

ANATOMIYAGA FANIGA KIRISH

Reja

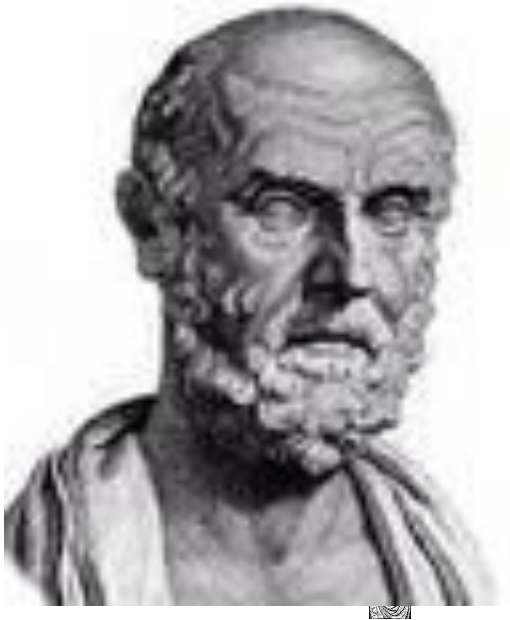
- 1.Odam anatomiyasi fani haqida tushuncha.
- 2.Anatomiyaning o`rganish usullari.
- 3.Anatomiya fanining rivojlanish tarixi.
- 4.Anatomiya atamalari.

Tayanch iboralar: *gorizantal*
yuza , medial yuza,
sagittal yuza, frontal yuza,
lateral, kranial, kaudal,
ventral , proksimal,
gistalogiya, embriologiya,
antropologiya.

- **Анатомида қуйидаги методлардан фойдаланилади.**
- **антропометрия**
- **препаратлар**
- **инъекции**
- **коррозии**
- **ёритиш**
- **микроскопик метод**
- **рентген нури**

Makroskopik anatomiya (ot grech. makros — katta) gavda tuzilishini, alohida organlar va ularning qismlarini, kattalashtirib ko'rsatuvchi asbob uskunalar bilan o'rganish (lupa). Mikroskopicheskaya anatomiya (ot grech. mikros — kichik) mikroskop yordamida organlar tuzilishini o'rganish. Mikroskop paydo bo'lishi bilan anatomiya -gistologiya (ot grech. histos — to'qima) — to'qimalar haqidag fan vassitologiya (ot grech. kytos — hujayra) — hujayraning tuzilishi va funksiyasi haqidagi ta'limot. Odam gavdasini sistemalar orqali aniqlash (suyaklar, muskullar, ovqat hazm qilishva b.) sistematik anatomiya nomini olgan. sistematik anatomiya esa «normal»,odam sog'ligini, organ, to'qimalarini kasallik tufayli o'zgarmasligini yoki o'sish va rivojlanishga ta'sirini o'rgatadi

Анатомиянинг ривожланиш тарихи



Гиппократ (460 — 377 гг. до н.э.),
медицина отаси, инсонларни 4
типга бўлган, мия қуттисини
тузилишини таърифлаб берган

Аристотель (384—322 гг.н.э.)
ҳайвонлар нерв ва пайлар
борлигини ва суяк билан
тоғайни фарқлаган. “аорта”
терминининг асосчиси.

Клавдий Гален (131—201) мия нервларини 7 тасини аниқлаган, бириктирувчи тўқима ва мускул нервларини баъзи органлардаги қон томирларни, суяк усти, бойламлар ҳақида анатомик маълумотларни ёзиб қолдирган



Абу Али Ибн Сино (Авиценна, 980—1037 гг.) Анатомия ҳақидаги маълумотни ўз ичига олган «Тиб қонунлари» китобини ёзиб қолдирган, “Қонун” лотин тилида таржима қилинган бўлиб 30 марта қайта нашрдан чиққан

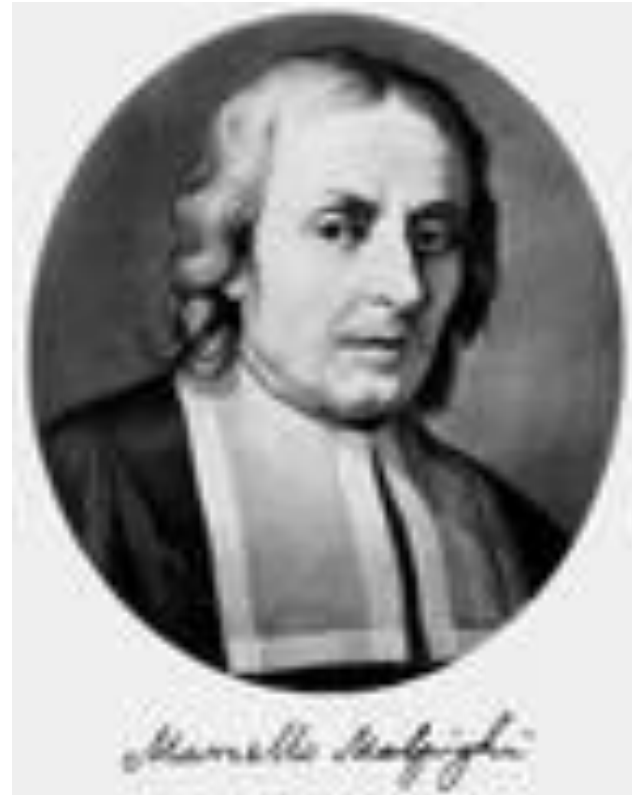


Леонардо да Винчи (1452—1519), 30 та ўликни ёриб, кўпгина суякларни, мускулларни, юрак ва бошқа органларни тасвирлаб, бу расмлар ҳақидаги маълумотларни ёзиб қолдирган. У тананинг тузилиши ва формасини ҳамда мускулларнинг классификациясини механика назарияси билан тушунтирган.



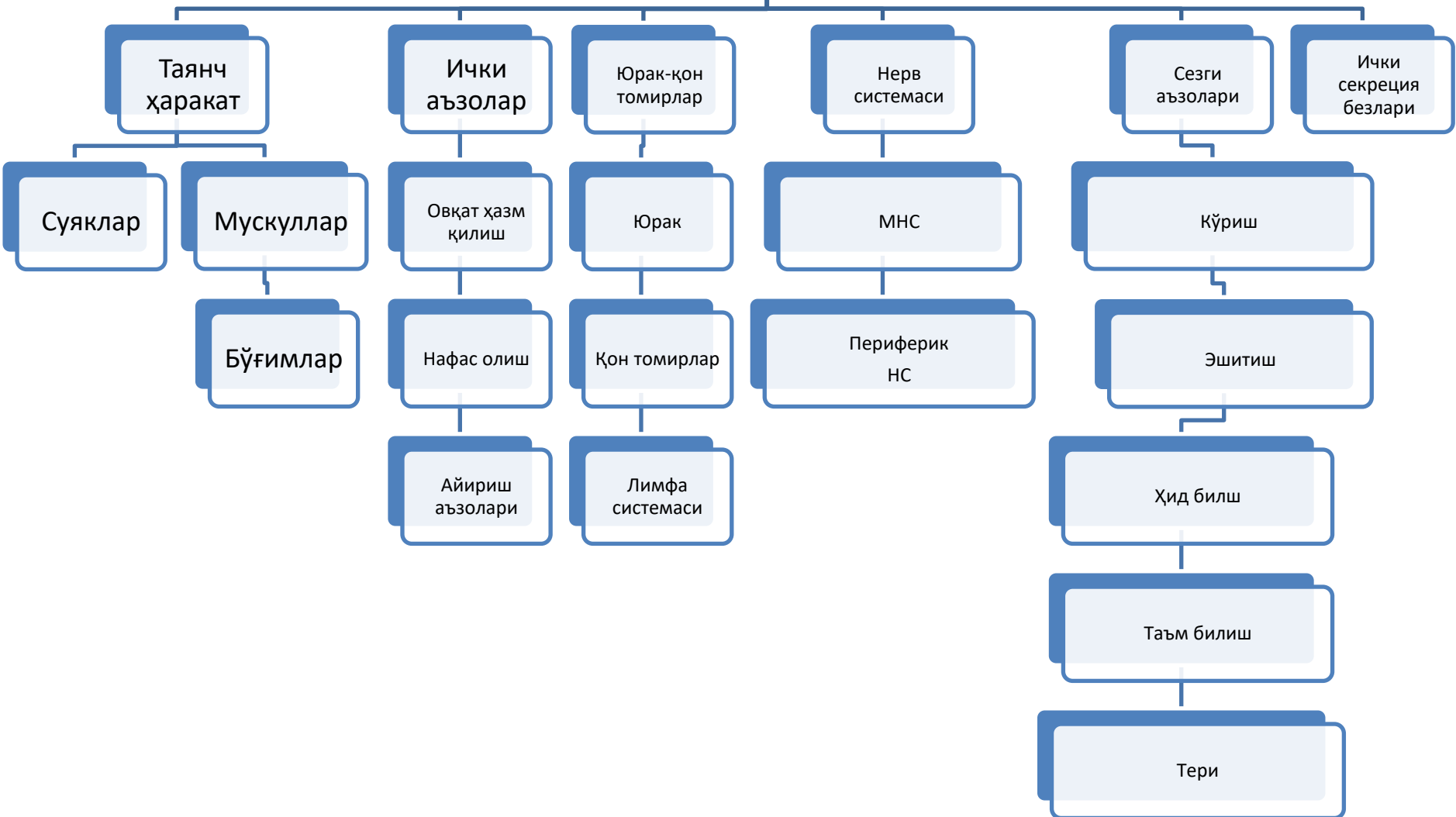
Андрей Везалий (1514—1564), мурдаларни ёриб, «Одам танасининг тузилиши ҳақида» (*De Humani corporis fabrica*) асари Базеледан 1543 йилда нашрдан чиққан. Везалий одам анатомияси систематикасини ва анатомиясини аниқ маълумот бериб, Галеннинг анатомиядаги хатосини тушунтирган.

Уильям Гарвей (1578—1657), катта ва кичик айланиш доирасини аниқлаган



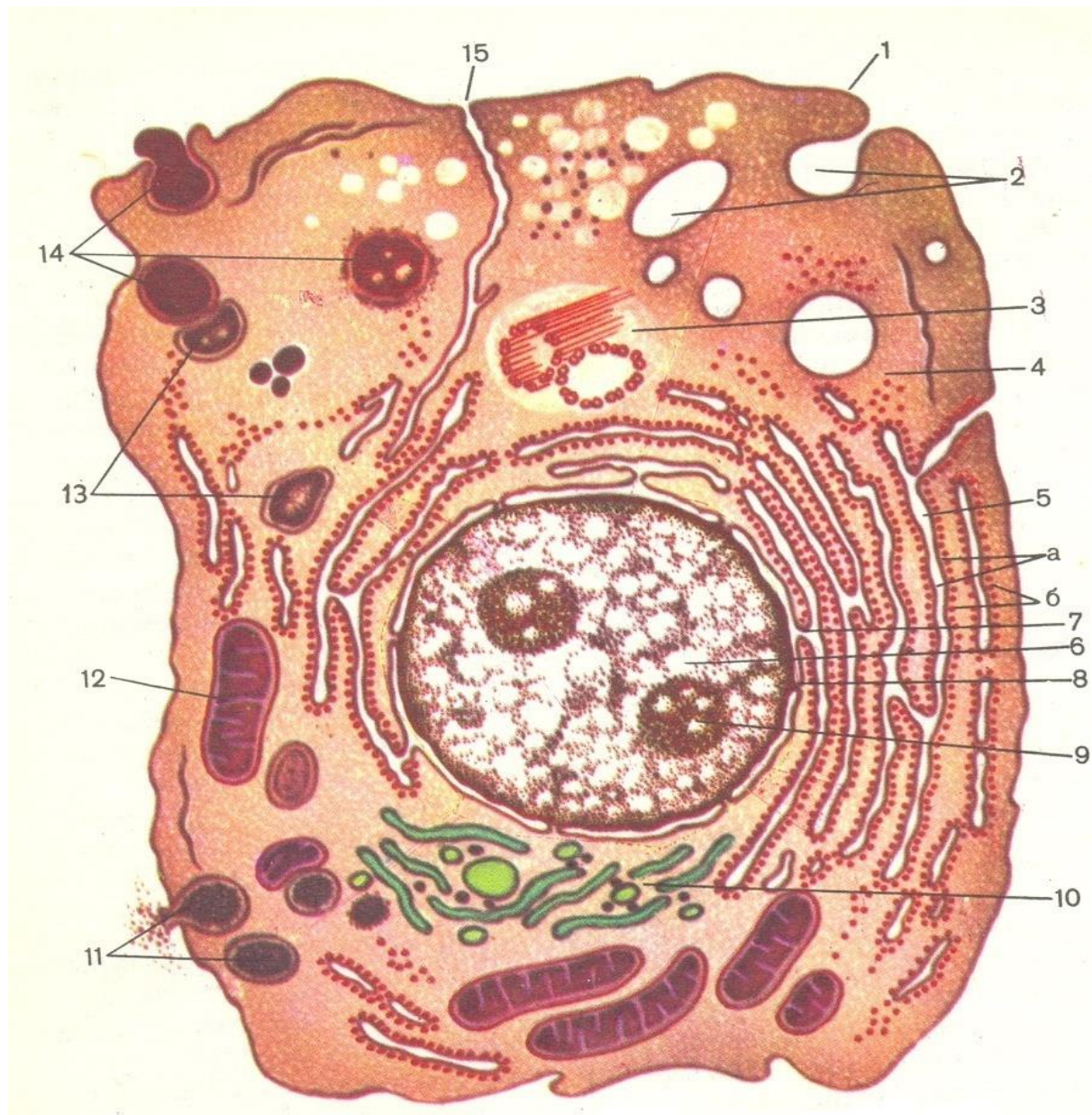
Мальпиги (1628—1694), 1661 йилда микроскоп ёрдамида капилляр қон томирларини аниқлаган.

Анатомия систематикаси





Ҳужайранинг тузилиши



Hujayra nafaqat insoniyat balki o'simlik va hayvonlarning asosiy tuzilish qismi hisoblanadi. Bu kichik organism mustaqil yashash xususiyatiga ega. Ko'p hujayrali organizmlarda hujayralar bir butun organizmni hosil qiladi va keng qamrovli funksiyalarni bajaradi. Ko'p hujayrali organizmlar : o'simliklar, hayvonlar va insonlarning fundamental asosini hujayratashkil qiladi. Lekin har bir guruh hujayralari organizmda maxsus ish bajarishiga ko'ra bir-biridan farq qiladi. Masalan qizil qon tanachalari (eritrositlar) kislorod tashiyotgan paytida nerv hujayralari qon tomirlar faoliyatiga ta'sir qiladi yoki ayrim hujayralar bir vaqtning o'zida bo'linish davrida bo'ladi. Organizmdagi har bir alohida hujayraning funktsiya bajarishi uning genetik tuzilishiga bog'liq. Hujayraning genetik tuzilishi uning DNK si tarkibidagi genlarga bog'liq bo'ladi. Undagi dastur oqsillar sintizi va hujayraning ko'payishiga yo'naltirilgan.

(Anatomy of the Human Body. Henry Gray. Nega Assefa Alemaya University
Yosief Tsige Jimma University. In collaboration with the Ethiopia Public Health Training Initiative, The Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education 2003. 14)

Adolf Faller., Michael Schuenke-The Human Body - "An Introduction to Structure and Function" Thieme Stuttgart · New York <http://www.bestmedbook.com> /2-6et

Cytology: - It is a branch of science concerned with a study of cells

An organism as a whole can be understood through the collective activities & interactions of its cells. To know more about cell, we can divide the cell into four principal parts: - Plasma (cell) membrane: it is the outer lining, limiting membrane separating the cell internal parts from extra cellular

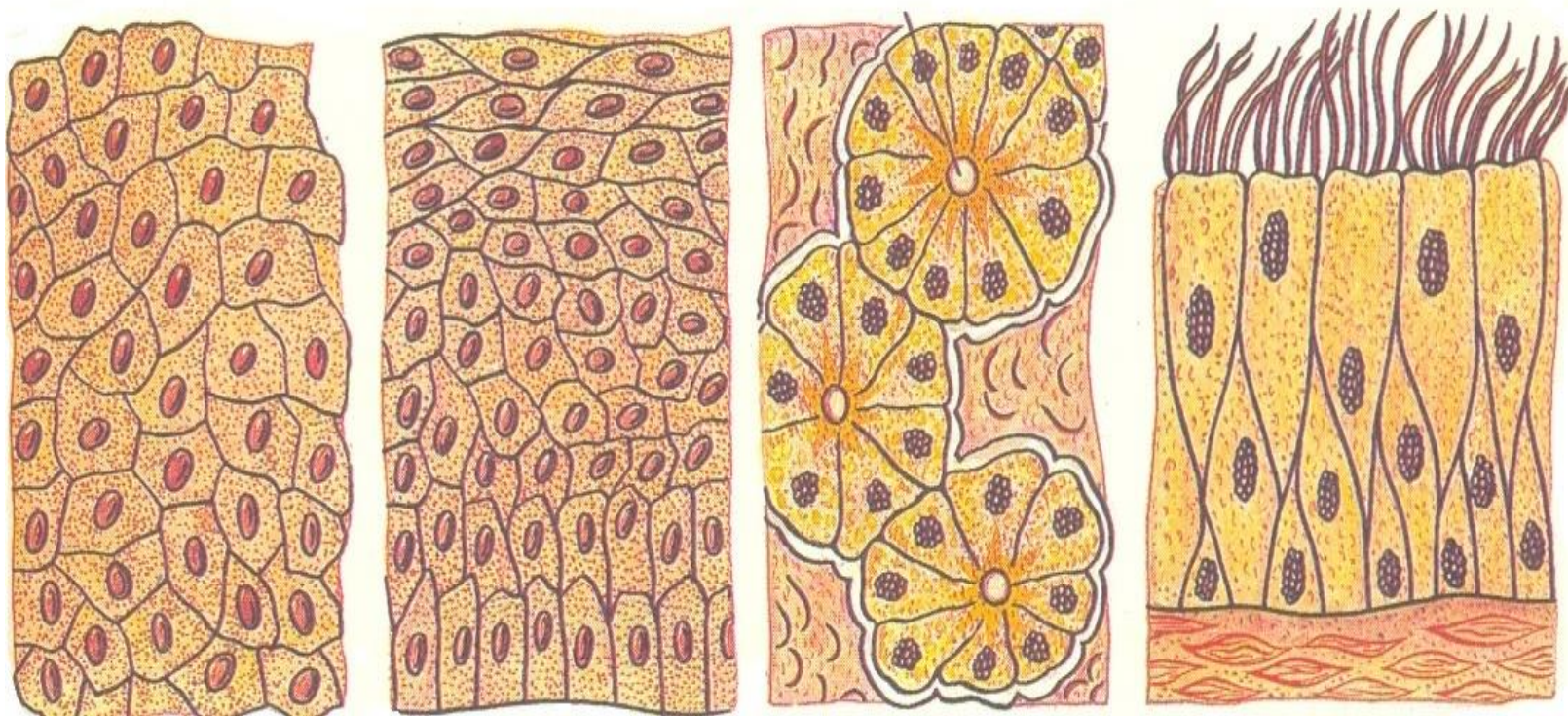
materials & external environment. Cytoplasm: cytoplasm is the substance that surrounds organelles and is located between the nucleus and plasma membrane. Organelles are specialized portion of the cell with a

characteristic shape that assume specific role in growth, maintenance, repair and control. Nucleus, Oval in shape and is the largest structure in the cell. Contain the hereditary factor in the cell. Hence it controls cell activity & structure. Most cell contain single nucleus but some like matured Red Blood cell do not

contain. However Muscle cell contain several nucleuses. The nucleus separated from other cell structure by double membrane called nuclear membrane. Pores over the nuclear membrane allow the nucleus to communicate with the cytoplasm. In the nucleus a jelly like fluid that fill the

nucleus is karyolymph (nucleoplasm), which contain the genetic material called chromosome. Nucleus also contain dark, somewhat spherical, non-membrane bound mass called nucleolus. It contains DNA, RNA and protein, which assist in the construction of ribosome.

Тўқималарнинг тузилиши



Epiteliy to'qimasi.

Epiteliy hujayrasi asosiy vazifasiga ko'ra sirtqi epitiliy, bezli epitiliy va sensor epitiliy hillariga bo'linadi. Barcha epitiliy hillari uchun yupqa bazal membrana (bazal qavat gialinli membrane oynasimon membrana) hos bo'lib, u epitiliyning mehanik tasirlariga chidamligini taminlaydi. Yuza (qoplovchi) epitiliy organizmning ichki va tashqi tarafdin o'rab uni himoyasini sekreksiya jarayonini va rezorbsiya (moddalar yetilishi) va tashqi muhit bilan aloqasini taminlaydi. Bezli epitiliy tashqariga (ekzotrin bezlar) yoki qonga (endokrin yoki ichki sekreksiya bezlar) turli suyuqliklar(so'lak ter ,ferment,garmon)ajratiladi. Sensor epitiliy o'z navbatida sezuv o'rganlariga uchrab tashqi tasirotni qabul qilib uzatadi(masalan, ko'zning to'r pardasi) (rasm 3.1A-D) qoplovchi epiteliy joylashgan organ yuzasiga bog'liq holda yassi,kubsimon,silindirsimon,qoplamasiga qarab oddiy,qavatli(bir qavatdan ko'proq)va ko'payadi,epiteliyga bo'linadi.(rasm 3.2) stratsfikatlangan epitiliy nomlanishi uning hujayra yuzasiga ko'ra amalga oshiriladi. Masalan ko'p qavatli yassi epitiliy-teri mehanik tasirotlarga berilmasligini taminlaydi. Psevdo ko'p qavatli epitiliyda barcga hujayralar bazal membranaga taqalsa ham barchasi erkin yuzaga yetmaydi.(Masalan 2 qavatli mersatel epitiliy nafas yo'llaridagi)

Tissue: tissue is made up of many similar cells that perform a specific function. The various tissues of the body are divided into four groups. These are epithelial, connective, nervous and muscle tissue.

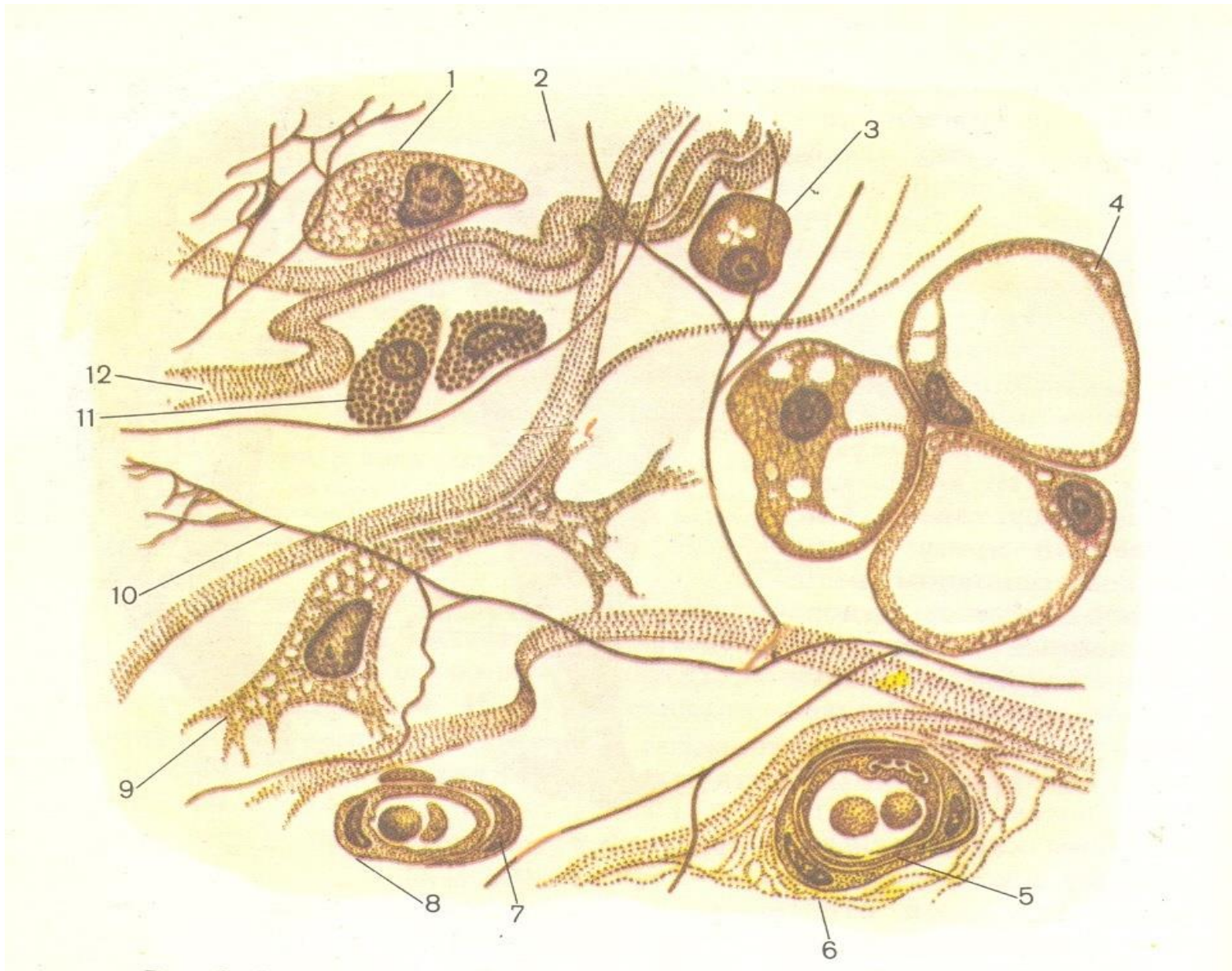
Epithelial tissue: -Found in the outer layer of skin, lining of organs, blood and lymph vessels and body cavities.

Connective tissue: - Connects and supports most part of the body. They constitute most part of skin, bone and tendons.

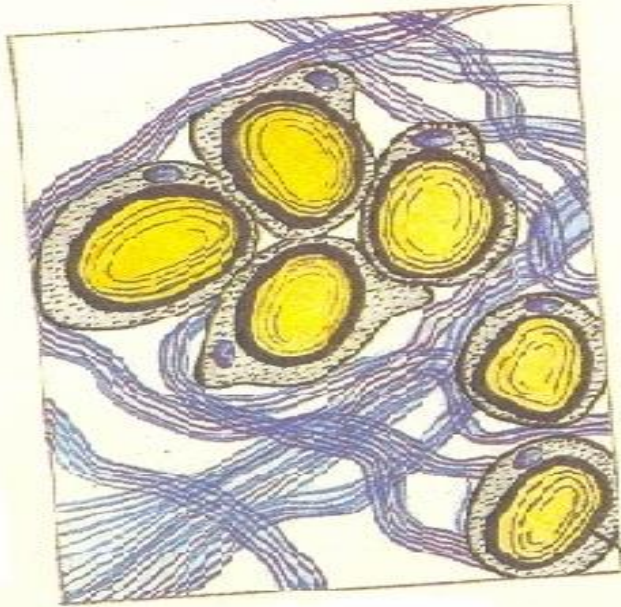
Muscle tissue: -Produces movement through its ability to contract. This constitutes skeletal, smooth and cardiac muscles.

Nerve tissue: -Found in the brain, spinal cord and nerves. It responds to various types of stimuli and transmits nerve impulses.

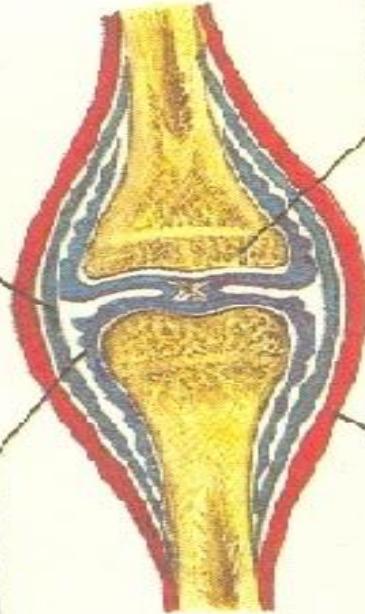
Organ:- Is an integrated collection of two or more kinds of tissue that works together to perform specific function. For example: Stomach is made of all type of tissues.



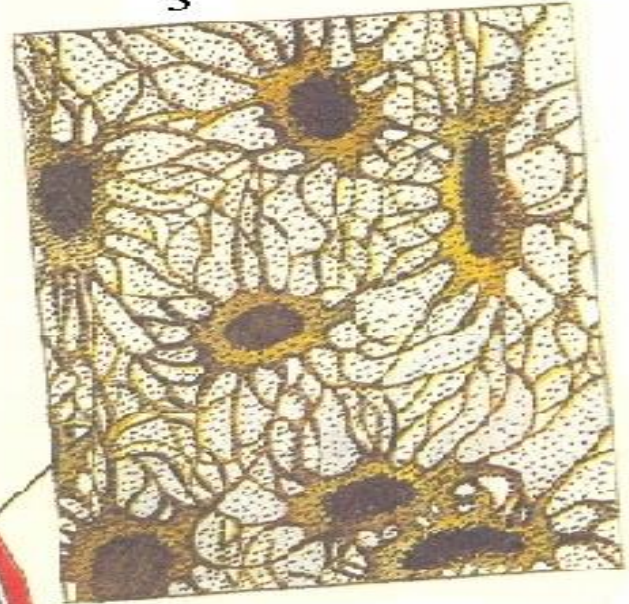
1



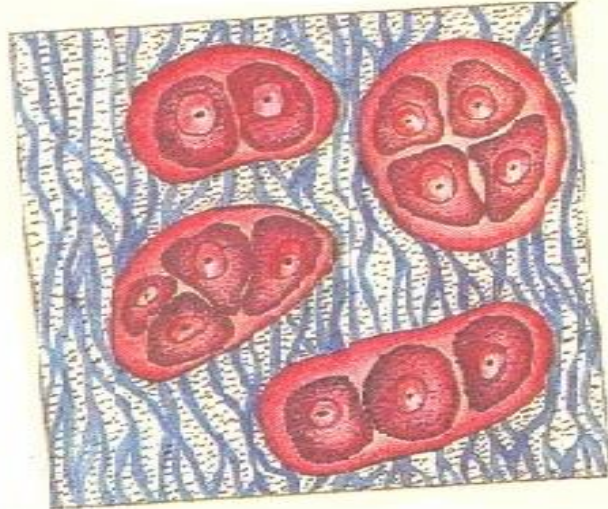
5



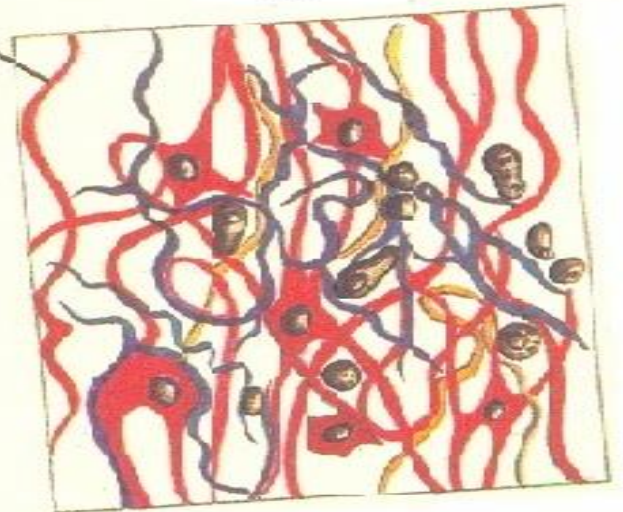
3



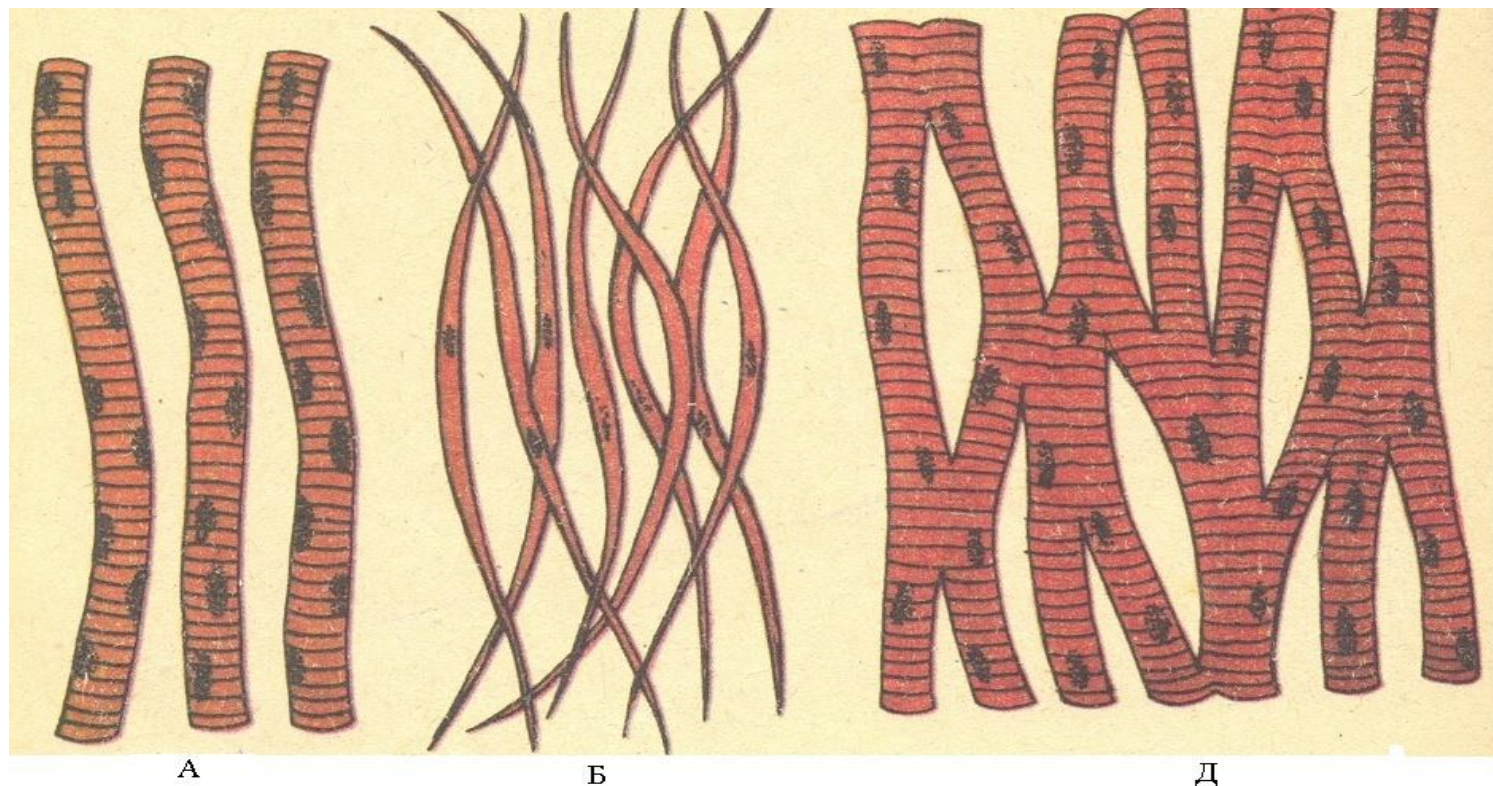
2

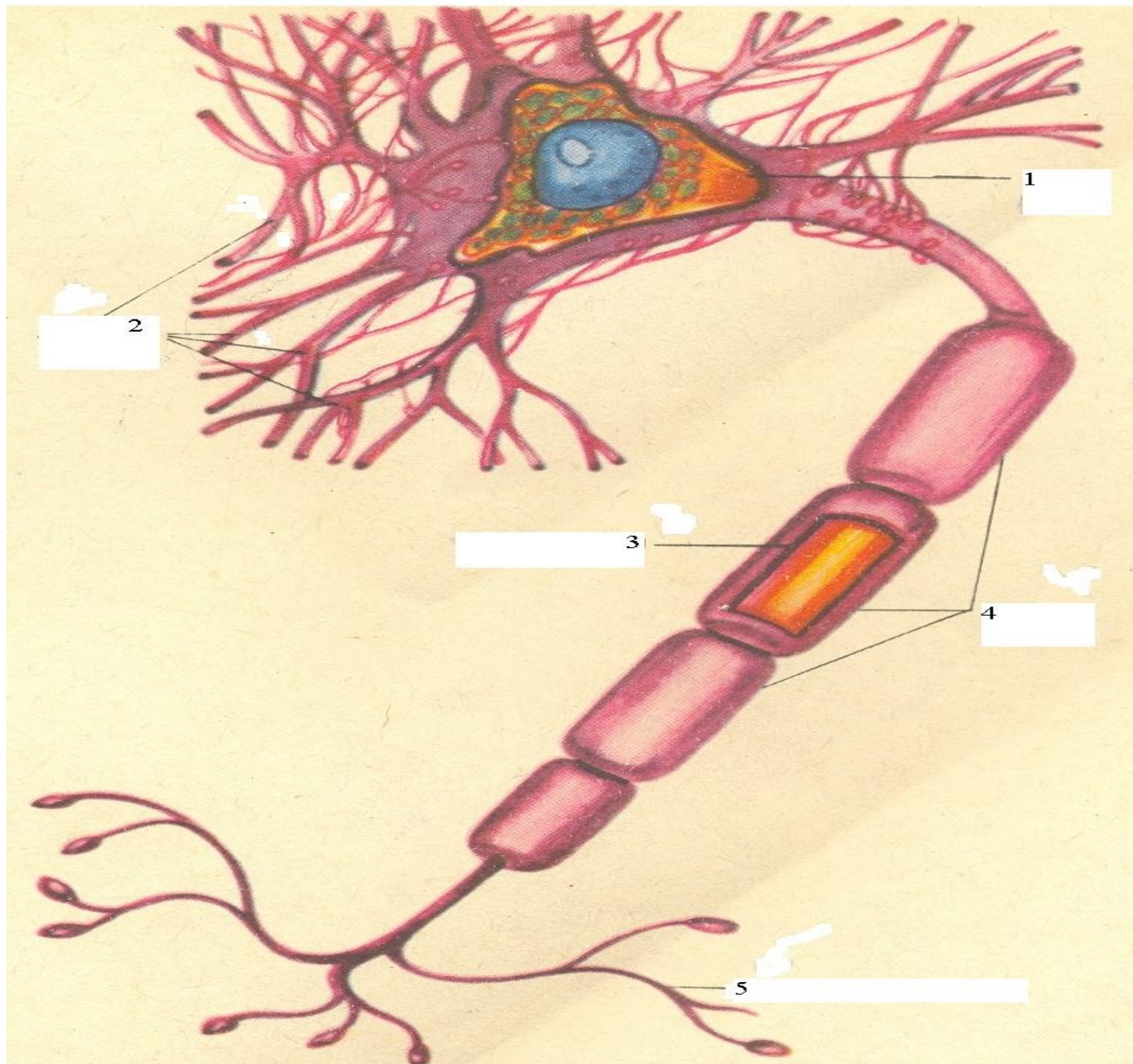


4

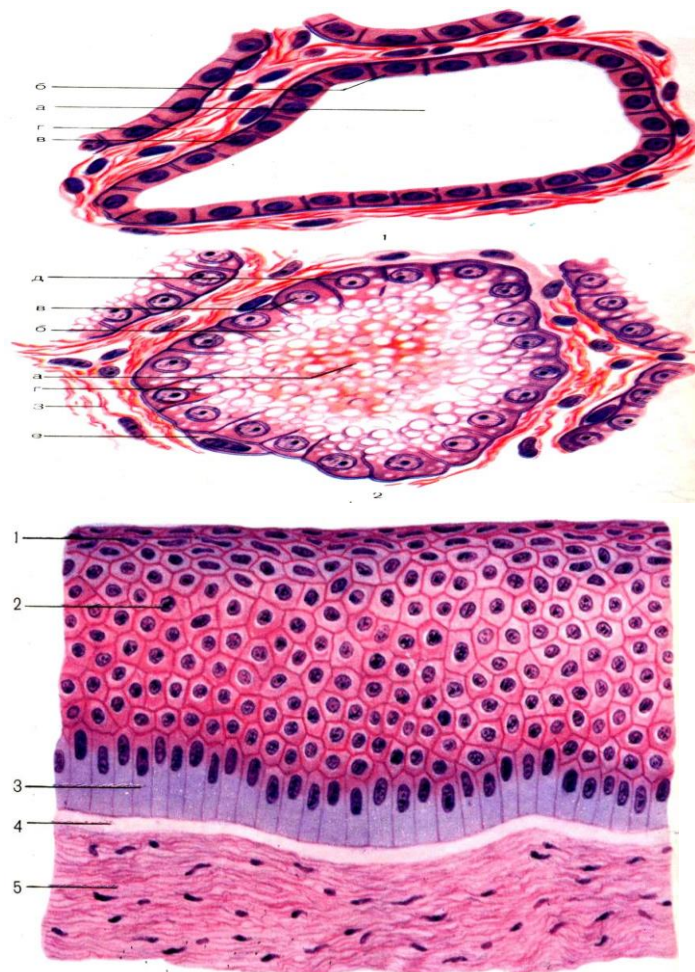
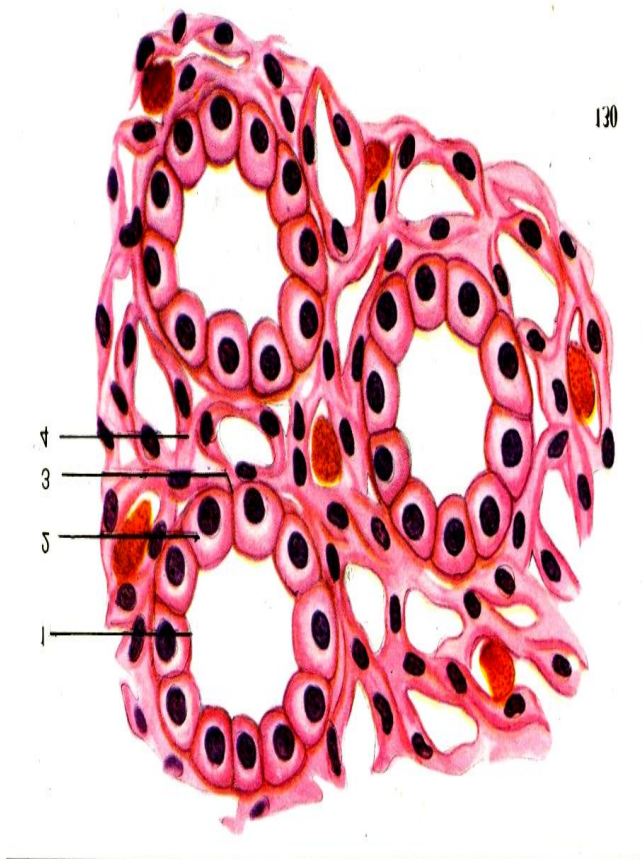


Мускул тўқимасининг тузилиши





Органларнинг тузилиши



Ҳужайра



Тўқималар



Органлар
системаси



Органлар



Бир бутун
тана

Анатомик атамалар

Суяклар

- Остеология

Мускуллар

- миология

Ички аъзолар

- Спланхнология

Қон томирлар

- Ангиология

Нерв системаси

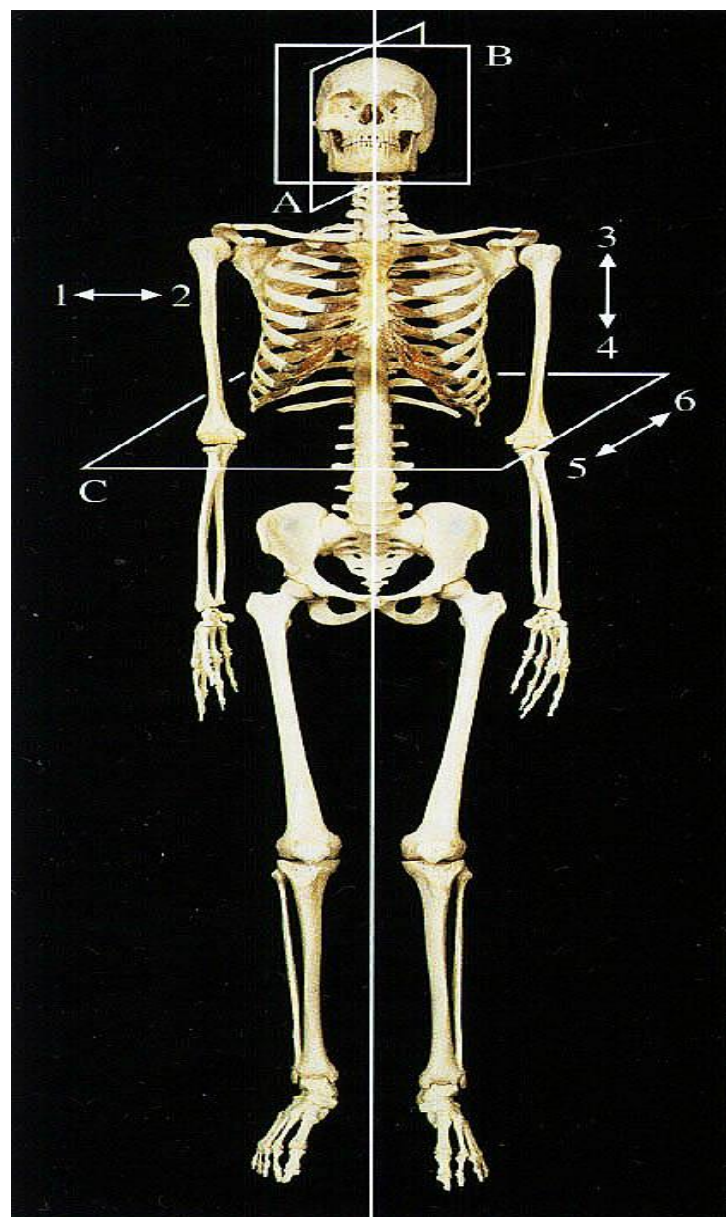
- Неврология

Сезги аъзолари

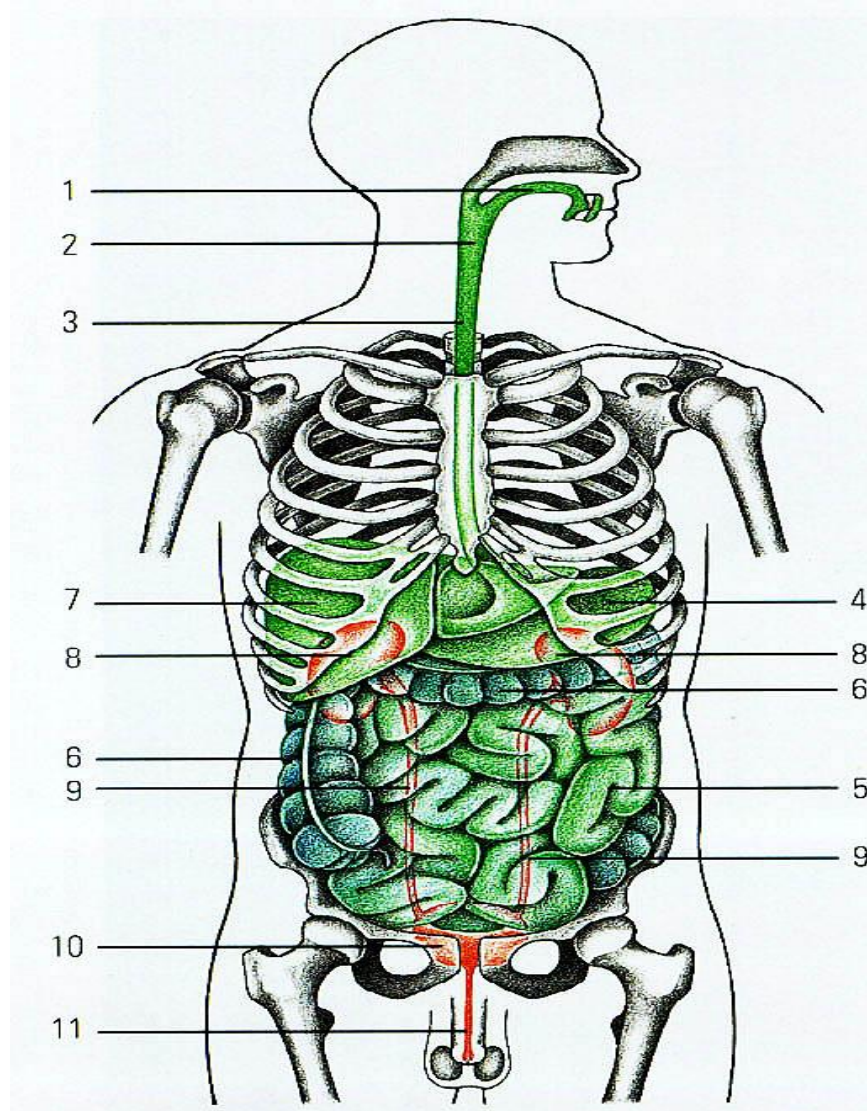
- Эстизиология

Ички секреция безлари

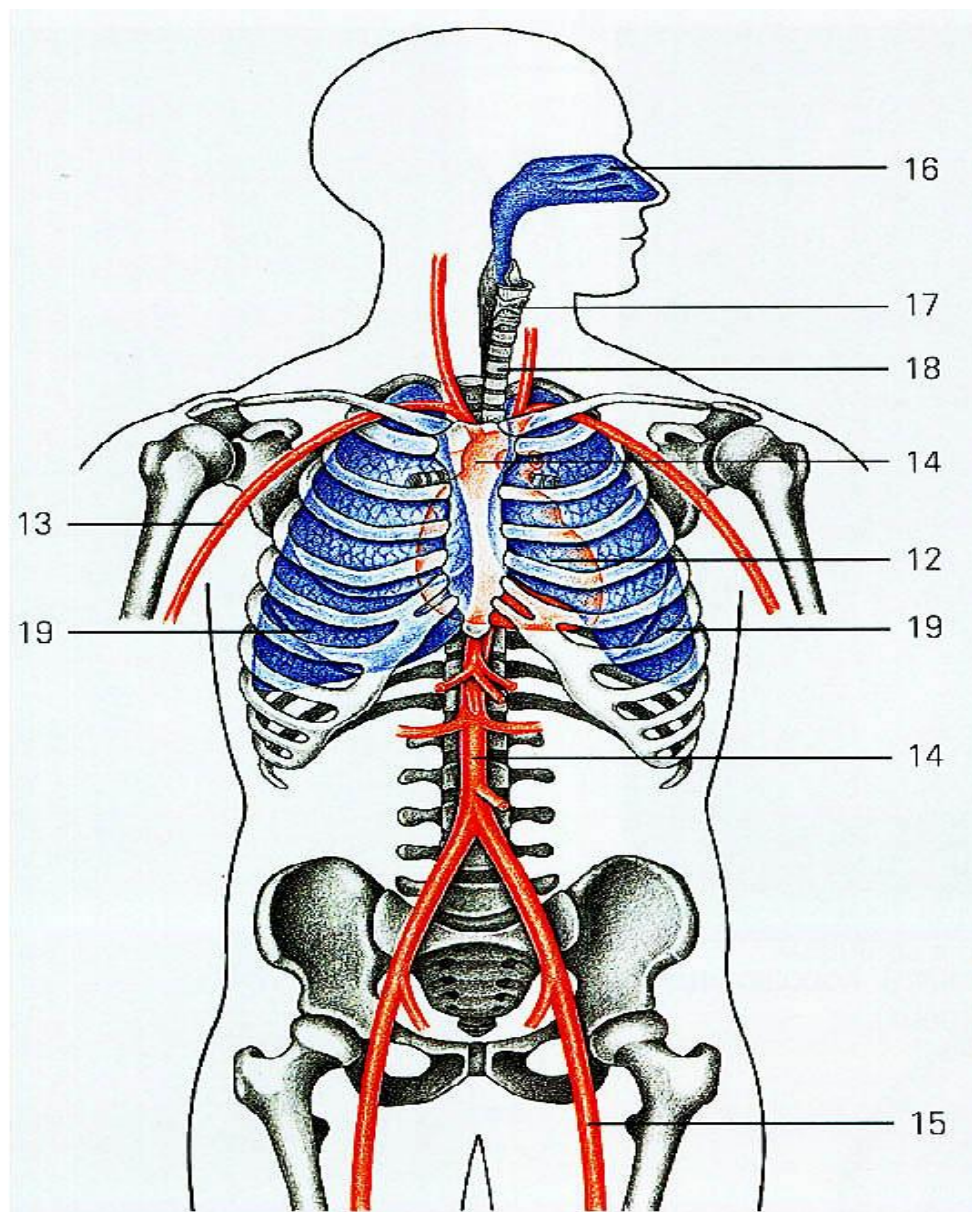
- Эндокринология



Плоскости и оси



Система органов пищеварения и выделения



Системы органов дыхания и кровообращения

Asosiy adabiyotlar ro'yxati

1. Rajamurodov Z.T., Rajabov A.L. "Odam va hayvonlar fiziologiyasi" T.: Tib. Kitob. 2010 y.
2. Nuriddinov.E.N. "Odam fiziologiyasi" T.: "A'loqachi" 2005 y.
3. Almatov K.T., Allamuratov.Sh.I. "Odam va hayvonlar fiziologiyasi" T.: Universitet. 2004 y.
4. Xudoyberdiev.R.E.,I.K.Axmedov. "Odam anatomiyasi" T.: "Ibn Sino" 1993 y.
5. Ahmedov.A. "Odam Anatomiyasi" T.: "Iqtisod moliya" 2007 y.
6. R.Boxodirov "Odam anatomiyasi" T.: "O'zbekiston", 2006 y.
I.K.Axmedov "Atlas odam anatomiyasi" T.: "Uzb. Milliy ensiklopediyasi" 1998y.

8.I.K.Axmedov “Atlas odam anatomiyasi”T.: “Uzb. Milliy ensiklopediyasi”1998y.

9. natomy of the Human Body.Henry Gray. Nega Assefa Alemaya University Yosief Tsige Jimma University. In collaboration with the Ethiopia Public Health Training Initiative, The Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education 2003. 22bet Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to Structure and Function” ThiemeStuttgart · New Yorkhttp: //www.bestmedbook.com /14 bet

Elektron ta’lim resurslari

www.tdpu.uz

www.pedagog.uz

www.physiology.ru/handbooks.html

www.curator.ru/e-books/b22.html