

Dear colleagues,

Pharmacy students,

Please **read carefully** the following instructions concerning your exam in *General and Clinical Pathology*, which will be held in June 2021. The exam will be in person!

The exam will start at 8.00 am.

Only students who are in the list for that particular day will be permitted to enter the auditorium, wearing masks (gloves are optional) and the required distance between each one will be kept.

The results of the exam will depend on your answers to **21 closed and 4 open questions.**

Closed questions are in the form of a test (mcqs).

Each question has **only one correct** answer. Each correct answer to the first ten questions (you have two options to choose from) gives you 1 point; the correct answers to questions 11 to 21 incl. (you choose between four options) give you 2 points. The maximum number of points is 32.

Open questions require you to write the definition and description of types of lesions, classification, evolution, etc. (*see examples below*). You will have to answer four open questions - two from general pathology and two from clinical. According to the answer to the open question you will receive respectively:

0 points - no answer / wrong answer

1 point - answer for average (3)

2 points - answer for good (4)

3 points - answer for very good (5)

4 points - answer for excellent (6)

The assessment of the number of points will be made by a commission - habilitated lecturer and assistant.

After calculating the number of points on the test (closed questions)
+ those earned by the answers to the open questions:

32p. + 16p. = 48p. (Max. points)

The point summation will determine the final grade as follows:

up to 29 points incl. (60%) - Poor (2)

30 - 35 points - Average (3)

36 - 40 points - Good (4)

41 - 45 points – Very good (5)

46 - 48 points - Excellent (6)

The time you will have for the exam (closed and open questions) will be **60 minutes**.

There will be no oral exam!

Sample questions:

№	<i>Closed questions</i>	<i>Answer</i>	Approx. response time	Score in points
1.	Is the necrosis in cerebral infarction caseous?	a) yes b) no (correct)	30 sec	1p.
2	Is the brown pigment bilirubin detected in brown induration of the lungs?	a) yes (wrong answer) b) no	30 sec	0p.

12	“Nut meg” liver is the result of :	a) acute venous congestion b) chronic venous congestion (correct) c) acute viral hepatitis d) toxic hepatic dystrophy	1 min.	2p.
21	Gumma luetica is:	a) primary affect in		

		<p>lues</p> <p>b) painful ulcer</p> <p>c) occurs in the second stage of lues</p> <p><i>(wrong answer)</i></p> <p>d) manifestation of tertiary lues</p> <p><i>(correct)</i></p>	1 min.	Op.
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Open questions:

From general pathology:

- What is fibrinoid necrosis? What organ localisations do you know?

FN develops after severe destruction of collagen, which releases elements that comprise it (proteins) - albumins, globulins, fibrinogen, AG-AT complexes (fibrinoid), etc., which when stained are dyed as fibrin; in addition, there is cell necrosis in the center of destruction. That is why it is also called fibrinoid necrosis. Most often, FN is located at the bottom of an active chronic ulcer or acute ulcer in the stomach or duodenum. FN is also found in the wall of arteries in hypertensive crises developed due to malignant hypertension as a result of ischemic endothelial damage and ingestion of plasma proteins in the vessel wall.

Correct answer for excellent - 4 points.

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From clinical pathology:

- What is lung cancer? Where does it originate from? What histological types are you familiar with? In which organs does it most often metastasize and by what route?

Lung cancer is a malignant epithelial tumour. It develops as a result of malignant transformation of the epithelial cells of the bronchi (most often after metaplasia), from the epithelium of the bronchial glands or from that of the alveoli. The histological types are squamous cell and adenocarcinoma. Gives metastases to the liver.

Correct but incomplete answer - 2 points

Omitted - neuroendocrine carcinomas of the lungs - small-cell and large-cell, as well as adenosquamous. The ways of metastasis are not mentioned either - by lymph: in hilar, paratracheal, mediastinal, supraclavicular lymph nodes, also in the pleura; and by blood - in the liver (correct), but also in the brain, adrenal glands and bones. By canalicular way - along the bronchi in adjacent organs.

Sample tests for preparation - those from the textbook and those uploaded on the website of the department <https://www.pathology-plovdiv.com/>

For the open questions - the textbook you have:
-"General and Clinical Pathology" for students of pharmacy, edited by Assoc. Prof. B. Anavi, Medical University - Plovdiv. Department of General and Clinical Pathology, ISBN 978-619-7091-15-1, reprinted annually from 2012 to 2019; / B. Anavi, V. Belovezhdov, D. Staribratova, V. Danev, J. Peshev, G. Ivanov, Illustrations, exam tests and terminological dictionary: I. Bivolarski, D. Lapteva, S. Genova, D. Staykov, E. Poryazova, D. Tashkova, M. Koleva, S. Bachurska, K. Dangelov.

-“General and Clinical Pathology” for pharmacy students, edited by B. Anavi, Plovdiv, 2018 and 2019. / B. Anavi, V. Belovezhdov, D. Staribratova, V. Danev, Zh. Peshev, G. Ivanov, Figures, tests and terminological vocabulary: I. Bivolarski, D. Bojkova, D. Serteva, S. Genova, D. Staikov, E. Poryazova, D. Tashkova, M. Koleva, S. Bachurska, K. Dangelov .

- and additional teaching aids presented on the university website - MU-Plovdiv , Med. Faculty, Departments - Department of General and Clinical Pathology, textbooks.