přijímací zkouška

AR 2021/2022

BAKALÁŘSKÝ STUDIJNÍ PROGRAM B0413A050002 EKONOMIKA A MANAGEMENT

ENGLISH LANGUAGE TEST - total score 50 points

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... C CEO A MP B CV 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 **C** Human **D** Finance **B** Managing Resources A place where a conference is held is its... 3. A placement B room С 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 'm seeing D 5. I couldn't remember when... A the company is the company **C** the company **D** the company В floated. has been had been are being floated. floated. 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.

attached to apoles that aresmartphone ifto a smartplsmartphone ifattached to apeople want toif people wpeople want tosmartphone ifphotographto photogrphotographpeople want tothemselvesthemselvesthemselvesphotographmore easily.more easily.successfully.more easily.more easily.

TASKS 7-10

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	B "Yes, he's having a	C "You can leave a	D "Do you have an	
	message."	meeting."	message."	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. (6pts.)

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	B Unexpected	C Labor Market	D Welfare state in
	Department	increase of	Finally Picks up	crisis
	seeks help	jobless claims		

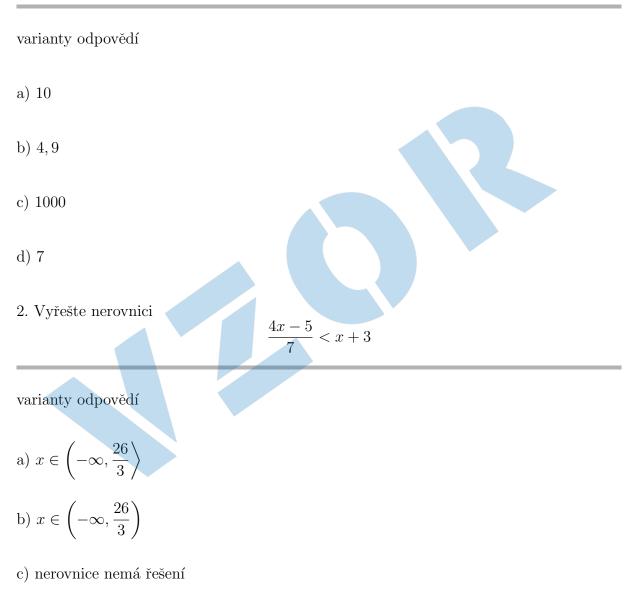
Read the article again and decide if the following statements are true (T), false (F) or if the article does not say (D/S). Write the correct alternative on your answer sheet. (12pts.)

According to the author...

9.	the average number of filed jobless claims hasn't been better for twelve years.	т	F	D/S
10.	the unemployment rate was falling steadily till November.	т	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?



d)
$$x \in \left(-\frac{26}{3}, +\infty\right)$$

VZOROVÝ TEST Z MATEMATIKY

3. V $\mathbb R$ řešte rovnici

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

varianty odpovědí

a)
$$x = \frac{2}{3}$$

b) $x = 4$
c) $x = 3$
d) $x = \frac{1}{2}$
4. Zjednodušte výraz $s = \frac{\sqrt{1+a}}{\sqrt{1-a}} - \frac{\sqrt{1-a}}{\sqrt{1+a}} - \frac{4a}{\sqrt{1-a^2}}$
varianty odpovědí
a) $s = -2a$
b) $s = \frac{\sqrt{1-a^2}}{1-a^2}$
c) $s = -2a\sqrt{1-a^2}$
d) $s = \frac{-2a\sqrt{1-a^2}}{1-a^2}$
5. Najděte všechna řešení rovnice $6^{x^2-3x+2} = 1$

varianty odpovědí

- a) $x_1 = 1, x_2 = 2$
- b) $x_1 = -1, x_2 = -2$
- c) $x_1 = -3, x_2 = -2$
- d) $x_1 = -1, x_2 = 2$

VZOROVÝ TEST Z MATEMATIKY

6. Ve tvaru a + bi napište komplexní číslo z = (15 + 8i) - (5 - i)(10 - 2i).

varianty odpovědí

- a) 38 38i
- b) -33 + 28i
- c) 65 + 40i
- d) 28 + 3i
- 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 $\log_2 V = \log_2(2x+1) \log_2(4x-1) + \log_2(x-1)$

varianty odpovědí

a) $V = \frac{(4x-1)}{(2x+1)(x-1)}$ b) $V = \log_2 \frac{2x+1}{(x+1)(4x-1)}$ c) $V = \frac{(2x+1)(x-1)}{(4x-1)}$ d) $V = \frac{(2x+1)(4x-1)}{(x-1)}$ 9. Určete definiční obor funkce $f(x) = x \cdot e^{\frac{1}{x}}$

A

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

Kontakt: České vysoké učení technické v Praze Masarykův ústav vyšších studií Kolejní 2637/2a 160 00 Praha 6

Kontaktní e-mail: info@muvs.cvut.cz

Telefonní kontakt:

studijní oddělení:	+420 224 353 169
sekretariát ředitele:	+420 224 353 163
PR kontakt:	+420 224 353 164

IČ: 68407700 DIČ: CZ68407700 Bankovní spojení: KB Praha 6 č.ú. 19-8491620277/0100





MASARYKŮV ÚSTAV VYŠŠÍCH STUDIÍ ČVUT V PRAZE