BUSINESS AND ADMINISTRATION 1: ENTRANCE EXAMINATION 2018 FOR INTERNATIONAL BUSINESS, SERVICE BUSINESS MANAGEMENT AND eSPORTS BUSINESS

Family Name _____   **Given name(s)** _____

Date of Birth _____
Day, month, year

ID/Passport Number _____   **Phone Number**_____

E-mail _____

Date when the exam taken _____11 April 2018_____
Day, month, year

Invitation received from _____
Name of the University of Applied Sciences

Signature _____

EXAM INSTRUCTIONS FOR THE APPLICANTS

The entrance examination for the field of business tests the applicants' logical and mathematical thinking and knowledge of English. A group discussion will be part of the entrance examination. The ability to communicate fluently in English is a prerequisite for admission. The applicants must pass all parts of the examination in order to be selected for admission.

Examination part	*Minimum points required*	*Maximum points*	*Time recommended*
Essay	3 points	10 points	75 min
Multiple-choice questions	2 points	6 points	45 min
Mathematics/Logic	2 points	8 points	60 min
Group discussion	3 points	16 points	
Total	**10 points**	**40 points**	

Length of the Exam:

The total duration of the **written part** of the business entrance examination is **3 hours**. In addition, there will be a group discussion after the written part. Ask the exam supervisors about your group discussion time when returning the exam papers.

Equipment and materials allowed:

In the entrance exam **no** materials, **no** dictionaries, **no** mobile phones **nor** calculators are allowed. The applicant may have their identification card or passport on the table when writing the exam.

IMPORTANT:

Start the exam by writing your **personal information on pages 1, 2 (= Answer Sheet) and 3 (= Essay).**
Return **all exam materials** to the exam supervisors after the exam. Have your identification card or passport ready **to prove your identity** when you return your exam papers to the exam supervisors.

Family name _____   Given name(s) _____

Date of birth _____
(Day, month, year)

ANSWER SHEET: Write your personal information at the top of this page.

Mark all your answers for the Part 2: Multiple Choice Statements and Part 3: Mathematics and Logic Tasks in the tables below. Mark the correct corresponding letter in the table with an "X".
Example: If you think the alternative "C" is correct for Question 1, then mark the correct answer like this:

Question	A	B	C	D
1			X	

PART 2: MULTIPLE CHOICE STATEMENTS   _____ / 6 points

Question	A	B	C	D		Question	A	B	C	D	
1						9					
2						10					
3						11					
4						12					
5						13					
6						14					
7						15					
8											

PART 3: MATHEMATICS AND LOGIC TASKS   _____ / 8 points

Question	A	B	C	D		Question	A	B	C	D	if D, specify:
1						11					
2						12					
3						13					
4						14					
5						15					
6						16					
7						17					
8						18					
9						19					
10						20					

Family name _____   **Given name(s)** _____

Date of birth _____
(Day, month, year)

PART 1: ESSAY based on the Pre-reading Materials *"The Future of Work"* and "Towards a Sustainable Wellbeing Society".

Write an essay on the following topic: **"The nature of work has changed multiple times and throughout human history. Which main trends, transformations and impacts of digitalization on future work are discussed in the article? Consider at least five (5) issues in your essay and give examples."**

Maximum score for essay **10 points**; **minimum 3 points** to qualify for admission. You must not exceed the space given. Please pay extra attention to your handwriting; essays in poor handwriting may be disqualified. You are expected to use **75 minutes** at the maximum for this part of the examination.

/ 10 points

PART 2: MULTIPLE CHOICE STATEMENTS

The statements are based on the pre-reading materials, **"The Future of Work**" and "**Towards a Sustainable Wellbeing Society".** Read the fifteen statements carefully and **mark all your answers on the ANSWER SHEET (on page 2).** Each correct answer is worth **+ 0.4** points; an incorrect answer/ no answer are both worth **0** points. Maximum score **6**; minimum **2 points** to qualify for admission. **The recommended time usage is 45 minutes**.

1. At the moment in Europe, the majority of the workers hold _____work contracts.

- A. flexible
- B. permanent
- C. no
- D. part-time

2. Which of the following has <u>not</u> been mentioned as a task for active labour market policies for adapting to new realities?

- A. Easing the transition from employment to freelancing and back
- B. Seeking ways to provide more security to gig economy workers
- C. Making greater efforts to provide customised skills and trainings that maximise employment potential
- D. Supporting the development of new technologies to reduce the negative impacts of the climate change

3. Which of the following statements is true about labour market in Europe in 2015?

- A. Over 50 year-olds' self-employment has fallen from 2002 to 2014.
- B. The share of self-employed females of all females is higher than the share of self-employed males of all males.
- C. Part-time employment was over 70 % in 2014.
- D. Self-employment in the EU constitutes 36,4 percent of the labour market.

4. Which of the following statements is <u>not</u> true about the changing work-life patterns and preferences?

- A. People will have to increasingly learn new skills to remain employable throughout their working life.
- B. It remains difficult for women to re-enter the labour market after they have taken time out to raise children.
- C. Millennials are keen to have more diversity and also more flexibility in their work patterns and commitments.
- D. Especially highly skilled workers are more and more interested in retirement and not staying in the workforce that long.

5. How can one improve professional resilience?

- A. By up-skilling opportunities throughout one's life
- B. By self-employment
- C. By temporary employment
- D. All of the above

6. Which are the reasons why it will be more difficult to target training and retraining?

- A. Decreased likelihood of job changes
- B. Growing number of generation Z in the workforce
- C. Contractual and on-demand work
- D. Growing number of elderly employees

7. _____ are a major cause of early retirement and social exclusion in many Western countries.

    A. Obesity and diabetes
    B. Mental health problems
    C. Lower skills levels
    D. Back problems and lack of physical activity

8. What is <u>not</u> an aspect of circular economy?

    A. A producer can use the waste of another as raw material for their product
    B. Circular economy is a way to avoid any emissions
    C. Using products for as long as possible
    D. Sharing products with others

9. Which of the following is a current trend in the Western countries?

    A. Voter turnout is on the increase.
    B. Citizens trust politicians.
    C. Globalisation has increased the power of national parliaments.
    D. Internet provides citizens with new direct channels for political participation.

10. Which factor is <u>not</u> an aspect that was mentioned as helping to create a culture of sustainability?

    A. Increasing people's self-awareness so that they have a realistic understanding of their own needs and priorities
    B. Broad-based general knowledge for understanding the consequences of the daily choices.
    C. Individual learning where people have time to deepen their individual understanding
    D. Peer pressure

11. What is meant by collaborative consumption?

    A. Consuming products and services within a family
    B. Consumption in collaborative and collective cultures
    C. Sharing economy of borrowing, sharing and exchanging things
    D. Consuming products and services that have been created collaboratively

12. Which major business opportunities are there to be seen when promoting sustainable lifestyle?

    A. 1, 3 and 4
    B. 1, 2 and 4
    C. 2, 3 and 4
    D. 2 and 3

        1.   Electronic applications that allow people to monitor their own health
        2.   Construction services aimed at improving the energy-efficiency of homes
        3.   Reinventing the uses of products made of plastic
        4.   Intelligent transport systems

13. Which is a typical trend about comprehensive social and health care services?

    A. Health primarily stems from well-working health care services.
    B. Needs relating to social inclusion and coping mechanisms have increased.
    C. Investing in the well-being of children and young is less important in the aging societies.
    D. Customers expect more and more from the physicians to know everything and make smart decisions for them.

14. In the future, our society's well-being services need to be more customer-orientated and more _____, and citizens must be given more choice.

- A. personalised
- B. distributed
- C. time-sensitive
- D. entertaining

15. As described in Sitra Working Paper 1.4.2015, Some Brazilian and American pilot projects for future schools have included:

- A. 1, 2, and 3
- B. 1, 2 and 4
- C. 2, 3 and 4
- D. 3 and 4

1. multi-aged groups of pupils
2. tutors as providers of holistic support to learners
3. schools understood as a part of a wider ecosystem benefitting also the families
4. transformation of traditional lectures into a robotized form

PART 3: MATHEMATICS AND LOGIC

Do the following twenty (20) problem-solving tasks. Each correct answer is worth **+ 0.4** points; an incorrect answer/ no answer are both worth 0 points. Maximum score **8**; minimum **2 points** to qualify for admission. **Mark all your answers on the ANSWER SHEET (on page 2).** The recommended time usage is **60 minutes**.

1. Number B is four times as much as number A. On the other hand, number B is one quarter of number C. What is number A, when number C = 48 ?

a) 2   b) 3   c) 4   d) 6

2. A shop pays its wholesaler $40 for a certain product, and then sells it to a client for $75. What is the markup rate?

a) 35%   b) 50%   c) 63.5%   d) 87.5%

3. Calculate –7689 + 8165 – 8065 – (–7590) =

a) –1   b) 199   c) 1   d) -99

4. John bought a calculator for 17.50, a pen for 11.50 euro and a notebook for 4.50 euro. If he gave the salesperson 50 euro, how much should he have received back?

a) 18.50 euro b) 17.50 euro c) 16.50 euro d) 15.50 euro

5. Can you work out which number (?) comes next in this sequence 4, 5, 7, 11, 19, ?

a) 41   b) 35   c) 38   d) 30

6. The price of a product was first increased by 15% and then by 20%. How many per cent had the price increased altogether?

a) 35%   b) 38%   c) 40%   d) 42%

7. A 20% discount is allowed on a necklace that is sold at the price of €176. How many euros was the discount?

     a) €32.00   b) €36.20   c) €34.00   d) €44.00

8. Five percent of 1500 euros is

     a) 7.00 euro   b) 7.50 euro   c) 75.00 euro   d) 750.00 euro

9. A tractor depreciates by 30% a year. What was the purchase price of the tractor two years ago, if its selling price is now €3675?

     a) €5880   b) €6211   c) €7500   d) €9950

10. Calculate 18/2x3 =

     a) 18   b) 3   c) 6   d) 27

11. When my godmother was 41 years old, I was 8. Now she is twice as old as I. What is my age now?

     a) 37 years   b) 27 years   c) 33 years   d) Other, specify on answer sheet

12. If you increase the price of a product by 105%, you have to multiply the original price by the factor

     a) 1.05   b) 2.05   c) 3.05   d) Other, specify on answer sheet

13. If 20 % of your clients are female, then there are how many male clients?

     a) 8.0 %   b) 0.8 %   c) 80 %   d) Other, specify on answer sheet

14. Find the single percentage increase or decrease equivalent to a 10% increase followed by a 10% decrease.

     a) -1.0%   b) -0.1%   c) 0.2%   d) Other, specify on answer sheet

15. A 10% increase in the price of natural gas decrease consumption by 5%. How many per cent and in which direction did the sales returns change?

     a) +4.5%   b) -5.0%   c) +5.0%   d) Other, specify on answer sheet

16. Can you work out which letter (?) comes next in this sequence A, D, G, J, ?

     a) M   b) N   c) O   d) Other, specify on answer sheet

17. $(2x + 2)^2 - (4x + 8)x$ is equal to

     a) 4   b) -8x + 4   c) $4x^2 + 12x + 4$ d) Other, specify on answer sheet

18. Calculate (8722 + 7832 − 1288) x 0.3 =

     a) 305.32   b) 4579.8   c) 12212.8   d) Other, specify on answer sheet

19. My basic salary plus overtime salary is altogether €2500. My basic salary is €2000 more than my overtime salary. What is my basic salary?

     a) €2100   b) €2250   c) €2300   d) Other, specify on answer sheet

20. What is half percentages of $50 ?

     a) $2,50   b) $0.025   c) $0.25   d) Other, specify on answer sheet