

**ЗАДАНИЯ (ЧАСТЬ 2) ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ  
ДЛЯ ИНОСТРАННЫХ СТУДЕНТОВ 3 КУРСА НА ПЕРИОД  
КАРАНТИНА**

1. Выполнять задание «Translate each word or phrase», а также, необходимо письменно записывать все слова из тем «MICROBIOLOGY» и «PHARMACOLOGY» в Ваши тетради и учить их наизусть.
2. Выполнять задания № 1,2,3,4,5,6,7,8,9 по темам «MICROBIOLOGY» и «PHARMACOLOGY», которые представлены ниже:

## MICROBIOLOGY

### *Vocabulary*

***Translate each word or phrase:***

microbiological inspection

crude drugs

fungus (*pl* fungi)

mold fungi

yeastlike fungi

pathogenic microorganism

bacteriological control

bacterium (*pl* bacteria)

saprophytic bacteria

microbal cell

smear

vaginal discharge

microorganism of flagellates  
class  
serum drug  
Staphylococcus aureus  
(S.aureus)  
to inoculate  
gram-positive diplococci  
causative agent  
microscopic mites  
pertussis  
microbial contamination  
faecal contamination of water  
infectious type *B* hepatitis  
sanitary meaningful  
microorganisms  
bacillus (*pl* bacilli)  
tuberculous bacilli  
rabies  
nonchromosomal hereditary  
elements  
septicopyaemia  
microscopy exam

***Task 1. Fill in the missing letters.***

1. \_e\_stlike \_\_\_\_\_
2. C\_\_sative \_\_\_\_\_
3. Sm\_\_r \_\_\_\_\_
4. T\_b\_rcul\_ us \_\_\_\_\_
5. Pert\_s\_is \_\_\_\_\_
6. Baci\_l\_s \_\_\_\_\_
7. Rab\_\_s \_\_\_\_\_

**Task 2. Unscramble the following words.**

1. y-h-e-r-e-t-a-r-d-i \_\_\_\_\_
2. a-r-s-a-i-t-y-n \_\_\_\_\_
3. e-t-i-n-a-o-l-c-u \_\_\_\_\_
4. i-f-g-u-n \_\_\_\_\_
5. u-s-e-m-r \_\_\_\_\_
6. l-m-i-a-r-c-b-o \_\_\_\_\_
7. i-c-s-a-t-h-y-p-r-p-o \_\_\_\_\_

**Task 3. Match the words from column A with ones from column B to make a word combination.**

<b>Column A</b>	<b>Column B</b>
1 microbiological	a) exam
2 microorganism	b) microorganisms
3 microscopy	c) diplococci
4 nonchromosomal	d) of flagellates class
5 sanitary meaningful	e) control
6 gram-positive	f) inspection
7 bacteriological	g) hereditary elements

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

**Task 4. Fill in the gaps using the words from the box.**

<i>infectious type B hepatitis</i>	<i>serum drugs</i>	<i>vaginal</i>
<i>discharge</i>	<i>microscopic mites</i>	<i>staphylococcus</i>
<i>aureus</i>		
<i>faecal contamination of water</i>		<i>microbial contamination</i>

1. The menstrual flow is a \_\_\_\_\_, which are very common, most women have them.

2. \_\_\_\_\_ is a gram-positive, round-shaped bacterium that is a member of the normal flora of the body, frequently found in the nose, respiratory tract, and on the skin.

3. We all almost certainly seem to have Demodex living on our faces. You can't see them, but they're there. They are \_\_\_\_\_, eight-legged creatures rather like spiders. Almost every human being has them.

4. The \_\_\_\_\_ resources is the main reason for endemic intestinal and infectious disease in Georgia.

5. Measurements of \_\_\_\_\_ concentrations are most often useful during prophylactic drug therapy, in patients with major pharmacokinetic disturbances, and when patients show unusual and unexplained sensitivity or resistance to therapy with a drug.

6. The reagents have to be sealed immediately after use to avoid evaporation and \_\_\_\_\_.

7. The \_\_\_\_\_ cannot be spread by holding hands, sharing eating utensils, kissing, coughing, sneezing, or breastfeeding. The infection can be diagnosed 30 to 60 days after exposure.

**Task 5. Read the text.**

## **MICROBIOLOGY**

Microbiology is the study of microscopic organisms that are either single-celled (unicellular), cell colony (multicellular) or acellular (lacking cells). The science includes many sub-disciplines like virology, mycology, parasitology and bacteriology.

Microbiologists study bacteria, archaea, algae, fungi, protozoa, and viruses. They research eukaryotic microorganisms which possess membrane-bound cell organelles and include fungi and protists, whereas prokaryotic organisms are conventionally classified as lacking membrane-bound organelles and include eubacteria and archaeobacteria. Microbiologists traditionally rely on culture, staining,

and microscopy. However, less than 1% of the microorganisms present in common environments can be cultured in isolation using current means.

Historians are unsure who made the first observations of microorganisms, but the microscope was available during the mid-1600s, and an English scientist named Robert Hooke made key observations.

He observed strands of fungi among the specimens of cells he viewed. In the 1670s and the decades thereafter, a Dutch merchant named Anton van Leeuwenhoek made careful observations of microscopic organisms, which he called animalcules. This scientist revealed the microscopic world to scientists of the day and is regarded as one of the first to provide accurate descriptions of protozoa, fungi, and bacteria.

The development of new experimental techniques and ability to sequence organisms without actually culturing them in the laboratory has revealed diversity and complexity in the microbial world not previously known. Today microbiologists can easily innovate new diagnostic kits (e.g. pathogen detecting, antigen detecting, receptor detecting etc), and discover new drugs with antibiotic sensitivity tests, zone of inhibitions etc. Hundreds of enzyme properties, antibiotic properties within microorganisms are being detected daily and are applied in many fields like Medical, Dairy, Pharmaceutical, Industrial, Clinical, research, water industry, agriculture, nanotechnology, chemical etc.

***Task 6. Answer the questions:***

1. What is microbiology?
2. What sub-disciplines does microbiology include?
3. What microorganisms do microbiologists study?
4. Who first provided accurate descriptions of protozoa, fungi, and bacteria?
5. What can microbiologists innovate and discover today?

**Task 7. Match the words from column A with synonyms from B.**

Column A	Column B
1 unicellular	a) to contain
2 multicellular	b) exact
3 include	c) pluricellular
4 lacking	d) to trust
5 to rely on	e) to find
6 to discover	f) to consider
7 to regard	g) monadiform
8 accurate	h) missing
9 to apply	i) to use

**Task 8. Choose the correct variant:**

1. \_\_\_\_\_ M  
 microbiology is the study of microscopic organisms that are either \_\_\_\_\_
- a) unicellular, multicellular or having excess of cells.  
 b) homocells, lacking cells or possess membrane-bound cell organelles.  
 c) single-celled, cell colony or acellular.
2. Less than 1% of the microorganisms present in common environments can \_\_\_\_\_
- a) be cultivated in fresh air using current means.  
 b) be cultured inside the laboratory using current means.  
 c) be grown in isolation using current means.
3. Anton van Leeuwenhoek made careful observations of \_\_\_\_\_
- a) animalcules.  
 b) fungi.  
 c) protozoa.
4. Microbiologists can NOT \_\_\_\_\_
- a) discover new drugs.  
 b) detect pathogens.  
 c) do operations.

**Task 9. Put the words in the correct order to create a sentence:**

1. The science/ many sub-disciplines/ includes / like virology/  
mycology/ and bacteriology/ parasitology.

---

---

2. Microbiologists / rely on / traditionally/ and microscopy / culture/  
staining.

---

---

3. are unsure/ Historians/ the first observations /who made/  
of microorganisms/ but the microscope/ during the mid- 1600s/  
was available.

---

---

4. enzyme properties / Hundreds of/ within microorganisms/  
antibiotic properties/ daily/ are being detected/

---

---

## PHARMACOLOGY

### *Vocabulary*

***Translate each word or phrase:***

acetylsalicylic acid

acute heart failure

acute poisoning

adipose tissue redistribution

amebic dysentery

anesthetic

angiotensin

antiarrhythmic medicine  
anti-inflammatory effect  
antiplatelet  
antipyretic  
anxiolytic action  
blood vessels  
cardiac glycoside intolerance  
chemotherapeutic agent  
clonidine  
to complain  
conductive  
contraindication  
derivative  
disorder  
to eliminate  
excitation  
forced diuresis  
gastric (peptic) ulcer  
herpes  
hypnotic  
increase  
indications  
inhibition  
meiosis  
muscarinic receptor  
myotropic  
to relieve  
stenocardia  
suppression



**Task 1. Fill in the missing letters.**

1. H\_pn\_ti\_ \_\_\_\_\_
2. D\_so\_d\_r \_\_\_\_\_
3. Po\_s\_ni\_g \_\_\_\_\_
4. Me\_os\_s \_\_\_\_\_
5. \_ompla\_n \_\_\_\_\_
6. A\_et\_lsalic\_lic \_\_\_\_\_
7. E\_cita\_ion \_\_\_\_\_

**Task 2. Unscramble the following words.**

1. i-e-i-n-a-t-e-m-l \_\_\_\_\_
2. b-i-n-o-i-t-i-n-h-i \_\_\_\_\_
3. p-m-y-c-o-t-o-i-r \_\_\_\_\_
4. p-s-u-p-e-s-i-n-s-o-r \_\_\_\_\_
5. o-m-l-i-n-c-p-a \_\_\_\_\_
6. c-u-l-r-e \_\_\_\_\_
7. h-i-n-e-s-t-c-e-t-a \_\_\_\_\_

**Task 3. Match the word from column A with ones from column B to make a word combination**

Column A	Column B
1 acute	a) tissue
2 gastric	b) vessels
3 acetylsalicylic	c) action
4 anxiolytic	d) heart failure
5 blood	e) ulcer
6 adipose	f) diuresis
7 forced	g) acid

**Task 4. Fill in the gaps using the words from the box.**

<i>antiarrhythmic medicine</i>	<i>amebic</i>	<i>clonidine</i>
<i>antipyretic</i>	<i>relieve</i>	<i>herpes</i>
<i>derivative</i>		

1. The man with high temperature has been prescribed \_\_\_\_\_ medicine.
2. A patient with a heart rhythm disorder should be given \_\_\_\_\_.
3. What chemotherapeutic agent is a drug of choice for treatment of \_\_\_\_\_?
4. What drug is more advisable for the patient with \_\_\_\_\_ dysentery?
5. A patient with hypertensive crisis has been given an intravenous injection of \_\_\_\_\_.
6. Diazepam used in patients with neurosis is \_\_\_\_\_ of benzodiazepine.
7. The student asked the pharmacist to recommend him the drug to \_\_\_\_\_ allergic rhinitis symptoms.

**Task 5. Read the text.**

## **PHARMACOLOGY**

Pharmacology is the branch of medicine and pharmacy concerned with the study of drug action, where a drug can be broadly defined as any man-made, natural, or endogenous (from within body) molecule which exerts a biochemical or physiological effect on the cell, tissue, organ, or organism. More specifically, it is the study of the interactions that occur between an organism and chemical agents that affect normal or abnormal biochemical and physiological function. If substances have medicinal properties, they are considered pharmaceuticals.

The field encompasses drug composition and properties, synthesis and drug design, molecular and cellular mechanisms, organ/systems mechanisms, signal transduction/cellular communication, molecular diagnostics, interactions, toxicology, chemical biology, therapy, and medical applications and antipathogenic capabilities. The two main areas of pharmacology are pharmacodynamics and pharmacokinetics. Pharmacodynamics studies the effects of a drug on biological systems, and

Pharmacokinetics studies the effects of biological systems on a drug. In broad terms, pharmacodynamics discusses the interaction of chemical agent with biological receptors, and pharmacokinetics discusses the absorption, distribution, metabolism, and excretion (ADME) of chemical substances from the biological systems. Pharmacology is not synonymous with pharmacy and the two terms are frequently confused.

Pharmacology, a biomedical science, deals with the research, discovery, and characterization of chemical agents which show biological effects and the elucidation of cellular and organismal function in relation to these agents.

***Task 6. Answer the questions:***

1. What is pharmacology?
2. What substances are considered pharmaceuticals?
3. What does pharmacology encompass?
4. What are the two main areas of pharmacology?
5. What does pharmacodynamics study?

***Task 7. Match the words from column A with synonyms from column B.***

Column A	Column B
1 concerned	a) widely
2 broadly	b) to circumscribe
3 to encompass	c) law
4 occur	d) interested
5 to consider	e) uses
6 applications	f) to regard
7 capabilities	g) to happen
8 elucidation	h) explanation
9 principle	i) abilities

***Task 8. Which of the following statements are true and which are false?***

1. Pharmacology is the study of the interactions that occur between an organism and chemical agents that affect normal or abnormal biochemical and physiological function.

2. If substances don't have medicinal properties, they are considered pharmaceuticals.

3. Pharmacokinetics studies the effects of biological systems on a drug.

4. Pharmacology is synonymous with pharmacy.

5. Pharmacology deals with the research, discovery, and characterization of chemical substances.

**Task 9. Put the words in the correct order to make up a sentence:**

1. the branch /of medicine/ the study/ action / is/ Pharmacology/ concerned with / of drug.

---

---

2. have/properties/they/ medicinal/ are considered/ If substances pharmaceuticals.

---

---

3. is not/ synonymous /and / terms/ confused/ Pharmacology/ with pharmacy/ the two/ are frequent.

---

---

4. a biomedical science /Pharmacology/the research/ and/ discovery/ characterization/ of chemical substances/deals with/ which / biological effects/ show.

---

---

5. contrast / The primary/ their/ between /distinctions/ between/ direct-patient /care/ the two/ is.

---

---