# **Exam Guidelines for International Candidates Applying to English-Medium Programs**

ILIA STATE UNIVERSITY

# **Contents**

Placement Test in English	3
Entrance Exam in Biology and Chemistry	
Entrance Exam in Mathematics or Physics	
Entrance Exam for MBA program candidates	
Entrance Exams for MPH program candidates	
Entrance Exam for Applied Genetics candidates	
Entrance Exam for Master of Atmospheric and Near Space Sciences candidates	

#### **Placement Test in English**

To be eligible for enrollment in all English programs at Ilia State University, the minimum language requirement is CEFR B2 (upper-intermediate).

Please carefully review the examination requirements outlined below, as they will be strictly adhered to by the admissions office.

Examination components you will be assessed on:

- 1. Speaking
- 2. Listening
- 3. Reading
- 4. Writing

# **Speaking Stage (arranged separately):**

- Duration: 15 minutes
- Minimum requirement: 5.5 out of 9 to pass the Speaking stage. If the score falls below 5.5, you will not proceed to the next stage, and your application will be cancelled.
- Speaking stage breakdown:
  - 3 minutes for an introduction of yourself
  - 3 minutes for a speech prepared based on the topic provided during the interview (preparation time: 5 minutes)

#### Listening / Reading / Writing Stages (all three stages are arranged at the same day):

#### Listening

- Duration: 40 minutes
- Listening test takes 30 minutes to finish and you will get an additional 10 minutes to review your answers. You will need to answer 40 questions in response to four recording sections. The minimum requirement for taking admission is 5.5 out of 9

#### Reading

- Duration: 60 minutes
- There are 3 readings passages. Each question equals to 1 point. The results are reported using a nine-band scale. Minimum requirement for taking admission is 5.5

### Writing

- Duration: 60 minutes
- There are 2 writing tasks.
  - Writing Task 1 requires to describe information presented in a graph, table, chart or diagram etc. and to present the description in their own words. Candidates are required to write at least 150 words in task 1. The results are reported using a nine-band scale. Minimum requirement for taking admission is 5.5
  - Writing Task 2 requires the candidates to formulate and develop a position in relation to a given prompt in the
    form of a question or statement. Candidates are required to write <u>at least 250 words in task 2.</u> The results are
    reported using a nine-band scale. Minimum requirement for taking admission is 5.5

#### **Entrance Exam in Biology and Chemistry**

To be eligible to get enrolled in the Medicine program at Ilia State University, international candidate should pass the entrance exam in biology and chemistry.

Duration: 1 hour and 40 minutes

Exam is divided in 2 sections

**Section 1:** The chemistry section includes 25 questions. Each question is assigned 1 point. The threshold is 17 points out of 25.

#### **Topics covered in Chemistry:**

- I. Inorganic chemistry 1. Elements, Atoms, Molecules and the Periodic Table; 2. Atomic weight, Molecular weight, Mole, molarity; 3. Ionic Bonding and Simple Ionic Compounds; 4. Covalent Bonding and Simple Molecular Compounds; 5. Chemical Reactions types; 6. Solutions; 7. Acids and Bases.
- II. Organic chemistry 1. Alkanes and Halogenated Hydrocarbons; 2. Alkenes; 3. Alkynes; 4. Unsaturated, saturated and Aromatic Hydrocarbons; 5. Organic Compounds of Oxygen; 6. Carbohydrates; 7. Lipids; 8. Amino Acids, Proteins, and Enzymes; 9. Nucleic Acids; 10. Energy Metabolism

**Section 2:** The biology section includes 25 questions. The threshold is 25 points out of 35 points.

# **Topics covered in Biology:**

- Biological classification of living organisms.
- Cellular Biology the most common organelles and what they do in the cellular environment,
- the most common cell types in the human body and their function;
- Eukaryotic versus Prokaryotic organisms characteristics of both, similarities and differences;
- Cell. Chemical basis of biology. The basic structure and functioning of Proteins, Carbohydrates,
- Lipids, Nucleic acids basic differences between DNA and RNA, post-translational modifications.
- Translation versus transcription
- Reproduction and individual development of organisms. Mitosis and Meiosis Basic processes,
- differences and similarities, crossing over
- Human: tissues, organ systems
- Human blood composition, blood Typing The ABO blood group system and the Rhesus (Rh +/-)
- system, the basics of blood transfusion;
- Basics of human Cardiovascular system, Digestive system, Endocrine system, Renal system, Skin,
- Muscle system; Nervous system; Reproductive system; Respiration; Sensory reception; Skeletal
- system).
- Anaerobic versus aerobic metabolism / respiration
- Mendelian genetics The transmission of dominant and recessive traits; Non-Mendelian
- genetics chromosomes and their basic abnormalities
- Osmotic pressure basic concepts and how it applies to biological systems

#### **Entrance Exam in Mathematics or Physics**

To be eligible to get enrolled in the programs offered by the School of Technology (computer engineering, civil engineering, electrical engineering, computer science) at Ilia State University, international candidate should pass the entrance exam in Mathematics or Physics

#### **Entrance exam in Mathematics**

Duration: 2 hours

There are 20 questions. Minimum requirement to pass the exam is 11 points.

Topics covered in the exam:

- Fractions, Exponentials (Adding, subtracting, multiplying)
- Geometry
- Algebra and absolute numbers and number sets
- Sin and Cosine Laws

# **Entrance Exam in Physics**

Duration: 2 hours

There are 20 questions. Minimum requirement to pass the exam is 11 points.

Topics covered in the exam:

- Electronics, electricity and Magnetism
- Mechanics, mechanical equilibrium, kinematics
- Hydrostatics
- Optics, Energy

#### **Entrance Exam for MBA program candidates**

To be eligible to get enrolled in MBA program at Ilia State University, international candidate should pass the entrance exam.

Duration: 1 hour and 30 minutes

Topics covered during the exam:

- Case study from financial accounting
- Case study from Marketing
- Case study from financial management

#### **Entrance Exams for MPH program candidates**

To be eligible to get enrolled in MPH (Public Health and Health Policy) program at Ilia State University, international candidate should pass two stages:

Stage 1: submit GMAT (with a minimum of 550 points) or GRE (with a minimum of 260+3) certificate or pass the entrance exam in mathematics.

Stage 2: Subject-based oral exam. The following areas will be assessed:

- Subject-related basic knowledge 25 points
- Understanding of current trends and achievements in the field of public health 10 points

- Understanding of the professional development needs for a successful career 15 points
- Match between the candidate's expectation and program content and objectives 20 points
- Personal experience and achievements in the discipline 15 points
- Ability to participate in a discussion and competently address questions asked 15 points

### **Entrance Exam for Applied Genetics candidates**

To be eligible to get enrolled in Master of Applied Genetics program at Ilia State University, international candidate should pass the subject-based oral exam. The following areas will be assessed:

- Subject-related basic knowledge (e.g. concepts, theories) 25 points
- Understanding of current trends and achievements in the field of applied genetics -10 points
- Understanding of the professional development needs for a successful career 10 points
- Match between the candidate's expectation and program content and objectives 10 points
- Personal experience and achievements in the discipline 10 points
- Ability to advocate, verbally and in writing, with precision and clarity 15 points
- Ability to participate in a discussion and competently address questions asked 20 points

#### **Entrance Exam for Master of Atmospheric and Near Space Sciences candidates**

To be eligible to get enrolled in Master of Atmospheric and Near Space Sciences program at Ilia State University, international candidate should pass the subject-based oral exam. The following areas will be assessed:

- Subject-related basic knowledge (e.g. concepts, theories) 40 points
- Knowledge of current trends and achievements in the field of atmospheric sciences 10 points
- Understanding of the professional development needs for a successful career 10 points
- Match between the candidate's expectation and program content and objectives 10 points
- Personal experience and achievements in the discipline 10 points
- Ability to advocate, verbally and in writing, with precision and clarity 10 points
- Ability to participate in a discussion and competently address questions asked 10 points