

# 大学院入学試験問題用紙

2023 年度 1 期

科目名	受験専攻	受験番号	氏名
英語	農業工学 専攻 博士後期 課程		

I. Please read the following sentences and answer the question.

[Redacted text block]

(Source: Björn Gustavii. How to Write and Illustrate a Scientific Paper. 3<sup>rd</sup> ed.; CAMBRIDGE UNIVERSITY PRESS: 2017, 1-2.)

Q1. [Redacted text]

Ans. (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

II. Please put the most appropriate a word or words in each bracket.

[Redacted text block]

(Source: 臼井俊雄. 科学の知識と英語を身につける; ベレ出版, 2016)

Ans. A) \_\_\_\_\_ B) \_\_\_\_\_ C) \_\_\_\_\_ D) \_\_\_\_\_

III. Please select the most appropriate a word or words in each bracket from the following choices.

[Redacted text block]

(Source: 臼井俊雄. 教養としての理系の英語; ベレ出版, 2014)

Ans. i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_ iv) \_\_\_\_\_ v) \_\_\_\_\_

大学院入学試験問題用紙

2022 年度 10 月入学・2023 年度 1 期

Subject	Department / Course	Application Number	Name
English	Agricultural engineering Doctor		

IV. Please read the following passage and answer the following questions.

[Redacted passage text]

(Source: Tony Allan, "virtual water" 2011, Chapter 1 p.15-16, I.B.TAURIS)

Question 1 Which of the following is the appropriate word in ( A )? Please circle a correct answer.

[Redacted options for Question 1]

Question 2 Which of the following is the appropriate word in ( B )? Please circle a correct answer.

[Redacted options for Question 2]

Question 3 Which of the following is the appropriate word in ( C )? Please circle a correct answer.

[Redacted options for Question 3]

Question 4 Which of the following is the appropriate word in ( D )? Please circle a correct answer.

This breakfast includes a cup of espresso coffee, a slice of toast, an apple, eggs, a glass of milk, and bacons.

[Redacted options for Question 4]

Question 4 Which of the following is the appropriate word in ( E )? Please circle a correct answer.

The volume of a bathtub is assumed to be 360 litres.

[Redacted options for Question 4]

# 大学院入学試験問題用紙

2022 年度 10 月入学・2023 年度 1 期

Subject	Department / Course	Application Number	Name
地域資源利用工学 Land and Water Use Engineering	Agricultural Engineering Doctor		
<p>1. Please choose one question among 2 questions and answer it.</p> <p>(1) In arid and semi-arid regions, to minimize the amounts of irrigation water is indispensable. Using following 3 words in blanket, please describe your idea on how to minimize the amount of irrigation water to crops under the limited water resources. (I. <b>ET</b> (evapotranspiration), II. <b>Drip irrigation</b>, III. <b>Root zone</b>)</p> <p>(2) Revised Universal Soil Loss Equation is the most popular model for estimating amount of soil loss from agricultural fields. Using following 5 words in blanket, please describe your idea on how to estimate the amounts of soil loss with high accuracy. (I. <b>Rainfall</b>, II. <b>Soil</b>, III. <b>Topography</b>, IV. <b>Crop</b>, V. <b>Conservation practice</b>)</p>			

# 大学院入学試験問題用紙

2023 年度 2 期

Subject	Department / Course	Application Number / 受験番号	Name
英語 English	Agricultural Engineering / 農業工学専攻 Doctor / 博士後期課程		

**Question 1.** Select the word that fits in the blanks (A) ~ (D) and the blanks [ 1 ] ~ [ 6 ] of the following sentences from the respective options.

[Redacted text block containing several paragraphs of text with blacked-out sections for the test questions.]

**Blank (A) ~ (D) options**

Cultural	Environmental	Humanity	Provisioning	Regulating	Supporting
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**Answer**

(A) \_\_\_\_\_ (B) \_\_\_\_\_ (C) \_\_\_\_\_ (D) \_\_\_\_\_

**Blank [ 1 ] ~ [ 6 ] options**

(a) 3 billion to 6 billion people	(b) carbon dioxide and other greenhouse gases
(c) humans increased rapidly	(d) recreation, artistic and spiritual fulfillment, and intellectual development
(e) religions, heritage values, social interactions, and the linked amenity services	(f) water use doubled

**Answer the alphabet with (a)~(f)**

[ 1 ] \_\_\_\_\_ [ 2 ] \_\_\_\_\_ [ 3 ] \_\_\_\_\_ [ 4 ] \_\_\_\_\_ [ 5 ] \_\_\_\_\_ [ 6 ] \_\_\_\_\_



# 大学院入学試験問題用紙

2023 年度 2 期

Subject	Department / Course	Application Number	Name
Agricultural Process and Logistics Engineering	Agricultural Engineering Doctor		

Answer 2 questions from the following 4 questions.

1. Please explain the freshness and quality of vegetables including the evaluation and examination of them.
2. Please explain the typical drying characteristics of food, especially concerning the changes in the moisture content, temperature, drying rate, and moisture ratio, and the drying models (mathematical models) used in agricultural products.
3. Please explain inverse problems and forward problems in the field of numerical analysis.
4. Please explain the definition of numerical simulation and its benefits in the field of food engineering and/or agricultural engineering.