

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ  
БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ  
КАФЕДРА ОБЩЕСТВЕННОГО ЗДОРОВЬЯ И ЗДРАВООХРАНЕНИЯ

## **ПРАКТИКУМ ПО ИСТОРИИ МЕДИЦИНЫ**

## **WORKBOOK IN HISTORY OF MEDICINE**

Рекомендовано Учебно-методическим объединением по высшему медицинскому, фармацевтическому образованию в качестве учебно-методического пособия для студентов учреждений высшего образования, обучающихся на английском языке по специальности 1-79 01 01 «Лечебное дело»



Минск БГМУ 2017

УДК 61(076.5)(075.8)–054.6

ББК 5я73

П69

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ISBN 978-985-567-838-1.

Рассматривается история медицины от первобытного общества до наших дней. Содержит задания разного уровня сложности, представленные в виде таблиц, тестов и схем, что позволяет освоить учебный материал в полном объеме. Задания предназначены как для индивидуальной работы, так и для работы на семинарских занятиях по истории медицины.

Предназначается для студентов медицинского факультета иностранных учащихся, обучающихся на английском языке по специальности 1-79 01 01 «Лечебное дело».

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## Thematic plan of lectures

### IN THE HISTORY OF MEDICINE FOR THE 1ST YEAR STUDENTS OF THE MEDICAL FACULTY FOR INTERNATIONALE STUDENTS

<b>№</b>	<b>Lecture Topic</b>	<b>Hours</b>
1.	The history of medicine as a science. The emergence of medicine in a primitive society	2
2.	Medicine in Ancient World	2
3.	Medicine of the Early and High Middle Ages (V–XV century)	2
4.	Renaissance medicine (XVI–XVII centuries)	2
5.	New Age medicine	4
6.	Therapy in New Age	2
7.	Modern time medicine (XX–XXI century)	4
<b>In total</b>		<b>18</b>

## Thematic plan of seminars

### IN THE HISTORY OF MEDICINE FOR THE 1ST YEAR STUDENTS OF THE MEDICAL FACULTY FOR INTERNATIONALE STUDENTS

<b>№</b>	<b>Seminar Topic</b>	<b>Hours</b>
1.	Medicine in Ancient World	2
2.	Medicine of the Early and High Middle Ages (V–XV century)	2
3.	Renaissance medicine (XVI–XVII centuries)	2
4.	New Age medicine	2
5.	Therapy in New Age	2
6.	Modern time medicine (XX–XXI century)	2
<b>In total</b>		<b>12</b>

### Rating Scale

Completeness of the response	Mark/grade for the answer	
0 %	1	unsatisfactory evaluation
1–40 %	2	
41–50 %	3	
51–60 %	4	
61–70 %	5	satisfactory score
71–80 %	6	
81–90 %	7	
91–95 %	8	
96–100 %	9	

### My rating

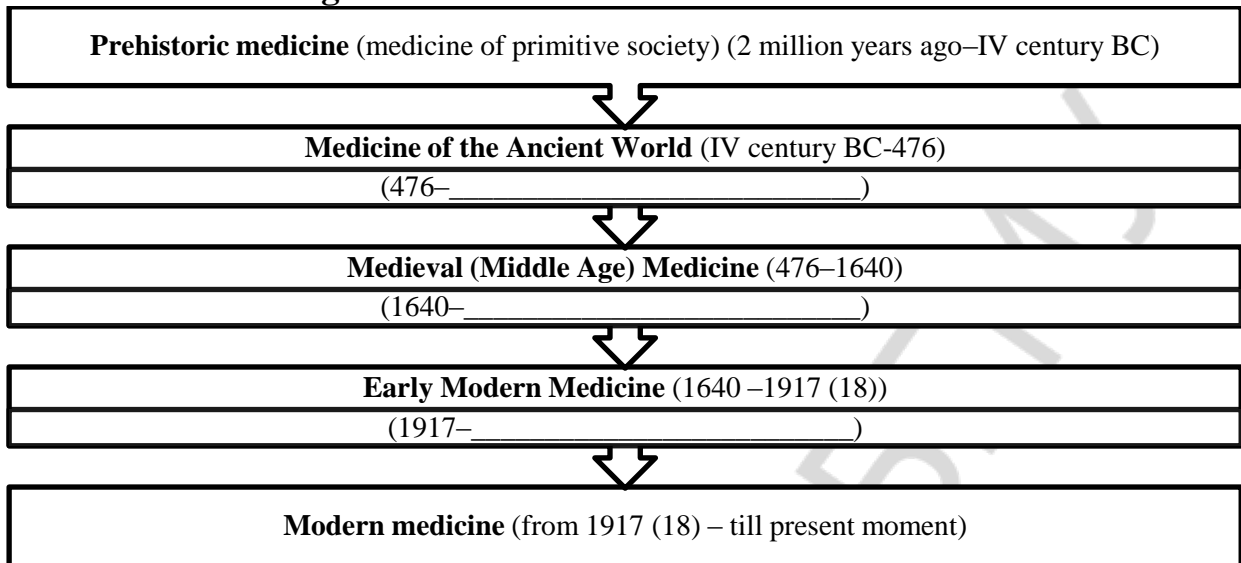
№	Seminar Topic	Oral Answer	Test	Paperwork	Teacher's signature
1.	Medicine in Ancient World				
2.	Medicine of the Early and High Middle Ages (V–XV century)				
3.	Renaissance medicine (XVI–XVII centuries)				
4.	New Age medicine				
5.	Therapy in New Age				
6.	Modern time medicine (XX–XXI century)				
7.	Final test	–		–	

### Makeup Work for the Missed Classes (C) or Lectures (L)






Missed Classes (C) or Lectures (L)	Date	Topic	Mark	Teacher's signature

# MEDICINE IN ANCIENT WORLD

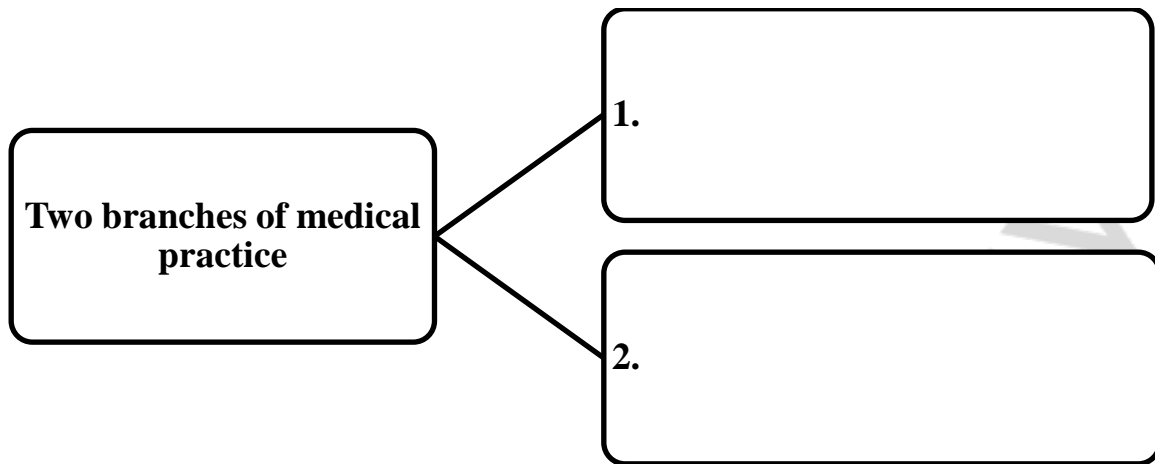
## 1. Fill in the missing information



## 2. Fill in the missing information

1. 	Trephining	Natural Beliefs and Treatments
2. 		
3. 	Mutual aid	
4. 		Supernatural Beliefs and Treatments
5. 	evil spirit	

**3. In Ancient World the two branches of medical practice were formed:**



**4. Write the missing words:**

a) concepts; b) writing; c) family schools; d) civilizations;  
e) class approach; f) hygienic habits; g) ethics

General features of Ancient World countries

- 1) Inventing \_\_\_\_\_, first medical documents.
- 2) \_\_\_\_\_ of the origin of illnesses were developed (connected with natural phenomena, ethics, religion).
- 3) Training medicine men in \_\_\_\_\_, church schools.
- 4) Ancient sanitation facilities appear, people develop \_\_\_\_\_ and traditions.
- 5) Medical practice acquires \_\_\_\_\_.
- 6) Basic medical \_\_\_\_\_ is formed.
- 7) Different \_\_\_\_\_ influence each other in medicine.

**5. Fill in the missing information**

*Sanitary measures in Ancient India:*

- a) Improvement of \_\_\_\_\_
- b) The division of the city into \_\_\_\_\_
- c) The presence of \_\_\_\_\_, water, \_\_\_\_\_
- d) The public baths
- e) The designated \_\_\_\_\_ for garbage collection

## 6. Connect the correct cell

<ul style="list-style-type: none"><li>• <b>Yin</b> is the inner and negative principles,</li><li>• <b>Yang</b>, outer and positive</li></ul>	<b>Concept of the disease: balance of 5 natural elements</b> Water (kidney and bladder), Wood (liver and gallbladder), Fire (heart and small intestine), Earth (stomach and spleen), Metal (lungs and large intestine)
<b>ANCIENT CHINA</b>	The <b>four methods</b> of diagnosis consist of observation, auscultation and olfaction, interrogation, pulse taking and palpation.
<b>ANCIENT INDIA</b>	<b>Diagnosis</b> <ul style="list-style-type: none"><li>• Disease history</li><li>• Patient questioning</li><li>• Palpation and Auscultation</li><li>• Examination of the body</li><li>• Examination of excrement</li></ul>
Philosophical traditions: yoga	<b>Different types of treatments applied:</b> <ul style="list-style-type: none"><li>• 760 herbal plants;</li><li>• Mineral substances</li><li>• Animal-based preparations</li><li>• Surgery</li></ul>

## 7. Check the correct (Yes) and incorrect (No) suggestions

1) Law Code of Hammurabi (1700 BC). According to these laws, both the successful surgeon's compensation and the failed surgeon's liability were determined by the status of his patient.

Yes                       No

2) Ashipu — a specialist in herbal remedies, and in texts is frequently called «physician» because he dealt with empirical applications of medication.

Yes                       No

3) The first attempts to classify the diseases: «Indian range of diseases» (typhoid disease (or diseases of the winds), diseases of nervous system, sexual diseases, from the bites of venomous snakes).

Yes                       No

4) Ancient Iranian doctors are among the first to take an interest in professional diseases of a blacksmith, stonemason, skin tanner, etc.

Yes                       No

5) Egyptian writings survive that demonstrate that they included diagnosis in their medical rituals.

Yes                       No

6) The Egyptians did not have hygienic habits.

Yes                       No

7) The Theory of the Four Humours: Aristotle suggested the body was made up of four humours — blood, phlegm, yellow bile and black bile.

Yes                       No

8) The Hippocratic Oath is a law on healthy living.

Yes                       No

9) The Ancient Greeks believed that to be healthy they needed to exercise. Hygiene was important, with emphasis placed on washing.

Yes                       No

10) The Greek God of Healing, Asclepius Temples were called Asclepiions and people went there to stay when they became ill.

Yes                       No

11) Alexandria became famous for training medics and surgeons. Accurate observation was the key to much of the advancement made there. Doctors from Alexandria went to practise all over the world.

Yes                       No

12) Unlike in the rest of Ancient Greece human dissection wasn't allowed in Alexandria.

Yes                       No

13) The main medical books in Rome were written by Hippocrates and his followers who were all Greek

Yes                       No

14) Galen discovered that the brain, not the heart, controls the speech. He found that the arteries, as well as veins, carry blood through the body.

Yes                       No



## MEDICINE OF THE EARLY AND HIGH MIDDLE AGES (V–XV CENTURY)

### 1. Write the missing words:

a) astrology and the stars; b) trephining; c) hospitals; d) system of education; e) Ibn Sina; f) Al Nafis; g) to protect; i) monasteries; j) the four humours; k) Al-Razi

#### A. In the Islamic Medicine

1. The \_\_\_\_\_, as well as providing care to the sick on site, sent physicians and midwives into the poorer, rural areas, and also provided a place for physicians and other staff to study and research.

2. The \_\_\_\_\_ physicians was well structured.

3. \_\_\_\_\_, known to the Europeans as Rhazes (850–923), was at the forefront of Islamic research into medicine.

4. From a young age, \_\_\_\_\_ gained renown as a physician and teacher, writing many detailed treatises about medicine.

5. \_\_\_\_\_ correctly observed that the blood in the lungs mixed with air, although he also proposed that the blood was also infused with 'spirit' in the left cavity of the heart.

#### B. Medicine in Europe

1. \_\_\_\_\_ themselves in times of epidemics, medieval doctors often carried with them something with a nice smell such as posies.

2. \_\_\_\_\_ also played a part in healing practices.

3. Hospitals began to appear in the \_\_\_\_\_ to help the sick and dying.

4. One common technique that was used by doctors to cure epilepsy was known as \_\_\_\_\_.

5. One of the prevailing theories about disease in medieval medicine was that of \_\_\_\_\_.

### 2. Enter the name of the scientist

A. \_\_\_\_\_

- Differentiated smallpox from measles (rashes, symptoms and outcomes)
- Works in ophthalmology
- Invents cotton wool and an instrument for the extraction of a foreign body from the throat.

**B.** \_\_\_\_\_

– He believed that many diagnoses could be made by simply checking the pulse and the urine, and a large part of the Canon of Medicine is given over to making diagnoses from the color, turbidity, and odor of urine.

**C.** \_\_\_\_\_

– His great contribution to Islamic medicine was his pharmacological works, which drew remedies from all across the world but also introduced mathematics and the idea of dosages to administration of treatments.

– He correctly observed that the blood in the lungs mixed with air.

– He was the first to understand the mechanisms behind the pulse.

**3. What is shown in the picture**



a)

1. Treatment by blood-letting and leeches



b)

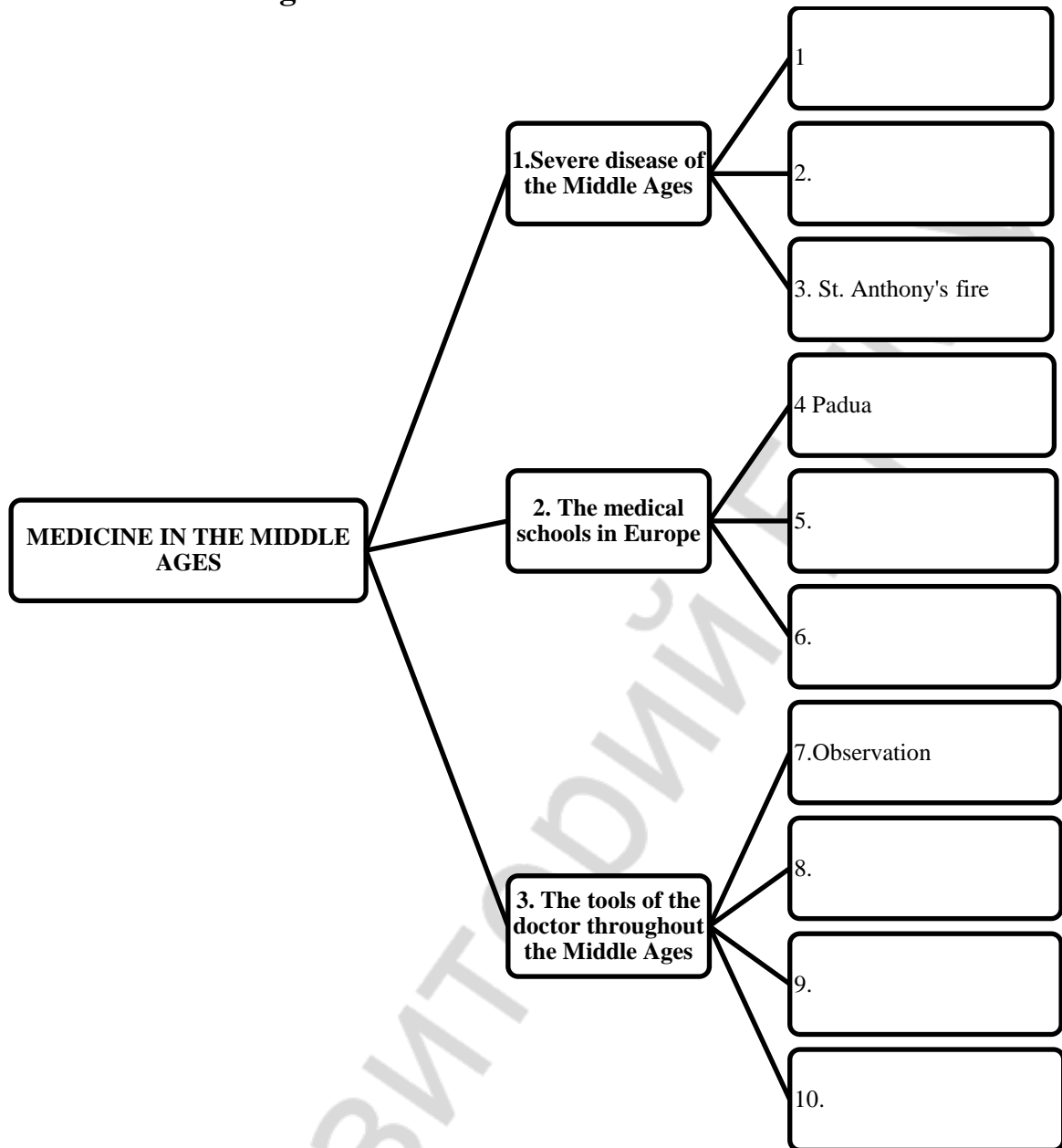
2. Diagnosis by urinoscopy



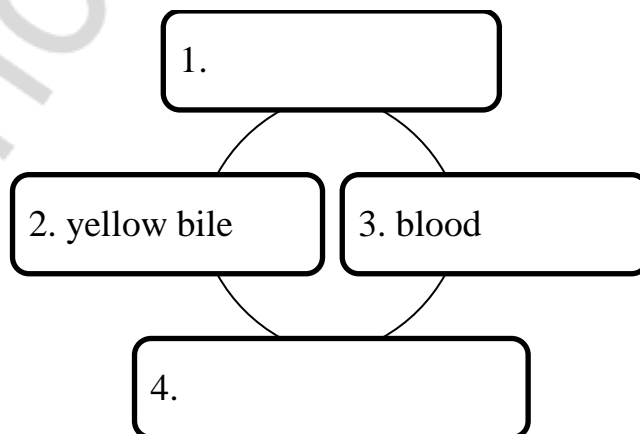
c)

3. Clothing doctor during an epidemic of plague

#### 4. Fill in the missing information



#### 5. The Four Humours (Fill in the missing information)



## RENAISSANCE MEDICINE (XVI– XVII CENTURIES)

### 1. Fill in the missing information

a) Renaissance means \_\_\_\_\_. It began with close study of classic texts and was critical of old translations

b) There was a greater interest in how the human body worked based on \_\_\_\_\_ and \_\_\_\_\_.

c) \_\_\_\_\_ attended dissections of human corpses and did wonderful illustrations for medical books.

d) Return of classical texts led to a renewed faith in the four \_\_\_\_\_ theory and treatment by opposites.

### 2. Enter the name of the term

1)

- It was an early form of pharmacology, influenced by alchemy.

2)

- It was a school of medicine in the seventeenth century which attempted to explain physiological phenomena in mechanical terms.

### 3. Specify the name of the scientist.

a) He was an Italian polymath, painter, sculptor, architect, musician, mathematician, engineer, inventor, anatomist, geologist, cartographer, botanist, and writer.

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b) The Flemish physician is widely considered to be the founder of the modern science of anatomy.

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c) The father of modern physiology, was the first researcher to discover the circulation of blood through the body (in Europe).

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d) The 17<sup>th</sup> century Italian scientist. Historians generally credit him as the 'Founder of Microscopic Anatomy'.

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e) Sometimes he is called the «father» of toxicology. He was born to a chemist father in Switzerland in 1493 and contributed greatly to the fields of medicine and toxicology.

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f) He was an Italian physiologist, physician, and professor, who introduced the quantitative approach into medicine. He is also known as the inventor of several medical devices, including the thermometer.

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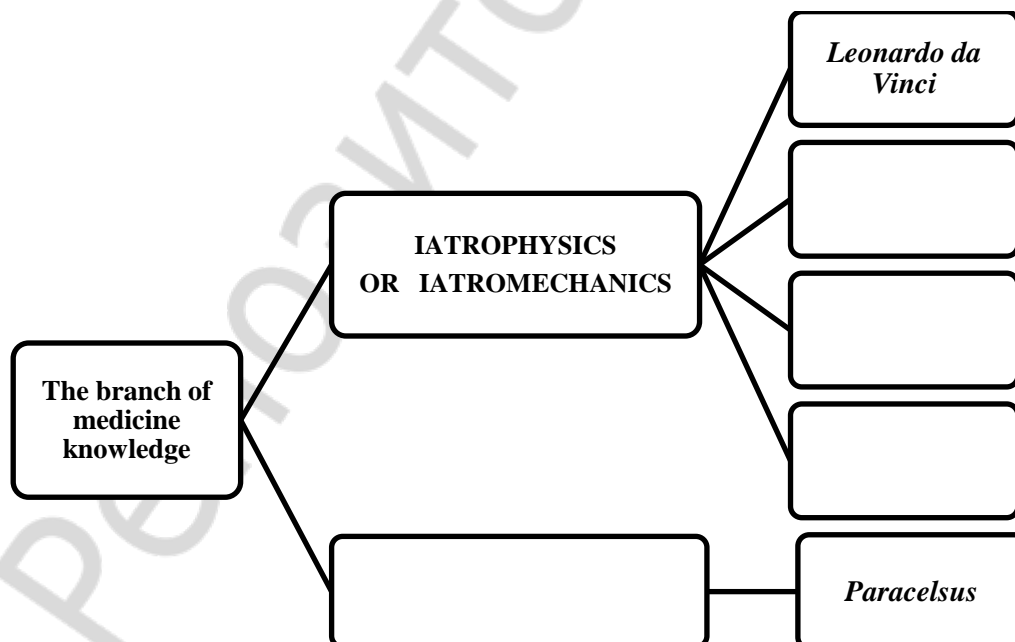
g) He was French mathematician, philosopher, and physiologist (the first systematic account of the mind/body relationship).

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h) French physician, one of the most notable surgeons of the European Renaissance, regarded by some medical historians as the father of modern surgery.

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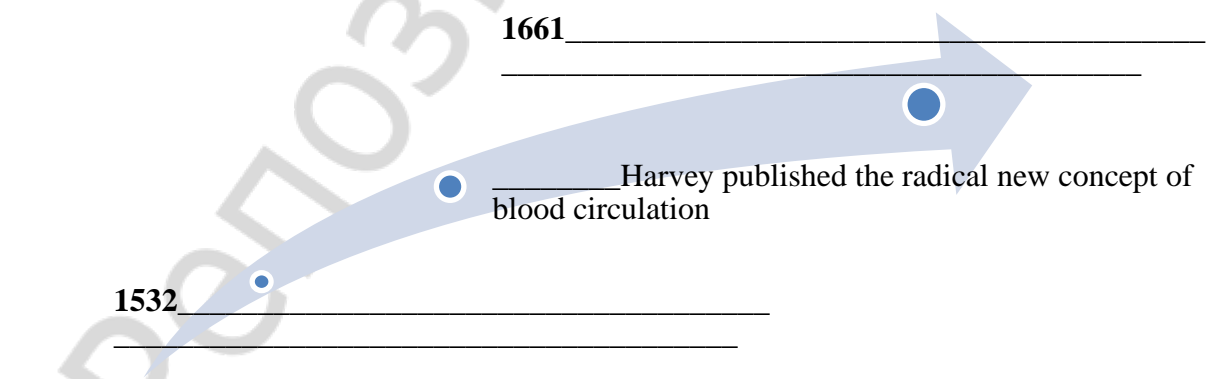
#### 4. Fill in the missing information



## 5. Correlate the scientist and the facts of their lives

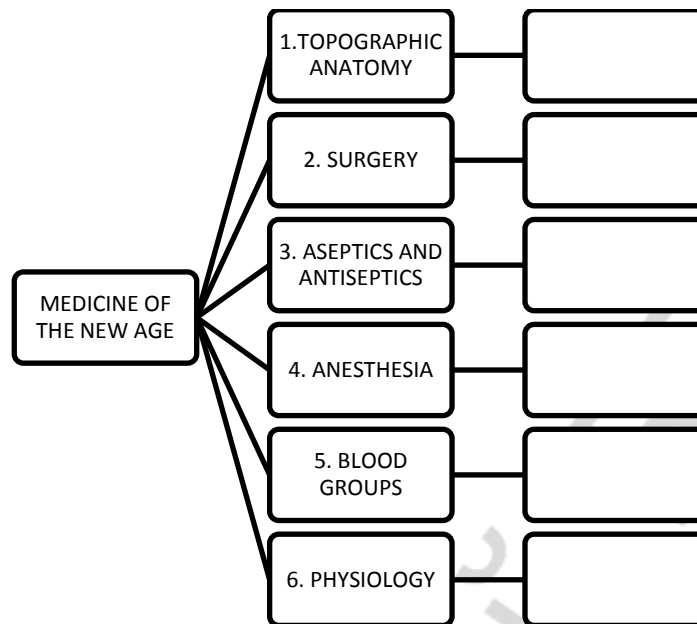
<i>Harvey</i>	.... made over 240 detailed drawings and wrote about 13,000 words towards a treatise on anatomy.
<i>Leonardo di ser Piero da Vinci</i>	....demonstrated that men and women have the same number of ribs. His book "De Humani Commis Fabrica" is one of the most important works about human anatomy.
<i>Vesalius</i>	...published this radical new concept of blood circulation in 1628. He was one of the first to study embryology.
<i>Francis Bacon</i>	...discovery of the capillary circulation was published in the form of two letters.
<i>Marcello Malpighi</i>	"The dose makes the poison."
<i>Ambroise Paré</i>	He singled out three medical problems: preservation of health, treatment of diseases and prolonging life.
<i>Paracelsus</i>	He reported his findings, which was ridiculed because it was written in French rather than in Latin.

## 6. The study of blood circulation



## NEW AGE MEDICINE

### 1. Insert the names of doctors in corresponding fields of medicine:



### 2. Write the missing words:

a) thyroid	b) obstetric	c) syringe	d) Reflexes of the brain	e) Theodor Kocher	f) carbolic acid
g) N.I. Pirogov	h) I.P. Pavlov	i) living tissue	j) laryngectomy	k) irritants	l) I.P. Pavlov

- A. Theodor Billroth made the first <sup>1</sup> esophagectomy and made the first <sup>2</sup> \_\_\_\_\_.
- B. <sup>3</sup> \_\_\_\_\_ received the Nobel Prize in Physiology or Medicine for his work in the physiology, pathology and surgery of the <sup>4</sup> \_\_\_\_\_ gland.
- C. <sup>5</sup> \_\_\_\_\_ was one of the first surgeons in Europe to use ether as an anesthetic (also in field operations).
- D. Ignaz Philipp Semmelweis was a doctor who worked in <sup>6</sup> \_\_\_\_\_ department.
- E. Lister used <sup>7</sup> \_\_\_\_\_ on the surgeons' hands, on the wound and sprayed it in the air.
- F. <sup>8</sup> \_\_\_\_\_ studied principles and physiology of higher nervous activity (reflexes, first and second signal systems).
- G. Charles Pravaz and Alexander Wood invented <sup>9</sup> \_\_\_\_\_.
- H. Sechenov authored the classic <sup>10</sup> \_\_\_\_\_ introducing electrophysiology and neurophysiology into laboratories and teaching of medicine.
- I. <sup>11</sup> \_\_\_\_\_ became the first Russian Nobel laureate.
- J. Vedensky's research was devoted to clarifying the regularities in the reaction of <sup>12</sup> \_\_\_\_\_ to various <sup>13</sup> \_\_\_\_\_.

**3. Fill the blank cells in the table:**

1.		He was the first surgeon to use anaesthesia in a field operation and developed his own technique of using plaster casts to treat fractured bones
2.	<b>Crawford Williamson Long</b>	
3.		He proposed the practice of washing hands with chlorinated lime solutions
4.	<b>Karl Landsteiner</b>	
5.		Most of his work involved research in temperament, conditioning and involuntary reflex actions.
6.	<b>A.M.Filomafitsky</b>	
7.		He is best known as the surgeon who performed the first successful gastrectomy for gastric cancer, after many unsuccessful attempts
8.	<b>I.M.Sechenov</b>	

**4. Fill in the missing information:**

<p>1.Humphrey Davy •1799 • _____</p>	<p>2. _____ _____ •1829 •ether</p>	<p>3.Horace Wells •1844 • _____ _____</p>	<p>4. _____ _____ _____ •1846</p>	<p>5.James Simpson •1847 • _____</p>	<p>6. _____ _____ _____ •1853 • _____</p>
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**5. Briefly describe:**

- ✓ 1. experiments carried out by Pavlov

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- ✓ 2. why Ignaz Philipp Semmelweis decided to use the chlorinated lime solutions

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- ✓ 3. why Joseph Lister decided to use the carbolic acid

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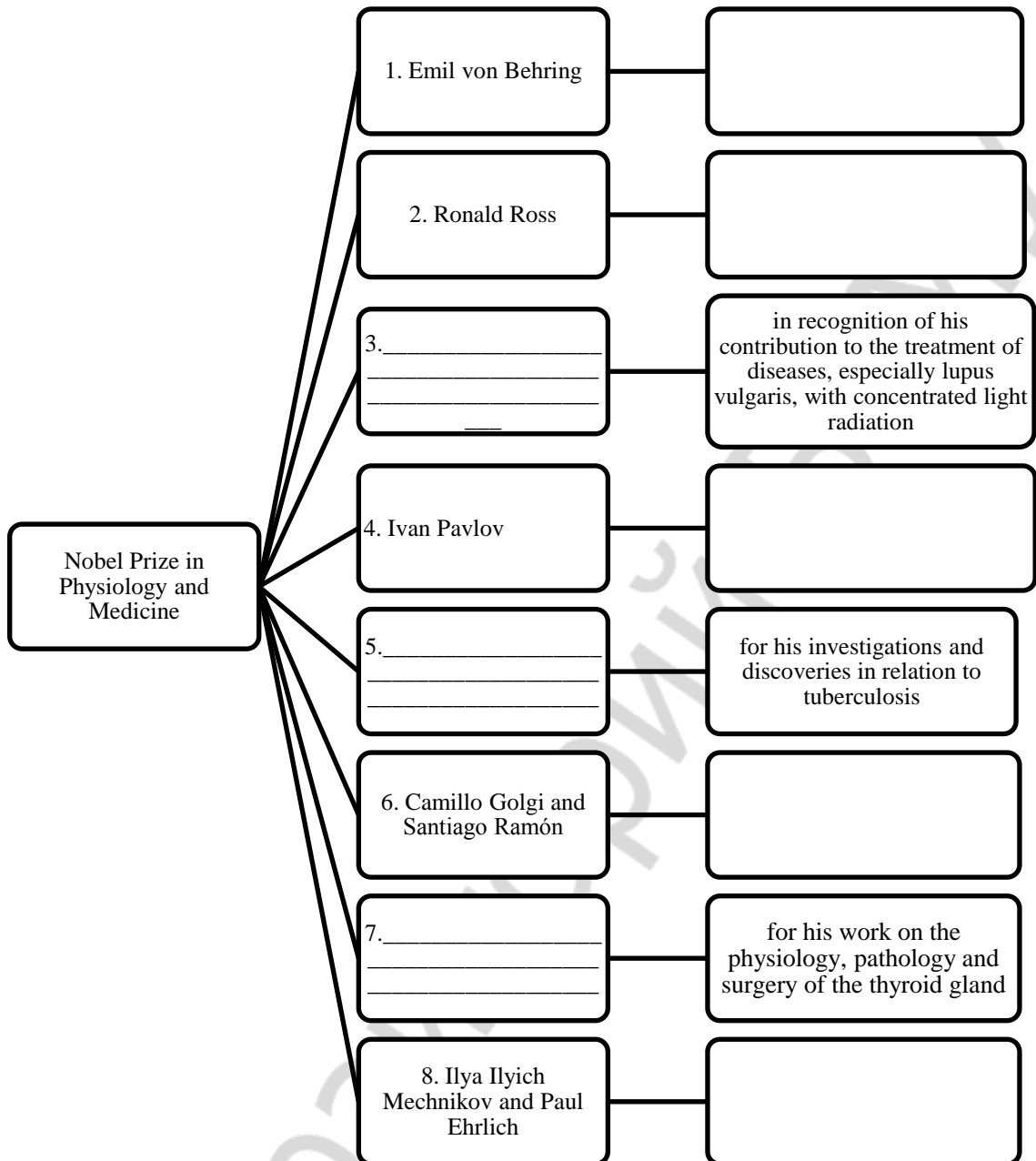
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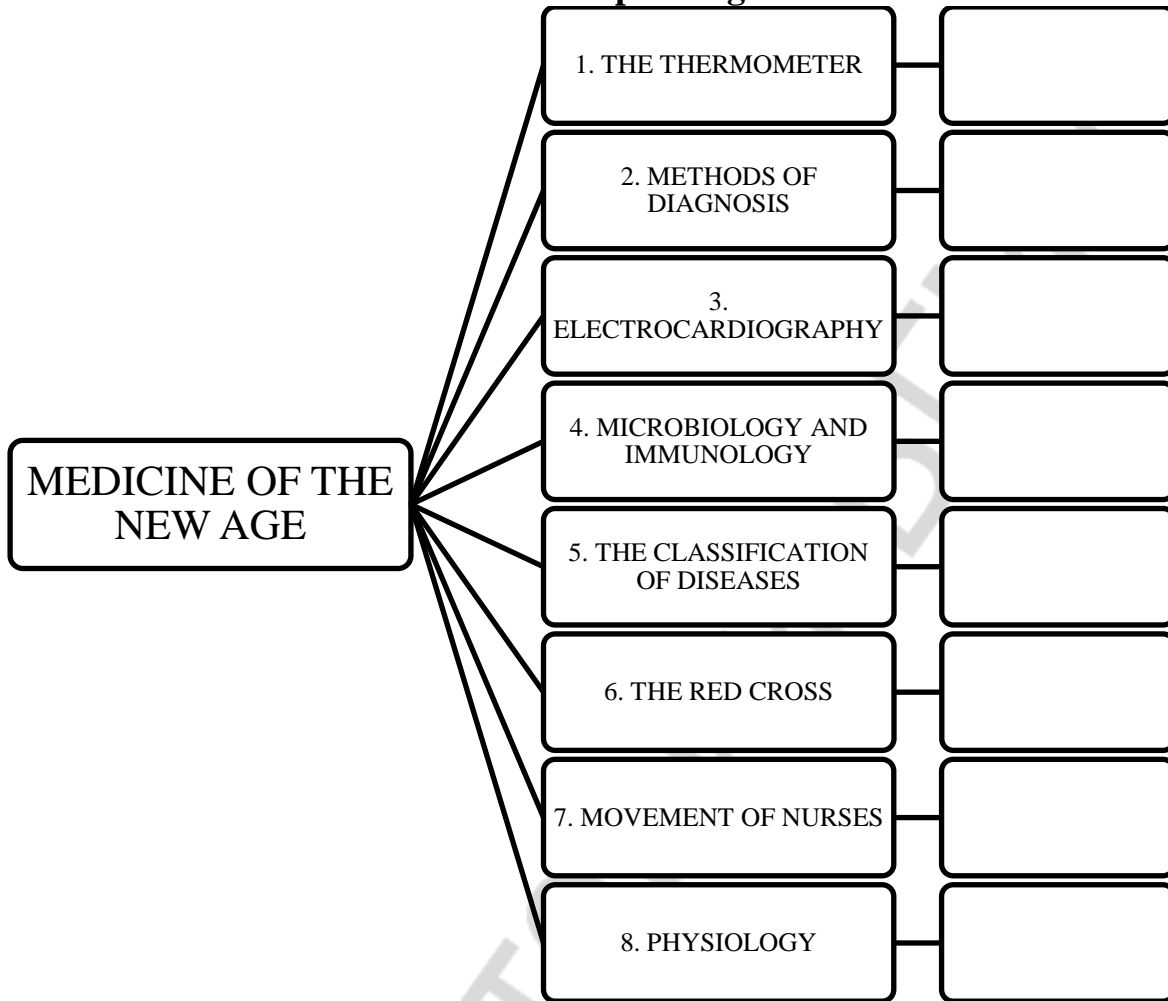
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**6. Fill in the missing information:**



## THERAPY IN NEW AGE

1. Insert the names of doctors in corresponding fields of medicine:



2. Fill in the missing information:

**1. Daniel Gabriel Fahrenheit**

- 1714
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

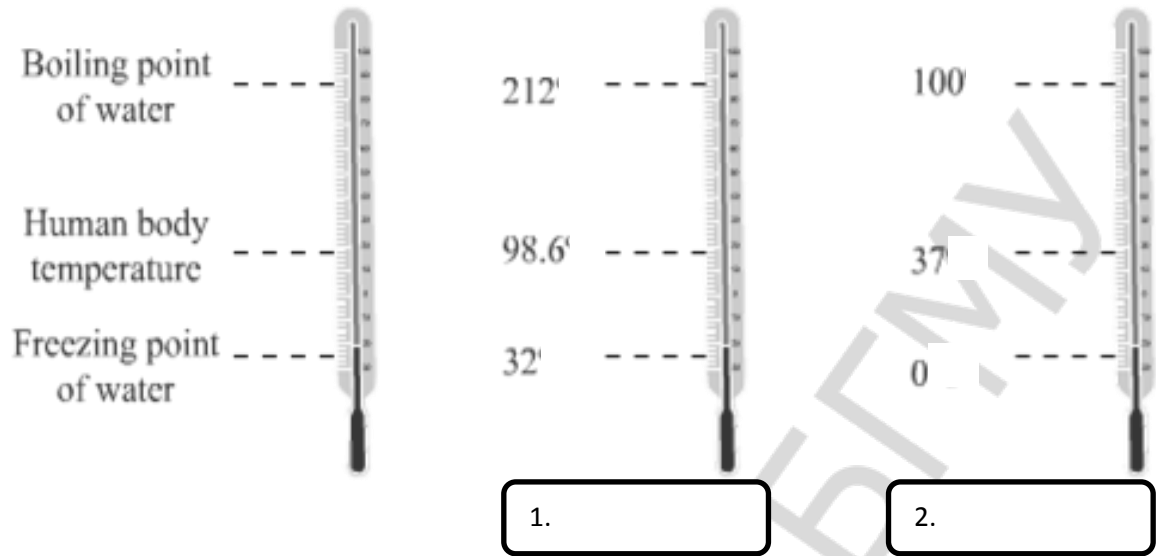
2. \_\_\_\_\_

- 1742
- created a temperature scale which was the reverse of the scale, where 0 represented the boiling point of water, while 100 represented the \_\_\_\_\_ of water

3. \_\_\_\_\_

- 1743
- developed a scale where 0 represented the freezing point of water and 100 represented the \_\_\_\_\_ of water

3. Who is the author of each thermometer?



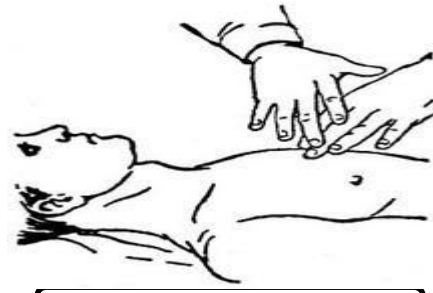
4. Correlate the scientist and his discovery:

<p><b>1. Josef Leopold Auenbrugger or Avenbrugger</b></p>	<p>a. The modern binaural stethoscope with two ear pieces</p>
<p><b>2. René-Théophile-Hyacinthe Laennec</b></p>	<p>b. percussion</p>
<p><b>3. Arthur Leared. George Cammann</b></p>	<p>c. the ophthalmoscope</p>
<p><b>4. Hermann Ludwig Ferdinand von Helmholtz</b></p>	<p>d. stethoscope</p>
<p><b>5. Wilhelm Conrad Rentgen</b></p>	<p>e. electrocardiogram</p>
<p><b>6. Willem Einthoven</b></p>	<p>f. electromagnetic radiation</p>

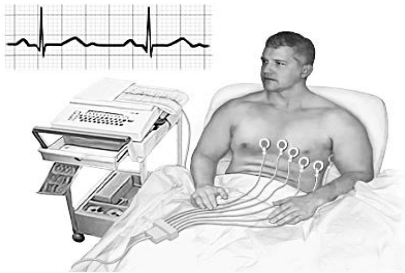
**5. What is the invention? Who is the author of this invention?**



1.



2.



3.



4.



5.

**6. Fill in the missing information:**

<p><b>1. Edward Jenner</b></p> <ul style="list-style-type: none"> <li>• _____</li> </ul>	<p><b>2. _____</b></p> <ul style="list-style-type: none"> <li>• the principles of vaccination, microbial fermentation and pasteurization</li> </ul>	<p><b>3. Paul Ehrlich</b></p> <ul style="list-style-type: none"> <li>• _____</li> <li>• Ilya Ilyich Mechnikov</li> <li>• _____</li> </ul>
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**7. What did the scientist describe?**

1. His father was a hotel keeper. This technique of percussive diagnosis had its origins in testing the level of wine casks in the cellar of his father's hotel.

2. He said to have seen schoolchildren playing with long, hollow sticks in the days leading up to his innovation. The children held their ear to one end of the stick while the opposite end was scratched with a pin, the stick transmitted and amplified the scratch. His skill as a flautist may also have inspired him.

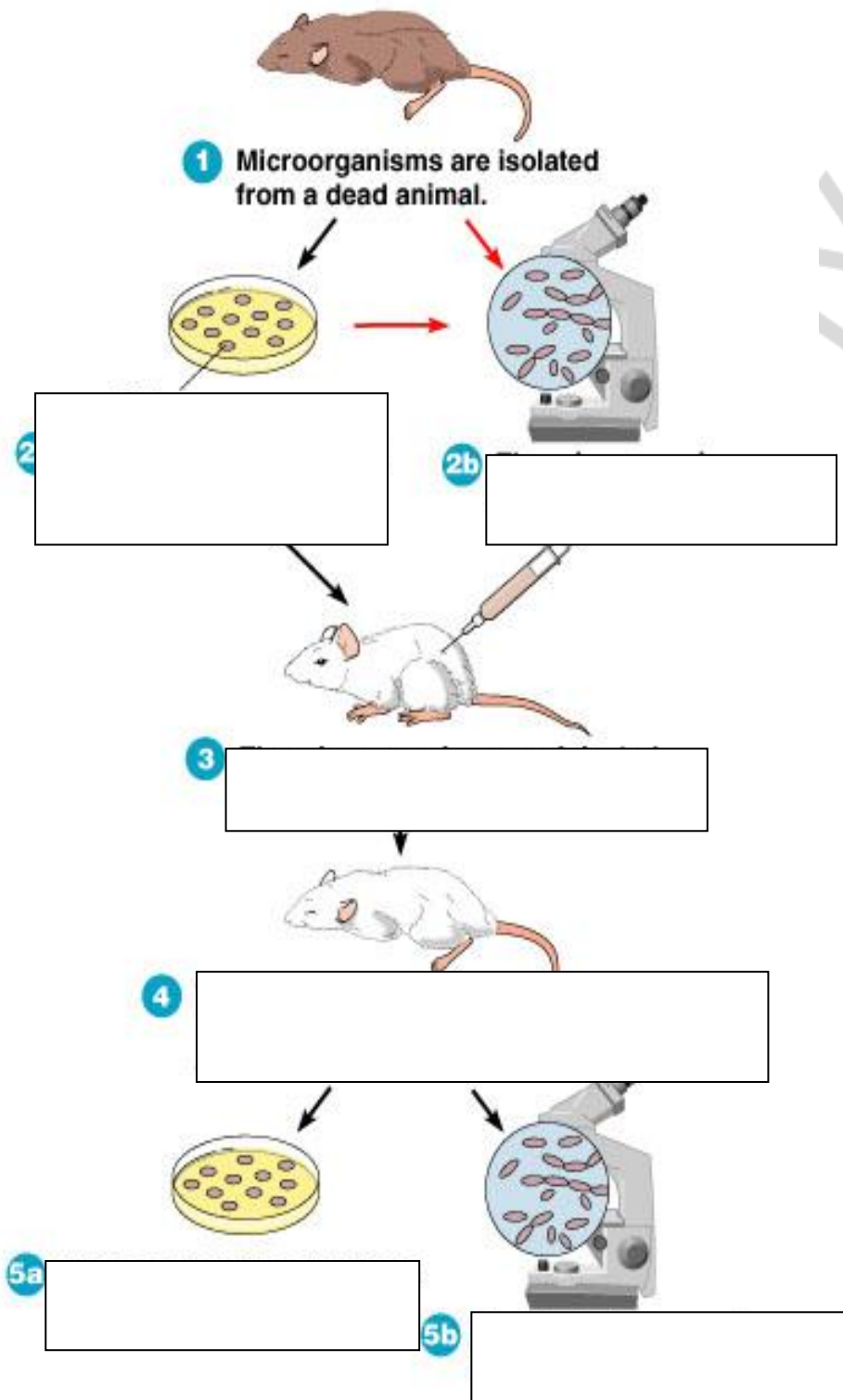
3. His work with this disease won him the Nobel Prize in Physiology and Medicine in 1905. Additionally, his research on tuberculosis, along with his studies on tropical diseases, won him the Prussian Order Pour le Merite.

4. The investigation was on the glycogenic function of the liver; in the course of his study he was led to the conclusion, which throws light on the causation of diabetes mellitus.

5. This scientist laid the foundation of professional nursing with the establishment of nursing school at St Thomas' Hospital in London. It was the first secular nursing school in the world, now part of King's College London.

**8. Fill the blank cells in the table:**

1.	His work, classifying causes of death, was a precursor of the modern code system, the International Classification of Diseases.
<b>2. Jean Henri Dunant</b>	
3.	She is described as "a true pioneer in the graphical representation of statistics", and is credited with developing a form of the pie chart now known as the polar area diagram.
<b>4. François Magendie</b>	
5.	His early research in this laboratory proved to yield one of his major contributions to the field of microbiology, as it was there that he developed the technique of growing bacteria.
<b>6. Willem Einthoven</b>	
7.	He measured the speed at which the signal is carried along a nerve fibre. At that time most people believed that nerve signals passed along nerves immeasurably fast. He used a recently dissected sciatic nerve of a frog and the calf muscle to which it attached. He reported transmission speeds in the range of 24.6 - 38.4 meters per second.



Fill in the missing information in the box.

These postulates were proposed by \_\_\_\_\_

## MODERN TIME MEDICINE (XX–XXI CENTURY)

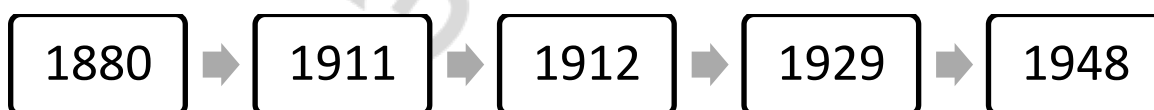
### A. Fill in the gaps.

1. The average life expectancy in the countries of the world has \_\_\_\_\_.
2. The rapid progress of medicine in this era was reinforced by enormous improvements in \_\_\_\_\_ between scientists throughout the world.
3. The specialization \_\_\_\_\_, teamwork became the \_\_\_\_\_.
4. It has become more difficult to ascribe medical accomplishments to \_\_\_\_\_.

### B. Connect pairs.

a. Sahachiro Hata	1. Penicillin
b. Leonard Colebrook	2. Streptomycin
c. Fleming, Florey and Chain	3. Prontosil
d. Albert Schatz, and Elizabeth Bugie	4. Insulin
e. Banting, Best, and Macleod	5. Salvarsan

### C. What events match the specified dates (the history of the discovery of vitamins)



- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_



#### D. Check the correct (Yes) and incorrect (No) suggestions

1. Three seemingly insuperable obstacles beset the surgeon in the years before the mid-19th century: pain, infection, and shock.

- Yes                       No

2. In the 20th century, surgery hasn't progressed farther than in all preceding ages.

- Yes                       No

3. The increasing scope of surgery led to specialization.

- Yes                       No

4. The first transplantation, which is documented, was performed in the USA.

- Yes                       No

5. The first success in heart transplantation was achieved on December 3, 1967, by Christiaan Barnard in Cape Town, South Africa. The recipient, survived for eighteen days.

- Yes                       No

6. In 1966 Robert Edwards defined that human ovum matures in vitro in 36-37 days after lutein hormone peak.

- Yes                       No

7. Helicobacter pylori bacterium is linked to the development of duodenal ulcers and stomach cancer.

- Yes                       No

8. In 1987, the president of the United States and the prime minister of France announced a joint agreement on HIV research.

- Yes                       No

9. Three scientists received the Nobel Prize for the discovery of HIV.

- Yes                       No

## TOPICS FOR DISCUSSION

### Seminar 1. MEDICINE IN ANCIENT WORLD

Date \_\_\_\_\_

Choose your topic

#### Literature:

1. Lecture № 1 and Lecture № 2.
2. *Magner, L. N.* A history of medicine, P. 1–22 (Prehistoric medicine).
3. *Maya, R. K.* History of medicine. P. 2–24 (Medicine of Ancient World).
4. *Magner, L. N.* A history of medicine. P. 25–132 (Medicine of Ancient World).

#### ***Topics for discussion:***

1. History of medicine as a science; its aims, objectives, principles, chapters and periodization.
2. Sources of studying prehistoric medicine and religious concepts in prehistoric society.
3. Medicine in Ancient Egypt: sources of studying, concepts of the disease, anatomy studying, therapy and surgery, sanitary and hygiene, medical ethics.
4. Medicine in Ancient Mesopotamia: sources of studying, concepts of the disease, anatomy studying, therapy and surgery, sanitation and hygiene, medical ethics.
5. Medicine in Ancient Iran: sources of studying, concepts of the disease, anatomy studying, therapy and surgery, sanitation and hygiene, medical ethics.
6. Medicine in Ancient India: sources of studying, concepts of the disease, anatomy studying, therapy and surgery, sanitation and hygiene, medical ethics.
7. Medicine in Ancient China: sources of studying, concepts of the disease, anatomy studying, therapy and surgery, sanitation and hygiene, medical ethics.
8. Medicine in Ancient Greece: concepts of the disease, anatomy studying, therapy and surgery, sanitation and hygiene, medical institutions.
9. Hippocrates. Hippocratic oath and Hippocratic aphorisms.
10. Medicine in Ancient Rome: concepts of the disease, anatomy studying, therapy and surgery, sanitary and hygiene, sanitation constructions, medical institutions.
11. Claudius Galen, his scientific findings.

#### ***Additional information:***

<http://en.wikipedia.org/wiki/Hippocrates>

<http://classics.mit.edu/Browse/browse-Hippocrates.html>

<http://en.wikipedia.org/wiki/Galen>

## Seminar 2. MEDICINE OF THE EARLY AND HIGH MIDDLE AGES (V–XV CENTURIES)

Date \_\_\_\_\_

Choose your topic

---

### **Literature:**

1. Lecture № 2 and Lecture № 3.
2. *Maya, R. K.* History of medicine. P. 26–36.
3. *Magner, L. N.* A history of medicine. P. 135–194.

<b><i>Topics for discussion:</i></b>
1. General characteristic of Medieval times, its chronology.
2. Medicine in Western Europe. First hospitals and first universities.
3. Sanitary conditions in European towns, epidemics of infectious diseases. Girolamo Fracastoro.
4. Surgery in medieval times, differentiation of surgeons.
5. Arab Chalifates medicine. Avicenna (Ibn Sina), Al-Razi.

### ***Additional information:***

[http://en.wikipedia.org/wiki/Ibn\\_sina](http://en.wikipedia.org/wiki/Ibn_sina)

<http://en.wikipedia.org/wiki/Al-Razi>

[http://en.wikipedia.org/wiki/Black\\_Death](http://en.wikipedia.org/wiki/Black_Death)

### Seminar 3. RENAISSANCE MEDICINE (XVI–XVII CENTURIES)

Date \_\_\_\_\_

Choose your topic

#### Literature:

1. Lecture № 4
2. *Maya, R. K.* History of medicine. P. 38–58, 62–66, 69–73.
3. *Magner, L. N.* A history of medicine. P. 197–258, 263–266.

#### *Topics for discussion:*

- |   |
|---|
| 1. General characteristic of <b>Renaissance</b> .   |
| 2. Anatomy studying: <b>Leonardo Da Vinci</b> .   |
| 3. Founder of modern scientific anatomy <b>Andreas Vesalius</b> .                                 |
| 4. Discovery of blood circulation: <b>Servet, Harvey and his experiments, Marcello Malpighi</b> . |
| 5. Iatrochemistry and <b>Paracelsus</b> .   |
| 6. Iatrophysics and iatromechanics: <b>Santorio Santorini, Rene Decart, Francis Bacon</b>         |
| 7. Surgery: <b>Ambroise Pare</b> .  |

#### *Additional information:*

- <http://en.wikipedia.org/wiki/Paracelsus>  
the Hermetic And Alchemical Writings Of Paracelsus  
([http://books.google.by/books?id=\\_Q0MAAAAIAAJ&redir\\_esc=y](http://books.google.by/books?id=_Q0MAAAAIAAJ&redir_esc=y))
- [http://en.wikipedia.org/wiki/Da\\_vinci](http://en.wikipedia.org/wiki/Da_vinci)  
Leonardo da Vinci: Anatomist  
(<http://www.royalcollection.org.uk/exhibitions/leonardo-da-vinci-anatomist>)
- <http://en.wikipedia.org/wiki/Vesalius>  
[http://en.wikipedia.org/wiki/De\\_humani\\_corporis\\_fabrica](http://en.wikipedia.org/wiki/De_humani_corporis_fabrica)  
Andreas Vesalius «De humani corporis fabrica»  
(<http://vesalius.northwestern.edu/>)  
Vesalius Project (<http://www.ospfe.it/per-la-formazione/biblioteca/progetto-vesalio/vesalius-project>)

## Seminar 4. NEW AGE MEDICINE

Date \_\_\_\_\_

Choose your topic

---

### Literature:

1. Lecture № 5 and № 6.
2. *Maya, R. K.* History of medicine. P. 81–90, 93–100, 113–126, 134–153.
3. *Magner, L. N.* A history of medicine. P. 370–375, 423–432, 461–490.

<b>Topics for discussion:</b>
1. General characteristics of New age time
2. Development of clinical medicine: Leopold Auenbrugger (percussion) and Rene Laennec (auscultation)
3. Invention of vaccination: Edward Jenner
4. Theory of pathology: Rudolf Virchow
5. Antiseptics: Ignaz Semmelweis, Joseph Lister
6. Discovery of anesthesia
7. Discovery of blood transfusion and groups of blood
8. Surgery: Theodor Billroth and Emil Kocher.

### Additional information:

[http://en.wikipedia.org/wiki/Leopold\\_Auenbrugger](http://en.wikipedia.org/wiki/Leopold_Auenbrugger)

[http://en.wikipedia.org/wiki/Rene\\_Laennec](http://en.wikipedia.org/wiki/Rene_Laennec)

[http://en.wikipedia.org/wiki/Edward\\_Jenner](http://en.wikipedia.org/wiki/Edward_Jenner)

<http://en.wikipedia.org/wiki/Semmelweis>

<http://en.wikipedia.org/wiki/Anesthesia>

[http://en.wikipedia.org/wiki/Theodor\\_Billroth](http://en.wikipedia.org/wiki/Theodor_Billroth)

[http://en.wikipedia.org/wiki/Emil\\_Kocher](http://en.wikipedia.org/wiki/Emil_Kocher)

## Seminar 5. THERAPY IN NEW AGE

Date \_\_\_\_\_

Choose your topic

---

### **Literature:**

1. Lecture № 6 and № 7.
2. *Maya, R. K.* History of medicine. P. 81–90, 93–100, 113–126, 134–153, 351–353.
3. *Magner, L. N.* A history of medicine. P. 446–448, 495–538, 541–578.

<b>Topics for discussion:</b>
1. Bacteriology: Robert Koch.
2. Microbiology: Louis Pasteur.
3. Roentgen and discovery of X-rays.
4. Immunology: Ilya Mechnikov and Paul Erlich.
5. Physiology: Francois Magendie, Claude Bernard, Hermann Helmholtz.
6. Physiology: Ivan Pavlov.
7. History of electrocardiography.
8. The Red Cross Movement.
9. Florence Nightingale and development of nursing profession.

### **Additional information:**

[http://en.wikipedia.org/wiki/Robert\\_Koch](http://en.wikipedia.org/wiki/Robert_Koch)

[http://en.wikipedia.org/wiki/Louis\\_Pasteur](http://en.wikipedia.org/wiki/Louis_Pasteur)

[http://en.wikipedia.org/wiki/Wilhelm\\_Röntgen](http://en.wikipedia.org/wiki/Wilhelm_Röntgen)

[http://en.wikipedia.org/wiki/Ilya\\_Ilyich\\_Mechnikov](http://en.wikipedia.org/wiki/Ilya_Ilyich_Mechnikov)

[http://en.wikipedia.org/wiki/Ivan\\_Pavlov](http://en.wikipedia.org/wiki/Ivan_Pavlov)

[http://en.wikipedia.org/wiki/Red\\_cross](http://en.wikipedia.org/wiki/Red_cross) [http://en.wikipedia.org/wiki/Florence\\_Nightingale](http://en.wikipedia.org/wiki/Florence_Nightingale)

## Seminar 6. MODERN TIME MEDICINE (XX – XXI CENTURIES)

Date \_\_\_\_\_

Choose your topic

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**Literature:**

1. Lecture № 8 and № 9.
2. *Maya, R. K.* History of medicine. P. 180–191, 214–220, 226–229, 238– 242, 246–248, 115–118, 274–275, 296–297, 322–326, 402–407.
3. *Magner, L. N.* A history of medicine. P. 578–589.

<b>Topics for discussion:</b>
1. General characteristics of modern time medicine, its problems and perspectives.
2. The Nobel Prize in physiology and medicine and its winners.
3. Ronald Ross and fighting malaria.
4. Alexander Fleming and antibiotic era.
5. Discovery of vitamins.
6. Discovery of insulin.
7. Psychotherapy. Sigmund Freud.
8. Organs transplantation.
9. Discovery of Helicobacter pylori
10. Perspectives of the 21st century: telemedicine, minimal invasive surgery, fetal surgery, gene therapy.

**Additional information:**

[http://en.wikipedia.org/wiki/Nobel\\_Prize\\_in\\_Physiology\\_or\\_Medicine](http://en.wikipedia.org/wiki/Nobel_Prize_in_Physiology_or_Medicine)

[http://en.wikipedia.org/wiki/Ronald\\_Ross](http://en.wikipedia.org/wiki/Ronald_Ross)

[http://en.wikipedia.org/wiki/Alexander\\_Flemming](http://en.wikipedia.org/wiki/Alexander_Flemming)

<http://en.wikipedia.org/wiki/Freud>

[http://en.wikipedia.org/wiki/Organ\\_transplantation](http://en.wikipedia.org/wiki/Organ_transplantation)

## Literature

1. Lecture's materials
2. *Maya, R. K.* History of Medicine Jaypee Gold Standard Mini Atlas Series / R. K. Marya // Jaypee Brothers, Medical Publishers, 2009. P. 488
3. *Magner, L. N.* A history of medicine Taylor & Francis,. 2005. P. 632

### Additional information:

1. <http://en.wikipedia.org/wiki/Hippocrates>
2. <http://classics.mit.edu/Browse/browse-Hippocrates.html>
3. <http://en.wikipedia.org/wiki/Galen>
4. [http://en.wikipedia.org/wiki/Ibn\\_sina](http://en.wikipedia.org/wiki/Ibn_sina)
5. <http://en.wikipedia.org/wiki/Al-Razi>
6. [http://en.wikipedia.org/wiki/Black\\_Death](http://en.wikipedia.org/wiki/Black_Death)
7. <http://en.wikipedia.org/wiki/Paracelsus>
8. the Hermetic And Alchemical Writings Of Paracelsus ([http://books.google.by/books?id=\\_Q0MAAAAIAAJ&redir\\_esc=y](http://books.google.by/books?id=_Q0MAAAAIAAJ&redir_esc=y))
9. [http://en.wikipedia.org/wiki/Da\\_vinci](http://en.wikipedia.org/wiki/Da_vinci)
10. Leonardo da Vinci: Anatomist (<http://www.royalcollection.org.uk/exhibitions/leonardo-da-vinci-anatomist>)
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12. [http://en.wikipedia.org/wiki/De\\_humani\\_corporis\\_fabrica](http://en.wikipedia.org/wiki/De_humani_corporis_fabrica)
13. Andreas Vesalius «De humani corporis fabrica» (<http://vesalius.northwestern.edu/>)
14. Vesalius Project (<http://www.ospfe.it/per-la-formazione/biblioteca/progetto-vesalio/vesalius-project>)
15. [http://en.wikipedia.org/wiki/Leopold\\_Auenbrugger](http://en.wikipedia.org/wiki/Leopold_Auenbrugger)
16. [http://en.wikipedia.org/wiki/Rene\\_Laennec](http://en.wikipedia.org/wiki/Rene_Laennec)
17. [http://en.wikipedia.org/wiki/Edward\\_Jenner](http://en.wikipedia.org/wiki/Edward_Jenner)
18. <http://en.wikipedia.org/wiki/Semmelweis>
19. <http://en.wikipedia.org/wiki/Anesthesia>
20. [http://en.wikipedia.org/wiki/Theodor\\_Billroth](http://en.wikipedia.org/wiki/Theodor_Billroth)
21. [http://en.wikipedia.org/wiki/Emil\\_Kocher](http://en.wikipedia.org/wiki/Emil_Kocher)
22. [http://en.wikipedia.org/wiki/Robert\\_Koch](http://en.wikipedia.org/wiki/Robert_Koch)
23. [http://en.wikipedia.org/wiki/Louis\\_Pasteur](http://en.wikipedia.org/wiki/Louis_Pasteur)
24. [http://en.wikipedia.org/wiki/Wilhelm\\_Röntgen](http://en.wikipedia.org/wiki/Wilhelm_Röntgen)
25. [http://en.wikipedia.org/wiki/Ilya\\_Ilyich\\_Mechnikov](http://en.wikipedia.org/wiki/Ilya_Ilyich_Mechnikov)
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30. [http://en.wikipedia.org/wiki/Ronald\\_Ross](http://en.wikipedia.org/wiki/Ronald_Ross)
31. [http://en.wikipedia.org/wiki/Alexander\\_Flemming](http://en.wikipedia.org/wiki/Alexander_Flemming)
32. <http://en.wikipedia.org/wiki/Freud>
33. [http://en.wikipedia.org/wiki/Organ\\_transplantation](http://en.wikipedia.org/wiki/Organ_transplantation)



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# **ПРАКТИКУМ ПО ИСТОРИИ МЕДИЦИНЫ**

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Учебно-методическое пособие

На английском языке

Ответственная за выпуск Т. П. Павлович  
Переводчики М. Н. Петрова, С. В. Куницкая  
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