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Структура и содержание варианта экзаменационного задания для проведения вступительных испытаний в магистратуру КФ МГТУ им. Н.Э. Баумана по направлению подготовки 27.04.06 «Организация и управление наукоемкими производствами»
(Иностранный язык)

Типовой вариант

Вопрос № 1. Аудирование (20 баллов)

Вы услышите монолог бизнес консультанта. Выберите один из 4 вариантов (a, b, c, d), завершив содержание по содержанию прослушанного текста. За каждый правильный ответ вы получаете 2 балла. Вы услышите запись дважды. Занесите свои ответы в бланк ответов.

Russian sanctions

Investing on the edge

1. On April 6-th America imposed harsh new sanctions on Russia...
 - a) ... in response to Annexation of Crimea;
 - b)...without any visible reason;
 - c) ... in response to its “malign activity” abroad;
 - d)... in response to the “Scripals’ case”
2. Oleg Tinkov compared being on the Russian stockmarket with...
 - a) ... living on the fat of the land;
 - b)...playing the Russian roulette;
 - c) ... living on a volcano;
 - d)... living in a bed of roses
3. The rouble was further weakened with...
 - a) ...tensions over Syria and talk of potential sanctions on Russian government bonds;
 - b)... the fall in oil prices
 - c)...the European sanctions;
 - d)... misallocation of the budget by the Russian government.
4. When the treasury secretary came out against sanctions on bonds later that day,...
 - a) ... the rouble perked up and the stockmarket was still in a very bad position;
 - b) ...the rouble and the stockmarket perked up;
 - c)... the rouble and the stockmarket collapsed;

5. Among the 24 people targeted by the new sanctions are ...
- a) ... the famous Russian artists;
 - b) ... government officials and the son-in-law of V. Putin;
 - c) ... the richest businessmen of Russia;
 - d) ... V. Putin's family.
6. Oleg Deripaska, one of Russia's richest men and the boss of United Company Rusal...
- a) ... was outraged with the sanctions;
 - b) ... was not targeted by sanctions.
 - c) ... agreed with the policy of D.Trump;
 - d) ... was also targeted by sanctions.
7. Last summer Congress passed a law requiring the Treasury...
- a) ... to identify individuals close to Mr Putin for potential sanctions.
 - b) ... not to deal with Russian companies;
 - c) ... to transfer all the business deals with Russians to the government department
 - d) ... to prepare a list of people targeted by the next wave of sanctions
8. When the list of people close to Mr Putin was published in January, ...
- a) ... it consisted of V. Putin's relatives and friends;
 - b) ... it was rather short;
 - c) ... it was widely discussed by the society;
 - d) ... it was so long as to be meaningless.
9. Rusal was forced ...
- a) ... to leave the American market;
 - b) ... to tell customers to halt transactions.
 - c) ... to sell shares to US companies;
 - d) ... to change its policy.
10. For the reason of sanctions, Glencore, a giant commodity firm,...
- a) ... stepped down from Rusal's board;
 - b) ... put plans for a share swap with Rusal on hold;
 - c) ... declared itself bankrupt;
 - d) ... transferred its assets to the US.

Вопрос № 2 Чтение (20 баллов)

Прочитайте текст и выполните задания 11-20. Выберите один из 4 вариантов (a, b, c, d), ответив на поставленный вопрос по содержанию текста или завершив предложение. За каждый правильный ответ вы получаете 2 балла. Занесите свои ответы в бланк ответов.

Streets ahead

An Alphabet subsidiary designs a wired, robot-served neighbourhood

QUAYSIDE, an area of flood-prone land stretching for 12 acres (4.8 hectares) on Toronto's eastern waterfront, is home to a vast, pothole-filled parking lot, lowlung buildings and huge soyabean silos — a crumbling vestige of the area's bygone days as an industrial port. Many consider it an eyesore but for Sidewalk Labs, an "urban innovation" subsidiary of Google's parent company, Alphabet, it is an ideal location for the world's "first neighbourhood built from the internet up".

Sidewalk Labs is working in partnership with Waterfront Toronto, an agency representing the federal, provincial and municipal governments that is responsible for developing the area, on a \$50m project to overhaul Quayside. It aims to make it a “platform” for testing how emerging technologies might ameliorate urban problems such as pollution, traffic jams and a lack of affordable housing. Its innovations could be rolled out across an 800-acre expanse of the waterfront—an area as large as Venice.

First, however, Sidewalk Labs is planning pilot projects across Toronto this summer to test some of the technologies it hopes to employ at Quayside; this is partly to reassure residents. If its detailed plan is approved later this year (by Waterfront Toronto and also by various city authorities), it could start work at Quayside in 2020.

That proposal contains ideas ranging from the familiar to the revolutionary. There will be robots delivering packages and hauling away rubbish via underground tunnels; a thermal energy grid that does not rely on fossil fuels; modular buildings that can shift from residential to retail use; adaptive traffic lights; and snow melting sidewalks. Private cars are banned; a fleet of self-driving shuttles and robotaxis would roam freely. Google’s Canadian headquarters would relocate there.

Undergirding Quayside would be a “digital layer” with sensors tracking, monitoring and capturing everything from how park benches are used to levels of noise to water use by lavatories. Sidewalk Labs says that collecting, aggregating and analysing such volumes of data will make Quayside efficient, liveable and sustainable. Data would also be fed into a public platform through which residents could, for example, allow maintenance staff into their homes while they are at work.

Similar “smart city” projects, such as Masdar in the United Arab Emirates or South Korea’s Songdo, have spawned lots of hype but are not seen as big successes. Many experience delays because of shifting political and financial winds, or because those overseeing their construction fail to engage locals in the design of communities, says Deland Chan, an expert on smart cities at Stanford University. Dan Doctoroff, the head of Sidewalk Labs, who was deputy to Michael Bloomberg when the latter was mayor of New York City, says that most projects flop because they fail to cross what he terms “the urbanist-technologist divide”. That divide, between tech types and city-planning specialists, will also need to be bridged before Sidewalk Labs can stick a shovel in the soggy ground at Quayside. Critics of the project worry that in a quest to become a global tech hub, Toronto’s politicians may give it too much freedom. Sidewalk Labs’s proposal notes that the project needs “substantial forbearances from existing [city] laws and regulations”. It is not yet known what business model Sidewalk Labs plans for Quayside. Rohit Aggarwala, its head of urban systems, said at a public meeting in March that it is “frankly a little unclear” what it will be. Mr Doctoroff says the firm might make money by licensing the products and services it develops in Toronto and selling them to other cities. It is uncertain whether Torontonians who contributed data to hone the services would share the revenue.

Privacy concerns will doubtless arise—over what data the sensors at Quayside will Hoover up, who will own them, where they will be housed and so on. For now, Sidewalk Labs has said it will not use or sell personal information for advertising purposes and that the data will be subject to “open standards”, allowing other firms and agencies to make use of it. Sidewalk Labs and Waterfront Toronto have brought in a former federal privacy commissioner and a former privacy commissioner of Ontario as advisers. But privacy experts call such assurances insufficient, because Canada’s legal frameworks for data privacy and security lag behind the latest innovations from tech firms. “You can always choose whether or not to download an app on your phone,” says Kelsey Finch at the Future of Privacy Forum, a think-tank. “You can’t easily opt out of the community that you live in.”

11. What firm is Sidewalk Labs working in partnership with?
 - a. Waterfront Toronto
 - b. Alphabet
 - c. Google

- d. Quayside
12. A \$50m project to overhaul Quayside aims to make it a “platform” for ...
- a. developing new areas
 - b. testing how emerging technologies might ameliorate urban problems
 - c. making money on real estate
 - d. testing how new technologies might change economy
13. What expanse could its innovations be rolled out across?
- a. an 800-acre
 - b. an 500-acre
 - c. an 700-acre
 - d. an 600-acre
14. If Sidewalk Labs’ detailed plan is approved later this year (by Waterfront Toronto and also by various city authorities), it could start work at Quayside in
- a. 2021
 - b. 2022
 - c. 2020
 - d. 2023
15. Why are private cars banned in this project?
- a. a fleet of self-driving shuttles and robotaxis would roam freely.
 - b. because they are expensive
 - c. there will be a system of public transport
 - d. because private cars are not eco-friendly
16. What layer will undergird Quayside?
- a. the manmade one
 - b. the virtual one
 - c. the digital one
 - d. the concrete one
17. What have similar “smart city” projects, such as Masdar in the United Arab Emirates or South Korea’s Songdo spawned?
- a. lots of interest
 - b. lots of hype
 - c. lots of additional expense
 - d. lots of problems
18. Why do most projects of smart cities flop?
- a. because they are not comfortable to live in
 - b. because they fail to attract financial investment
 - c. because they fail to cross what is termed as the urbanist-technologist divide?
 - d. because they fail to gain economic success
19. Is it already known what business model Sidewalk Labs plans for Quayside?
- a. there is no information in the text
 - b. not yet
 - c. yes
 - d. no
20. What concerns will doubtless arise?
- a. ecological

- b. privacy
- c. safety
- d. financial

Вопрос № 3 Грамматика и лексика (34 балла)

Прочитайте текст с пропусками, обозначенными номерами 21-37. Эти номера соответствуют заданиям 21-37, в которых представлены варианты слов (А, В, С); одно из них грамматически и лексически точно соответствует содержанию текста. Выберите один вариант. За каждый правильный ответ вы получаете 2 балла. Занесите свои ответы в бланк ответов.

Shadows of the colossi

The problem is that 21_____ wider playing-field for innovation is also being levelled 22_____. One 23 _____ is the dominance of the tech giants. Startups, particularly those in the 24_____ -internet business, 25_____ struggle to attract capital in the shadow of Alphabet, Apple, Facebook 26_____. In 2017 the number of first financing rounds in America was down 27_____ around 22% from 2012. Alphabet and Facebook pay their employees so generously that 28_____ can 29_____ to attract talent (the median salary at Facebook is \$240,000). When the chances of 30_____ success are even less certain and the payoffs not so very different from a steady job at one of the giants, dynamism suffers— and not just in the Valley. It is a similar story in China, where Alibaba, Baidu and Tencent are responsible for close to half of all domestic venture-capital investment, giving the giants a big 31_____ in the future of potential rivals. The second way in 32_____ innovation is being levelled 22_____ is by 25_____ unfriendly policies in the West. Rising anti-immigrant sentiment and tighter visa regimes of the sort 33_____ by President Donald Trump have economy-wide effects: foreign entrepreneurs create around 25% of new companies in America. Silicon Valley first 34_____, in large part, because of government largesse. But state spending on public universities throughout America and Europe has fallen since the financial crisis of 2007-08. Funding for basic research is inadequate—America’s federal-government spending on 35_____ was 0.6% of GDP in 2015, a third of what it was in 1964—and 36_____ the wrong direction. If Silicon Valley’s relative decline 37_____ the rise of a global web of thriving, rival tech hubs, that 37_____ worth celebrating. Unfortunately, the Valley’s peak looks more like a warning that innovation everywhere is becoming harder.

- 21 a) a b) the c) -
- 22 a) down b) up c) on
- 23 a) issue b) problem c) matter
- 24 a) consumer b) provider c) customer
- 25 a) incresingly b) increasingly c) increasingly
- 26 a) etc b) et al c) et all
- 27 a) by b) at c) of
- 28 a) startoffs b) start-ups c) startups
- 29 a) have been struggled b) be struggling c) struggle
- 30 a) startup b) startup' c) startups'
- 31 a) importance b) role c) say
- 32 a) which b) that c) what
- 33 a) offered b) introduced c) proposed

34 a) had been bloomed b) bloomed c) had bloomed

35 a) HR b) R&D c) D&R

36 a) heading in b) going in c) heading towards

37 a) heralded ... would be b) had heralded ... would have been c) had heralded ... would be

Вопрос № 4 Письмо (26 баллов)

Напишите аргументированное сочинение на предложенную тему:

**Is it more profitable to be an entrepreneur in a developing country or in a developed one?
What's your point of view on this problem?**

При выполнении задания следуйте приведенной ниже инструкции.

Write between 200 and 250 words. Specify the main idea. Express your point of view. Give reasons for your opinion. Include at least two relevant examples from your own knowledge or experience to support it. Include at least two relevant arguments against your position. Make a conclusion. Mind the appropriate functional style. Be polite. You should spend about 30 minutes on this task.