The borders of element can be clear or non-clear (bladder). During pulping it can be tight or soft. Morphological elements can be divided particularly (during syphilis) or to be flowing together at the expense of development about circumference (psoriasis), can form as groups which making an arch , ring, garland (During's dermatitis). Localization during some type of dermatosis can be selected (for example on elbows or knee during psoriasis) but in some cases doesn't make localization on the certain parts of skin (scab on the face, blackheads oh the palms and feet). Generally the efflorescence are polymorphic and monomorphic. Monomorphic is such efflorescence which consist from only one type of the primary [nettle-rash] or the secondary morphologic cells (ichtyosis). And that rash is called polymorphic which consists of various

	efflorescence. The polymorphism can be of two types: the real and the false one. During the real polymorphism the rash consists of a number of the primary cells (for example during an eczema there are erythema, papules, vesicles) and during the false polymorhism it has only one primary cell and some secondary ones as a result of its evolution (during the psoriasis following the evolution of papules the secondary hypochromic maculas (Hypochromic maculas are formed). The great role in the diagnostics of dermatosises play additional methods of the inspection of the patient. They can be divided into the clinical and laboratory methods. One of the most widely spread clinical additional methods of such inspection is the morphism or the vitripressing the essence of which is based on the process of pressing on the changed dermal section with a glass. While this doing changes the color of the skin. It can be seen through the glass. In this way the vascular inflammatory maculas (erythema, roseola) can be differentiated from others [hemarrhagic, pigment) and determine the singular brown coloring of the hillocks by the elimination of the inflammatory pink background (the symptom of "apple jelly" during the lupus). The method of scraping is provided with a help of a scalpel. Simultaneously it's possible to determine the typology of peeling – in the presence of parakeratosis it is more friable and during hyperceratosis it's hard to be gotten. For making the diagnostics of eczema apply so-called Brook's scraping system, which gives a possibility to find out the hidden micro-vesicles which are allocated in the prickle-cell layer, at the expense of taking of horny epidermic layer away. With the help of this method it's possible to reveal the typology of hemorrhage [punctated or poured one] under the heightened brittleness of capillaries. By determination of the dermographism character it's possible to define the functional stale of the vascular-nervous system. The dermographism is defined by such method as passing finder, with a little blunt stick or the special dermograph along the skin (the dosed irritation at the expanse of spring). With the help of the method it's possible to distinguish the pink dermographism ,by the vascular dilatation as the paradoxical reactions (during neurodermitis) and the heightened dermographism or the urticarial one (during nettle-rash). The processing of the dermographism gives possibilities to determine the presence of the vegetative-neurotic condition of organism. For making diagnostics of the allergic dermatosis making

	use of the so-called the dermal test with allergens are applied. These test give possibility to determine the heightened sensitivity (sensitization) to the concrete maters which caused allergic reactions of the organism. The cutaneous tests are divided into three types: epicutanic, scarificative and intrudermal ones. The epicutanic tests in their turn are divided into two subspecies – the drop and the compress ones. For carrying out the drop tests the spirituous or the acetone solutions of the definite substance are put on the surface of the clearly seen unaffected skin (more often it is done on the side surfaces of the stomach). After the spirit or acetone steaming the place with a drop of the solution with the allergen is glued over and marked with the name of the substance applied in the test. For carrying out the compress the pieces of gauze in 4 layers measuring 2x2cm. are put on the skin of the back (along the spinal column, between the shoulder-blades and lower). The gauze is wetted by the solution of the allergen. For the allergen solution preparation the special tables are used. These tables indicate the concentration of the examined matter and the name of the investigated material.. The gauze pieces are glued up, fixating them to the skin with some in size more large pieces of court plaster with written indication on its surface. The time of the test conducting and the name of the examined matter. The scarification test is carried out into the following method. On the clearly seen unaffected skin the scarification with Genner's feather (so-called dozen injection in the epidermis localization) and after that one drop of the allergen solution is put on the place of the scarification. As a variety of this test the scarificatative – compress test, proposed by Anton'ev A.A. can be conducted. It is based on carrying out the compress test (see above) on the place of the preceded scarification. For conducting the intradermal test the sterile solution of the allergen in the quantity of 0,05ml. Is injected intra-dermaly into the skin of the citronin surface of the forearm. The name of the examined matter is indicated below the place of the injection. The information about the results of the dermal tests must be given 4 times: after 40 minutes (for the registration of the allergic reaction of the rapid type), and after 24,48 and 72 hours (for the registration of the allergic reaction of slowed type). In the case of the absence of any changes of the skin (or in the skin) on the place where the test was carried out it is considered to be negative or it means that

	the examining patient doesn't have any heightened sensitivity to the given substance. The reaction of quick type shows itself by the bulla appearance which is evaluated according to its dimensions with the help of the special ruler. In the positive reaction of the slowed type the redness of the skin can appear on the place of the testing – that is erythema (its intensity is evaluated AS+), the redness with the turgescence or papule (++), the eczematous reactions on the background of the erythema there are small miliary papules, vesicles or bullas - +++) or the dermal necrosis (++++). For diagnostics of some dermatosis the determination of the functional state of the dermal capillaries with help of capillary-morphism is significant. It is conducted after oiling the examining section with a special capillary-morphism. The capillaries are examined in the section of the nail hillock, where they as a rule are localized across to the dermal surface. This method has (e) special significanse for the early diagnostics of Raynod's disease, for the systemic scleroderma (sclerodactylia) and other diseases that are connected with the disturbances of the peripheral blood circulation. Some other disturbances are also marked during the disease. They are the dilation or spasm of the capillaries, the increase or decrease of their number. The luminescent diagnostics of cutaneous diseases is conducted in the darkened room with help of Wood's lamp and after the doctor's adaptation to the darkness. Wood's lamp is a mercury-quarts lamp with the special filter for stopping the long-wave part of rays (the glass impregnated by nickel salts). The named diagnostics is applied to determ the vitiligo diagnosis on its initial stages) with clear contoured bright-white sections of the depigmentation) the red lupus (the snow-white luminescence of the hyperkeratosis zones), the microscopy (the bright-green luminescence of the affected hair). For making rational therapy is the revealing the nidus of the affection of hair part of the head (the golden-yellow luminescence) during the rash-like herpes is of fundamental importance. The typical coral-red luminescence is observed during the erythrasma (the differentiated diagnostics with the inguintal epidermophytosis). For making the diagnostics of the late purple of the skin a portion (5ml) from the daily urine is inspected in Wood's lamp rays; such urine has the red fluorescence and healthy people has the bluish-white one. In some difficult for diagnostic cases the histological inspection of the skin is carried out, which has the decisive

	importance during the concrete types of dermatosis (dermal growths, Darrier's disease, reticulosis, deep mycosis etc.). The piece of the skin after biopsy must be accompanied with the detailed description of the clinical history of the disease, including the data of the differentiated diagnostics before its sending for the microanatomical examination.