# přijímací zkouška 

## AR 2022/2023

## BAKALÁŘSKY̌ STUDIJNÍ PROGRAM B0413A050002 EKONOMIKA A MANAGEMENT

## TASKS 1-6

Read the sentences and write the correct answers (A, B, C or D) on your answer sheet. Pay attention to business terminology and English grammar.
(20 pts.)

1. When you apply for a job, you also have to provide your...
A MP
B CV
C CEO
D MD
2. The top executive responsible for a firm's overall operations and performance is in Britain referred to as the ... Director.
A Chief Executive
B Managing
C Human
D Finance
3. A place where a conference is held is its..
A placement
B room
C stage
D venue
4. A: Hello. My watch doesn't seem to be working. B: Ok, I ... what I can do about it.
A 'll see
B 'm going to see
C haven't seen
D 'm seeing
5. I couldn't remember when...
A the company is floated.
B the company are being floated.
C the company has been floated.
D the company had been floated.

## Read the text and mark the answer which has the same meaning (A, B, C or D) on your answer sheet. (6pts.)

6. "Around the United States this holiday season, camera shops, department stores, and pharmacies have been having a hard time keeping up with demand for the selfie stick, a $\$ 10$-to- $\$ 30$ retractable pole that people clamp onto their smartphones to take better pictures of themselves."
https://www.inquirer.com/philly/business/20150101_Business_news_in_brief.html\#mjqmQSisc6TUWs9y.99.

A US retailers are unable to supply enough selfie sticks which are \$10-to- $\$ 30$ poles that are attached to a smartphone if people want to photograph themselves more successfully.

B At home as well as abroad, US retailers are unable to sell enough selfie sticks which are \$10-to-\$30 poles that are attached to a smartphone if people want to photograph themselves more easily.

| CUS retailers are <br> unable to sell <br> enough selfie | US retailers are <br> sufficiently <br> supplied with a |
| :--- | :--- |
| sticks which are | selfie stick |
| \$10-to- $\$ 30$ <br> frames that are | which is a $\$ 10-$ |
| attached to a | to- 30 frame |
| smartphone if | that is attached |
| people want to | to a smartphone |
| photograph | if people want |
| themselves | to photograph |

hemselves more easily.

Find the right solution to the problem. Mark the correct letter (A, B, C or D) on your answer sheet. (6pts.)
7. "I want to talk to Mr. Brown, but he's not available at the moment."
A "You can take a
message."
B "Yes, he's having a meeting."
C "You can leave a
message."
D "Do you have an appointment?"

Read the article below and choose the heading which summarises its content in the best way. Write the correct alternative (A, B, C or D) on your answer sheet.
Fewer Americans filed applications for unemployment benefits in 2014 than at any time in 14 years as the economic expansion strengthened. An average of 308,500 workers a week filed jobless claims last year, the least since 299,600 in 2000, according to figures from the Labor Department. Applications climbed by 17,000 to 298,000 in the week ended Dec. 27, more than projected, displaying the typical year-end holiday swings. The increase in jobless claims last week was the first since late November. - Bloomberg News
http://www.philly.com/philly/business/20150101_Business_news_in_brief.html\#mjqmQSisc6TUWs9y. 99
8.
A Labor Department seeks help
B Unexpected increase of jobless claims
C Labor Market Finally Picks up
D Welfare state in crisis

Read the article again and decide if the following statements are true (T), false (F) or if the article does not say (D/S). Write the correct alternative on your answer sheet.
(12pts.)
According to the author...
9. the average number of filed jobless claims hasn't been better for twelve years.
10. the unemployment rate was falling steadily till November.

| T | F | D/S |
| :--- | :--- | :--- |
| T | F | D/S |

## VZOROVÝ TEST Z MATEMATIKY

1. Automobil spotřeboval na průjezd terénem 7 litrů benzínu na 70 km . Kolik litrů benzínu spotřebuje na 100 kilometrů?
varianty odpovědí
a) 10
b) 4,9
c) 1000
d) 7
2. Vyřešte nerovnici

$$
\frac{4 x-5}{7}<x+3
$$

varianty odpovědí
a) $x \in\left(-\infty, \frac{26}{3}\right\rangle$
b) $x \in\left(-\infty, \frac{26}{3}\right)$
c) nerovnice nemá řešení
d) $x \in\left(-\frac{26}{3},+\infty\right)$

## VZOROVÝ TEST Z MATEMATIKY

3. V $\mathbb{R}$ řešte rovnici

$$
\frac{5}{x+1}-7=\frac{10-7 x}{x-1}
$$

varianty odpovědí
a) $x=\frac{2}{3}$
b) $x=4$
c) $x=3$
d) $x=\frac{1}{2}$
4. Zjednodušte výraz

$$
s=\frac{\sqrt{1+a}}{\sqrt{1-a}}-\frac{\sqrt{1-a}}{\sqrt{1+a}}-\frac{4 a}{\sqrt{1-a^{2}}}
$$

varianty odpovědí
a) $s=-2 a$
b) $s=\frac{\sqrt{1-a^{2}}}{1-a^{2}}$
c) $s=-2 a \sqrt{1-a^{2}}$
d) $s=\frac{-2 a \sqrt{1-a^{2}}}{1-a^{2}}$
5. Najděte všechna řešení rovnice $6^{x^{2}-3 x+2}=1$
varianty odpovědí
a) $x_{1}=1, x_{2}=2$
b) $x_{1}=-1, x_{2}=-2$
c) $x_{1}=-3, x_{2}=-2$
d) $x_{1}=-1, x_{2}=2$
6. Ve tvaru $a+b i$ napište komplexní číslo $z=(15+8 i)-(5-i)(10-2 i)$.
varianty odpovědí
a) $38-38 i$
b) $-33+28 i$
c) $65+40 i$
d) $28+3 i$
7. Vypočítejte kořeny kvadratické rovnice $x^{2}-9=0$
varianty odpovědí
a) $x_{1}=3, x_{2}=-3$
b) $x_{1}=3, x_{2}=3$
c) $x_{1}=-3, x_{2}=-3$
d) $x_{1}=3$
8. Určete výraz $V$, jestliže $\log _{2} V=\log _{2}(2 x+1)-\log _{2}(4 x-1)+\log _{2}(x-1)$
varianty odpovědí
a) $V=\frac{(4 x-1)}{(2 x+1)(x-1)}$
b) $V=\log _{2} \frac{2 x+1}{(x+1)(4 x-1)}$
c) $V=\frac{(2 x+1)(x-1)}{(4 x-1)}$
d) $V=\frac{(2 x+1)(4 x-1)}{(x-1)}$
9. Určete definiční obor funkce $f(x)=x \cdot e^{\frac{1}{x}}$
varianty odpovědí
a) $D(f)=(-\infty, 0) \cup(0, \infty)$
b) $D(f)=(0, \infty)$
c) $D(f)=(-\infty, 1) \cup(1, \infty)$
d) $D(f)=\mathbb{R}$
10.

varianty odpovědí
a) Graf 1 je $\cos 4 x, 2$ je $\sin 4 x, 3$ je $\sin x$
b) Graf 1 je $\cos 2 x, 2$ je $\sin 2 x, 3$ je $\cos x$
c) Graf 1 je $\cos 2 x, 2$ je $\frac{1}{2} \sin 2 x, 3$ je $\cos x$
d) Graf 1 je $2 \cos 2 x, 2$ je $\cos 2 x, 3$ je $\cos x$

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