

ЗРАЗОК Екзаменаційної роботи (2-й курс)

Task 1. Read the text. For paragraphs (1-5), choose the correct title. There are two choices you do not need to use.

It is that day when you want to proudly demonstrate your work and passion for research to everyone who have been a part of this long journey. It is important that you carefully read and understand the structure, protocol, and requirements well in advance. This will help you plan your defense skillfully.

(1)

- Universities and institutes defense protocols to better suit remote requirements.
- Talk to your faculty administration department to decide how to structure the open defense.
- Test your system prior to the actual defense from the same location you plan to use! Learn how to switch or share screens, control your microphones and camera, etc.

(2)

- Ensure you set up your system in a quiet and well-lit room.
- Sit against a plain, light-colored wall. Ensure there is no distracting artwork or bright windows in the background. Test this in advance to check if it looks good.
- Therefore, position your system and webcam to eye level ensuring a better face-to-face contact.

(3)

- Practice your talk with your colleagues, in-house mentors and supervisors. Their feedback will be instrumental in adjusting the pace of your presentation.
- Record your practice sessions to critique your presentation skills and improve based on your performance.
- Anticipate questions in advance and prepare your answers well.

(4)

- Reboot your system, make all the essential updates, turn off applications that might pop-up unexpectedly to ensure a smooth run.
- Log in to the video conferencing software at least 20-30 minutes in advance to ensure the technology is working fine for everyone!
- Request the examination committee members to login 10-15 minutes prior to your actual defense time to check for any technical issues on both ends.

(5)

- Even the best made plans may go for a toss! Rather than panicking in the moment, it is better to have an alternative technology solution ready if something goes wrong or stops functioning mid-way through your defense.

- A. Begin Your Defense Early
- B. It is All About the Defense Setup
- C. Talk to Everyone!
- D. Practice, Practice and Practice!
- E. Control Your Examiners
- F. Do You Have a Plan B?
- G. Perfect Your Pre-Defense Preparation

Task 2. Read the text. For questions (6-10), choose the correct answer (A, B, C, or D).

WILL WE EVER BE ABLE TO RECYCLE ALL OUR PLASTIC?

For more than 20 years, Chinese companies helped hide the problem by buying about 700,000 tons of paper and plastic from the US every year. Cheap labor there meant people

could sort objects, which made it simple to separate trash from treasure. In the case of tricky combos like bags full of mixed materials, for instance, workers could pull bottles from heaps of greasy takeout boxes. But in 2018, worried about the amount of sheer junk like cling wrap coming in, China banned all rubbish imports save for 99.5 percent pure plastic.

Back in the US, plants are now chipping away at our mountain of garbage by improving automation. Some facilities use cameras to spot plastic bags that could tangle up sorting machines, or deploy robotic arms to shake bottles out of the irksome sacks. Others use blasts of air to separate paper from plastic based on weight. But those small tweaks won't be enough. To handle our nation's plastic trash – 262 million tons a year, or 234 pounds per person, according to analysis by the global risk consulting firm Verisk Maplecroft – we'd need to increase our recycling capacity by more than tenfold.

Some experts argue that we should just waste less. "Not producing trash in the first place will always be better than having something to recycle," says Jenna Jambeck, a professor of environmental engineering at the University of Georgia. To shrink our pool of would-be recyclables, US companies will have to prioritize selling long-lasting objects over single-use goods – and change the way they wrap them. Many products come in packaging designed for immediate disposal, Jambeck says, which accounts for 40 percent of plastic use. Consumers can pressure manufacturers to do better by seeking out companies that employ reusable or biodegradable wrappers. "Every time we can make a choice to not use single-use plastic, it makes a difference," Jambeck says.

6. According to the first paragraph, China _____.
 - A. recycles US waste
 - B. has been recycling US waste for 20 years
 - C. used to recycle US waste
 - D. buys and recycles 700,000 tons from all over the world
7. US does not use such a technique as _____.
 - A. picking up bottles from greasy waste manually
 - B. using fans to blow light garbage
 - C. shake out plastic bottles from bags
 - D. picking up plastic bags to avoid tangling
8. Academic representatives suggest _____.
 - A. sending trash to other countries
 - B. improving automatized waste division
 - C. reducing the production of waste
 - D. reducing the production of plastics
9. 40 % of plastic waste comes from _____.
 - A. selling long-lasting objects
 - B. single-use packaging
 - C. reusable plastics
 - D. biodegradable wrappers
10. It can be inferred from the text that _____.
 - A. China invented the way to recycle waste quicker
 - B. People are advised to use reusable objects
 - C. The USA stopped producing single-use goods
 - D. People pressure manufacturers to use biodegradable materials

Task 3. Read the text. For gaps (11-20), choose the correct word (A, B, C, or D).

Sorption is a technology widely used to (11) _____ the bioavailability and mobility of contaminants for pollution control. (12) _____, the sorbents used in this process have a

limited sorption capacity and will eventually become depleted. Spent sorbents with a significant **(13)** _____ of pollutants, are difficult to dispose of.

In recent years, progress has been made in the catalytic sorbent's synthesis and applications, especially for carbon-based sorbents. Impregnating metal elements into carbon structures is one of the common methods used to introduce catalytic sites onto carbon surfaces for either oxidation or **(14)** _____ reactions. Non-metal elements have also been placed in carbon materials as heteroatom reactive sites for oxidants activation and radical generation. **(15)** _____ these tremendous applications, there are many open questions for producing high-quality catalytic sorbents.

This Research Topic **(16)** _____ to cover the recent developments in carbon-based catalytic sorbents for water treatment to tackle the knowledge barrier of synergetic pollution sorption and transformation technology. Research areas may include:

1) design and syntheses of carbon-based catalytic sorbents **(17)** _____ for water treatment, such as iron impregnated biochar, nitrogen-doped carbon nanotubes, or the carbon nanotubes with metal nanoparticles deposition;

2) application of advanced spectroscopic techniques and atomistic simulations to advance **(18)** _____ of molecular-level interactions that control sorption and transformation process and reaction rates;

3) identification of reaction **(19)** _____ (reaction pathways, reaction rate and radical species) and their **(20)** _____ with reactive catalytic structures;

4) identification of barriers to implementation and development of application methods.

11	a	develop	b	infer	c	cut	d	reduce
12	a	To sum up	b	However	c	Consequently	d	Apart
13	a	figure	b	row	c	number	d	index
14	a	destruction	b	reduction	c	combustion	d	compound
15	a	Yet	b	Beside	c	In spite	d	Despite
16	a	goals	b	aims	c	target	d	purposes
17	a	suitable	b	additional	c	using	d	applying
18	a	understanding	b	realizing	c	supposing	d	considering
19	a	ways	b	techniques	c	conduction	d	mechanisms
20	a	relating	b	relevance	c	relationship	d	relate

Task 4. Grammar test. Choose one variant.

21. Robert was not sure _____ he _____ the right choice.

- A. that, made
B. if, had made
C. whether, has made
D. what, was making

22. Jim _____ make a report. His advisor said so. – Then he must _____ in the library now.

- A. must, have worked
B. should, have been working
C. has to, be working
D. ought, work

23. As the temperature _____, skiing, dog sledging and ice climbing _____ local favourites.

- A. drops, are
B. drop, have been
C. dropped, was
D. has dropped, is

24. Viscosity in a gas _____ first theoretically from this point of view _____ Kestin.

- A. was studying, with
B. had been studied, with
C. was studied, by
D. had been studying, by

25. You will never find such a _____ bag! – Huh! I have seen something _____.
 A. wonderful leather Italian, more interesting C. Italian wonderful leather, much interesting
 B. leather Italian wonderful, interesting D. wonderful Italian leather, much more interesting
26. Swinburne became interested _____ plastics in 1902 when he _____ to the phenol formaldehyde reaction.
 A. in, was introduced C. at, introduced
 B. for, had been introduced D. with, was introduced
27. We really hope that you _____ your term-paper by the time you _____ it.
 A. will finish, will present C. have finished, will present
 B. will have finished, present D. would finish, will present
28. The guests _____; now they are checking in, later they _____ sightseeing according to our plan.
 A. are arriving, will C. arrived, will go
 B. have arrived, are going D. arrived, go
29. Let's open our text-books on _____ page 13 and discuss the questions, _____ we?
 A. ---, shall C. ---, let not
 B. the, should D. the, will
30. The test was too difficult for me _____ it from the first time. – Really? I _____ do it quite easily.
 A. to do, could C. to do, was able to
 B. do, might D. doing, could
31. Professor Smith _____ material from the previous lecture for 15 minutes, but the audience _____ silent.
 A. was asking, was C. asked, was
 B. had been asking, were D. had asked, were
32. Our attention will be focused on _____ comparative methods _____ by different sciences.
 A. the, being applied C. the, applying
 B. ---, having applied D. ---, applied
33. Unfortunately, that was not their choice. They were made _____ the conference _____ than we expected.
 A. leave, earlier C. leave, the earliest
 B. leaving, early D. to leave, earlier
34. _____ surface tension of water is strong enough _____ a steel needle float on water.
 A. A, let C. The, to let
 B. ---, letting D. ---, to letting
35. _____ you help me with this catalogue, please? – Yes, _____ you use the restricted section.
 A. Shall, if C. Will, if
 B. Could, unless D. May, whether
36. _____ copper wire from 0 to 100 °C _____ its resistance for about 40%.
 A. Heating, increases C. Having heated, increased
 B. To heat, increase D. To heat, have increased
37. The comparative simplicity of _____ cases depends on the masses of the balls _____ alike.
 A. these, being C. that, being
 B. those, having been D. those, been
38. She has missed her train. If she _____ more attention to time, she _____ home now.

A. paid, will go

B. has paid, will be going

C. had paid, would be going

D. paid, would go

39. Are you going to complain about what happened? – No, it's not worth _____. Nobody _____ anything about it.

A. to do, is going to do

B. doing, will do

C. to do, is doing

D. doing, does

40. Besides _____ important for industry, _____ oxygen is also important for medicine.

A. to be, ---

B. to be, an

C. being, the

D. being, ---

