**Entrance Exam Preparation Materials**

The international academic and administrative team at the IUBH Campus Studies is looking forward to welcoming you on our campus and wishes you good luck for the entrance exam!
We would like to assist you in your first step to becoming a student at our university and are therefore providing you with entrance exam information and preparation materials.

The entrance exam consists of a written and an oral exam. The written part of the exam is computer-based and takes approximately 2.5 hours. It is composed of the following sections (1-3):
1. **General Knowledge**: Multiple choice questions; 30 minutes
2. **Mathematics and Logic**:
   Mental arithmetic, conversion exercise, math word problems, logic; 60 minutes
3. **English Grammar and Comprehension**:
   English reading, "fill-in-the-blank", grammar questions; 60 minutes
4. **English Oral Exam**: Interview; 15 minutes

The next few pages provide you with sample exercises.
For further questions and concerns, please do not hesitate to contact our Study Advisory Services:

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Study Advisory Services
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## 1. General Knowledge: approx. 75 questions, 30 minutes

The general knowledge section of the exam is structured as follows:

### Section 1: Politics and History
Example: What is the name of the current French president?
☐ Francois Mitterand
☐ Jaques Chirac
☐ Nicolas Sarkozy
☐ Francois Hollande

### Section 2: Arts & Culture
Example: Which of the following painters is not German?
☐ Albrecht Dürer
☐ Paul Klee
☐ Jan Breughel
☐ August Macke

### Section 3: Geography
Example: Which of the following countries does not border the Baltic Sea?
☐ Sweden
☐ Norway
☐ Denmark
☐ Finland

### Section 4: Science and Technology
Example: Who is credited with inventing the automobile?
☐ Felix Wankel
☐ Gottlieb Daimler
☐ Rudolf Diesel
☐ Karl Benz

### Section 5: Sports
Example: Who has won the Gentleman's Championship Wimbledon 2007?
☐ Andy Roddick
☐ Rafael Nadal
☐ Roger Federer
☐ Fernando Gonzalez

If you are interested in testing your general knowledge online please visit
http://www.wissen.de/wissenstest and check out the training programme for general
knowledge.

## 2. Pre-test Exercises for Math and Logic, 60 minutes

**A. Mental Arithmetic: Solve as many problems as possible without using a calculator.**
**NOTE: "Punkt-vor-Strich-Rechnung" does not apply here. Add the numbers successively.**
**(TIME LIMIT: 1 minute)**

| | |
|---|---|
| 25 * 2 + 24 : 2 – 27 = | |
| 9 * 5 + 15 : 10 – 3   = | |
| 30 – 15 : 5 + 39 * 2 = | |
| 76 – 42 : 2 + 23 * 2 = | |
| 14 –   6 * 2 + 22 : 2 = | |
| 8 – 3 * 4 + 8 : 7      = | |
| 22 : 2 – 6 * 9 + 42   = | |
| 95 : 5 – 16 * 3 + 45 = | |
| 40 : 5 – 2 * 3 + 15   = | |
| 74 : 2 – 29 * 5 + 10 = | |
| 3 * 9 + 43 : 5 – 5     = | |
| 80 – 18 : 2 + 5 * 2   = | |
| 4 – 2 * 6 + 3 : 3      = | |
| 54 : 9 – 4 * 7 +  7    = | |
| 50 : 10 – 3 * 2 + 22 = | |

There are more problems to solve in the entrance exam within an extended time pe-
riod. You can further practice your mental arithmetic skills online at, for example,
http://sikore.schiffner-tischer.de/.

**B. Conversion Exercise: Calculate the following to 2 decimal points using**
**the conversion table below.**
Example: 5 tonnes (t) in pounds (lb)

| 1 kilogramme (kg) | 1000g | 2,2046 lb |
|---|---|---|
| 1 tonne (t) | 1000kg | 0,9842 ton |

## C. Word Problem (Rule of Three/ Distribution/ Foreign Currency/ Percentages)

1. The monthly output of 9 machines amounts to 45.000 pieces. The monthly output has to be increased to 75.000 pieces. How many machines in total will be necessary?

2. For seasonal work to be accomplished 36 workers need 48 days working 8 hours a day. Now the same work has to be accomplished within 32 days using 9 additional workers. How many work hours a day are needed to finish within 32 days?

3. A merchant plans to make coffee blends at a price of € 7.50 for half a kilo. The price of the first variety of coffee used is € 8.50 for half a kilo and the price of the second variety of coffee used is € 6.00 for half a kilo. How does the merchant blend the coffee proportionally to achieve a price of € 7.50 per half kilo?

4. Three partners are buying a house and participate financially as follows: A with 0,25, B with 0,2 and C with € 148,500.00. What is the total price of the house?

5. A textile merchant from Britain exchanges British pounds into Euro at a bank in Frankfurt. The exchange rate is quoted at 0.64. What does that mean?

6. A textile producer in Bremen, Germany imports 20,000 kg of cotton from the United States. The invoice comes to $ 40,000.00. What is the price of half a kilo cotton in Euro? ($1.00 = € 1.10)

7. A bank transfers 43.000,00 Canadian Dollars at an exchange rate of € 0.64 per Canadian Dollar to the Canadian business partner of their client. What was the total amount on the invoice in Euro?

8. A retailer receives the following offers for purchasing a commodity:
a. € 3,340.- with a 3% discount
b. € 3,300.- with a 2% discount
c. € 3,310.- with a 2,5% discount
Which one is the best offer?

9. Two cooking pots are offered at € 28,-- and € 21,-- respectively. How much more expensive is the first cooking pot as a percentage?

10. The price of a radio if paid at once in cash comes to € 350. A customer pays € 58 in cash and agrees to pay another 8 instalments of € 40 each. How much more in percent has the customer to pay when choosing payment by instalments?

## D: Logic

### Task 1

| Premise 1: | All A are B. |
|---|---|
| Premise 2: | All C are D. |
| Conclusion a) | All A that are not D are B that are not C.<br><br>☐ possible    ☐ not possible |
| Conclusion b) | All A that are C are B that are D.<br><br>☐ possible    ☐ not possible |
| Conclusion c) | Some A that are D are B that are C.<br><br>☐ possible    ☐ not possible |
| Conclusion d) | Some A that are C are not B that are D.<br><br>☐ possible    ☐ not possible |
| Conclusion e) | All A that are D are B that are C.<br><br>☐ possible    ☐ not possible |

### Task 2
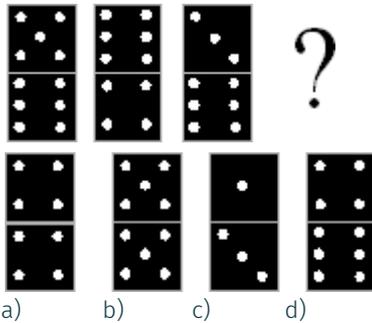What is the value of X?

$$X + Y = 12$$
$$2Y = 6$$

### Task 3
The following number rows are arranged according to a certain rule. Your task is to identify the number that will come up next.

a)  9   8   10   9   12   11   15   ?
b)  2   4   8   4   8   16   ?

**Task 4**
Which domino replaces the question mark?



a)        b)        c)        d)

## 3. English Grammar and Comprehension

Reading, "fill in the blank" and grammar questions; 60 minutes

**A. Reading:** In this section, you will receive a scientific text of about 650 – 700 words length. You will be asked to answer 12 questions on the text. The text is related to the study programme you apply for. You can use TOEFL prep material to prepare yourself for the type of questions asked in this section.

**B. "Fill in the blank":** Complete the passage by putting one of the following words in each space:

in order to -  made – to predict – had to be discussed – smooth – briefing – chose – over – speakers – front office – heads – was held – where – could – in order to – leading – were invited – with

In 1999, the Chief Executive Officer of a 1) _____ American company invited 250 of his most important European clients to attend a conference 2)_____ four days at Le Petit Palais, the conference centre of Le Montreux Palace. Former Heads of State 3) _____, as well as guest 4)_____ . All necessary security arrangements 5) _____ in advance, and the organizers 6) _____ each suite personally for these most important of guests 7) _____ the guidance of the 8) _____ manager.

Daily meetings started early in the morning with the 9) _____
of all departments for a full 10)_____, and then with the
conference organizers. At the end of each day, a meeting 11)_____ at 11pm with the security officers 12) _____ ensure the 13) _____ running of the next morning's most important event. Mistakes cannot be 14)_____ in top VIP events and the Chief Executive Officer prefers 15) _____ situations
16) _____ problems 17) _____ occur, 18) _____ react to them.

The "**fill in the blank**" exercise of the exam is longer. The issues dealt with are related to the course of study you apply for.

**C. Grammar:** The part of the exam testing your English grammar knowledge consists of different question types. A few examples are listed below.

### Section 1 – Choose the correct word or phrase to complete the sentence.
Example: What time _____?
☐ does you arrive
☐ arrived you
☐ did you arrive
☐ do you arrived?

### Section 2 – Please identify the mistake in the following sentences. Choose from the underlined options.
Example: Thanks <u>very much</u> for your letter – it was good <u>to hear</u> all your news and I'm glad <u>that</u> your family are all <u>as</u> well.
☐ very much
☐ to hear
☐ that
☐ as

### Section 3 – Complete the following sentences using the correct form of the word given in brackets.
Example: Many thanks for your birthday present. I was _____ delighted and you certainly know my taste. (ABSOLUTE)

### Section 4 – Identify the word that is closest in meaning to
Example: Debate
☐ debase
☐ debauch
☐ discuss
☐ dissuade

The **Oral Exam** is a **15 minutes interview** with a member of our university's faculty. The interview gives us insights into your motivation and personality and tests your ability to freely speak English. It is comparable to a job interview. Your final score will be a combination of the written and the oral part of the exam.

# Answers

## A – Answers Mental Arithmetic

| | |
|---|---|
| 25 * 2 + 24 : 2 – 27 = | 10 |
| 9 * 5 + 15 : 10 – 3   = | 3 |
| 30 – 15 : 5 + 39 * 2 = | 84 |
| 76 – 42 : 2 + 23 * 2 = | 80 |
| 14 –   6 * 2 + 22 : 2 = | 19 |
| 8 – 3 * 4 + 8 : 7      = | 4 |
| 22 : 2 – 6 * 9 + 42   = | 87 |
| 95 : 5 – 16 * 3 + 45 = | 54 |
| 40 : 5 – 2 * 3 + 15   = | 33 |
| 74 : 2 – 29 * 5 + 10 = | 50 |
| 3 * 9 + 43 : 5 – 5      = | 9 |
| 80 – 18 : 2 + 5 * 2   = | 72 |
| 4 – 2 * 6 + 3 : 3        = | 5 |
| 54 : 9 – 4 * 7 +  7     = | 21 |
| 50 : 10 – 3 * 2 + 22 = | 26 |

## B – Answers Converting Exercise
11023 pounds (lb)

## C – Answers Math Word Problem
1.  15
2.  9.6
3.  3 : 2
4.  € 270,000.00
5.  GBP 64.00 = € 100.00
6.  € 1.10
7.  € 27,520.00
8.  c
9.  33 1/3%
10. 8 %

## D – Answers Logic
1.a.  possible
1.b.  possible
1.c.  possible
1.d.  not possible
1.e.  possible
2.     x = 9
3.a.       14   rule: (-1) (+2) (-1) (+3) (-1) (+4)
3.b.       8     rule: (*2) (*2) (/2)
4.          a

Answers: pre-test English Grammar and Comprehension

**B - Answers "Fill-in-the-blank"**
1. leading, 2. over, 3. were invited, 4. speakers, 5. had to be discussed, 6. chose, 7. with, 8.
front office, 9. heads, 10. briefing, 11. was held, 12. in order to, 13. smooth, 14. made, 15. to
predict, 16. where, 17. could, 18. in order to

**C - Answers Grammar**
1. did you arrive, 2. as, 3. absolutely, 4. discuss