# ПИТАННЯ ДЛЯ ПІДГОТОВКИ СТУДЕНТІВ 2 КУРСУ

# ДО ЕКЗАМЕНУ З ДИСЦИПЛІНИ “ІМ”

**(усна частина)**

1. Speak about the latest trends in Telecoms and IT.

**[1]** The latest and modern focus for telecommunications is fast and reliable data transmission. This can be achieved with using 5G technologies. Imagine being

able to download all seasons of “Game of Thrones” in one minute.

As for the IT sphere, the main trends are: AI, Machine Learning, VR, and Robotics.

In the future, by combining AI and Robotics, we can get much more than

just a robot vacuum cleaner.

1. What are the latest examples of Telecoms and IT technology companies converging?

**[2]** The Internet of Things is one of the fastest growing areas combining telecommunications and information technology. Telecommunications is responsible for fast and stable connections, data collection and transmission. And IT departments are responsible for the task at hand.

The Internet of Things includes “smart home” control, where the user can control music, lights, cameras and other things in the house from the phone.

Sensors are responsible for stable and safe operation. Smart-watches and more complex medical devices also work on the base of the Internet of Things.

1. What sorts of IT and Telecoms companies do you think there will be the big winners and losers in converged future?

**[3]** The main trends today are: AI, Machine Learning, VR, and Robotics. In the future, by combining AI and robotics, we can get much more than just a robot vacuum cleaner. Therefore, the companies that develop them will be able to get a lot of money. For example: companies such as IBM, AIBrain, Google.

1. Speak about the systems of contactless payment.

**[4, 5, 6]** …

1. Do you think we will ever stop using cash? If so, why and when? Give your reasons.

**[4, 5, 6]** …

1. Do you think that contactless payment and other electronic forms of payments are more open to fraud than traditional forms of payment? Speak of their advantages and disadvantages.

**[4, 5, 6]** Today we can pay in a store or subway using a smart watch or phone. The NFC microchip can be easily integrated into modern devices and is perfect for any bank payment. Contactless payment has helped people control their spending through mobile banking apps. Also, now you don't need to carry a lot of cash in your wallet. Unfortunately, the phone is not the most secure device, so cash bills are unlikely to disappear in the next 20 years.

1. Speak of any problems that people or organizations might have with their software and suggest how to fix them.

**[7]** One of the most common problems is data loss. It can occur when installing a program in which there were viruses, or from a lack of memory. For save your data it is worth making a backup. This is when you make a copy of all the data on your device and store it. For example, in the cloud. In this way, you can restore all programs and files without losing anything.

1. Do people regularly use applications that are provided in a “cloud”? Give your reasons.

**[8, 9]** …

1. Do you think people will be comfortable with all software being provided remotely in the future? Give reasons.

**[8, 9]** For save your data, it is worth making a backup. This is when you copy all of your device's data and store it in the cloud or extern device. In this way, you can restore all programs and files without losing anything.

Also, in cloud programs, you can save very large files and share them with other members of the company. Providing all software remotely can be beneficial for large companies, but not very convenient for the client and small business.

1. What do you think of how many clouds there will be in future? Could one big service provider provide a single cloud for everyone? Give reasons.

**[10]** There are cloud service providers will definitely always be several. There are will always be such problems as an inconvenient interface for some people, communication problems for certain regions, too expensive tariffs. Big competition in the service market is the key to the success of enterprises and the development of new technologies.

1. What wireless technologies are being used in Ukraine? Give the details about each of them.

**[11, 12, 13]** …

1. What are the limits to wireless technology when compared to fixed line? Give your reasons.

**[11, 12, 13]** …

1. Can you see the world becoming entirely wireless in the future? Give your reasons.

**[11, 12, 13]** As technological advances gain momentum, telecommunications and the IT sphere are developing very rapidly. The latest and modern focus is on fast and reliable data transmission. This can be achieved with the help of new 5G technologies.

Imagine being able to download all seasons of “Game of Thrones” in one minute. Of course, the most common wireless technologies are Wi-Fi and 4G. However, fixed cable connections are still much faster now. I think a certain percentage of technologies will always remain stationary using cables and servers.

1. Do you think the technology of automated trading will mean the end of centralized stock exchanges such as London, Tokyo, and New York? Give reasons.

**[14, 15]** …

1. Speak in details: What are the security risks of having so many sensitive transactions happening online?

: phishing attacks, website spoofing, payment card skimming (credit /debit cards), fraud in online transactions, malware attack (malicious code attack of viruses, worms, Trojans, and bots).

**[14, 15]** I think it is impossible to transfer all trade to digital format. Trade depends on demand, economic conditions and digital security. There is always a risk of phishing attacks, website spoofing, payment card skimming, online transaction fraud, malware attacks. That is why online trading cannot replace the usual market one.

1. Do you think that one or two countries will end up dominating the telecoms and IT service sector providing services to the rest of the world? Why/ why not? Give your reasons.

**[16]** Healthy competition in the service market is the key to the success of enterprises and the development of new technologies. Every country has smart and capable people who can do something new. Most countries are interested in their own success and development, and only then selling services abroad. It will be too difficult to serve all countries from 2 or 3 points of the world. Because everything has its own characteristics, starting with the language and ending with moral values, which is very important for the IT sphere.

1. Speak about the most important tips for negotiations in Telecoms and IT industry.

**[17]** I think the most important thing is to know what you want. Knowing the specific goal and how to implement it, you can easily come to an agreement. The most important thing in negotiations is to understand your area and understand, what the other side wants.

1. Speak about the effects of new technology on the news industry. Are printed, daily newspapers going to disappear? Give your reasons.

**[18]** I know that to this day in England, postmen deliver newspapers every morning. Newspapers and magazines are still popular and in demand. This is practically where they started their industry. Of course, many publications have an electronic form, but it is more popular with the younger community.

1. What will the media landscape look like in five or ten years time in your country? Give your reasons.

**[19]** Not so long ago, 4G + appeared at the stations of the Kiev metro. One of the main advantages of wireless technology is the ability to communicate anytime, anywhere. The widespread availability of wireless networks in public places such as Internet cafes allows you to connect to the Internet, download information, exchange e-mail and files of any size. However, there are issue, is security, because access to wireless networks is always open. Anyone can access the data transmitted in the broadcast session.

1. Should music or other digital content be free? Why or why not? Give your reasons.

**[20]** In America, music and films, subscription to electronic newspapers are paid. To some extent, this is correct, because it is intellectual property and artists are get money for their work. However, we have more developed “piracy”. When everything is in the public domain. I don’t think this is bad, and I can’t say how it right. Also in the IT world, there are open source resources and paid specialized applications.

1. What can you say about the relationship between society and technologies? Give your reasons.

**[21, 23]** …

1. Speak in details how green your own use of Telecoms and IT is or might be.

**[22]** Every year or six months, large companies such as: Apple, Microsoft, Google, IBM, DELL and others, release more and more new devices. In fact, there are not as many people on the planet, as there are now phones and computers. The production of such a quantity of equipment is not good for environment with throw emissions and heavy metals. People don’t think about throwing away new phones to get a one. I think it is worth using one device much longer to save own planet.

1. Do you think digital technology has improved society? Why or why not? Give your reasons.

**[21, 23]** At the beginning, all technologies were created to improve people's life. This is progress in medicine, engineering and construction. However, many people now see, how technology is being used to control. In our time, it is more and more difficult to remain anonymous and guarantee some personal space. However, progress in IT allow people to explore the world much better than before. This is AI assistance, voice control, machine vision etcetera.

1. How do you think technology could help society in the next 50 years? Give your reasons.

**[24]** I think, yes. In cloud programs, you can save very large files and share them with other members of the company. You can access data in the cloud from any of your devices and from anywhere in the world with a good connection. Therefore, now cloud technologies are gaining popularity, especially during a pandemic.

Items about SUT

1. Give a summary of studying at the SUT… (сказати коли був заснований, назвати переваги із інноваційного змісту)
2. Reveal the most important events which are dealt with the university. (коли універ став членом міжнародного союзу електрозв’язку де знаходиться їх штаб квартира)
3. Clear up the structure of the SUT (розказати про кількість інститутів, про дисципліни які там викладаються, акцентувати увагу на своїй спеціальності.)
4. Name the leading international companies which SUT cooperates with. (розказати про співпрацю з іноземними компаніями, про те що в Україні багато розумної молоді і саме тому університет залучає до співпраці іноземні компанії,)
5. Give some information about 3 communication technologies centers at the SUT where the students obtain necessary theoretical knowledge and practical skills for free of charge.(???? щось розповісти про направлення в інші компанії після закінчення універу про підтримку і реалізацію студентських проектів).
6. Can a student obtain practical skills…(тут про те що в нас багато аудиторій з сучасним обладнанням, деякі від компанії партнерів і взяти % практичних занять з ЗМІСТУ і що рішення помилок на практиці допомагає в подальшому покращити свої навички та знайти високооплачувану роботу.)
7. Speaking about the innovative training at the University, what do you think about the employment model when students obtain international certificate of companies partners of university faculties?
8. What opportunities are provided by modern companies for university students (besides the certificates of their excellent theoretical knowledge) connected with student employment?
9. Do you agree that innovational content of education at the University provides students with knowledge and skills which are required at present by University partners - potential employers?
10. In what way the innovational education in this University ensures better training quality and how it differs from other Universities?
11. Tell about the history of the State University of Telecommunications, its structure and achievements at present.
12. What changes has the State University of Telecommunications introduced to provide high quality modern education to students?
13. How does the University's collaboration with IT businesses influence its activities? In what way is it beneficial to students?
14. How does the University prepare its graduates to face challenges of the modern labor market and ensure their successful employment?
15. Tell about your experience of being a student. Focus on how your life has changed since you entered the university, what/who influenced your decision of the specialty and university choice, your first day at the university and impressions, what difficulties you experience, what you like/dislike about your student's life and what you think about advantages and disadvantages of distance education due to the present day epidemic.