2025 Master's Program, Graduate School of Design (General Entrance Examination) Achievement Test Question Sheets

Examination Subject

Urban and Architectural Design

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Question 1 (Compulsory)

Describe each of the following 20 keywords related to environmental design.

- (1) Basilica
- (2) Sick building syndrome
- (3) Cooperative house
- (4) Carbon negative concrete
- (5) Nature-based Solutions
- (6) TATSUNO Kingo
- (7) Chemical warfare agent
- (8) The Limits to Growth
- (9) COVID-19
- (10) Mies van der Rohe
- (11) Ecosystem service
- (12) Vibration control of buildings
- (13) Cross laminated timber (CLT)
- (14) Specialization of environmental design
- (15) Shinden-zukuri style
- (16) Park system
- (17) Metabolism (architectural movement)
- (18) Curtain wall
- (19) Area classification system
- (20) World Heritage Convention

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- *Choose and answer two questions from Questions 2 to 5. If you answer three or more questions, your answers will not be marked.
- *Use the third and fourth answer sheets for each question (use a separate sheet for each) and make sure that each of your answer fit on one sheet.

Question 2: Questions on architectural planning (50 points)

- 1. Explain the long-term problems of "housing complexes". (10 points)
- 2. Explain the significance and challenges of "opening a school" respectively. (10 points)
- 3. Explain the "peculiarities of hospital architecture in Japan". (10 points)
- 4. Discuss the "sustainability" of space from the viewpoint of architectural planning, citing specific examples. (20 points)

Question 3: Questions on architectural design and urban planning (50 points)

- 1. Answer the following questions (1) and (2) regarding urban planning.

 (Use about 1/2 of the answer sheet)
 - (1) Describe the author and explain the urban project shown on the right. (10 points)
 - (2) Compared to the time when the urban plan in the diagram on the right wasa drawn up, how do cities tooday, in an era of declining population, differ, describe your view on this. (15 points)



2. Answer the following questions (1) and (2) regarding architectural design.

(Use about 1/2 of an answer sheet)

(1) Explain the author and the contents of the architectural drawing shown below. (10 points)



(2) Discuss your own vision of circular design. (15 points)

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Question 4: Questions on architectural environment planning (50 points)

- 1. The human eye can see objects in a wide range of lighting conditions, from bright daylight to quite dark places. Explain the mechanisms that enable the human eye to function like this and the characteristics of the response to brightness including a diagram. (10 points).
- 2. Explain the relationship between humans and the thermal environment in terms of each of the following items. (20 points)
 - Thermoregulation
 - Heat and cold acclimatization
 - People vulnerable to thermal environmental changes
 - Heat shock
- 3. Identify two typical concepts to consider in the acoustic design and explain what you know about them. (10 points)
- 4. Explain the difference between 'personal space' and 'territory' in terms of human territoriality and explain how each is applied in environmental design with examples. (10 points)

Question 5: Questions on building construction (50 points)

- 1. Describe the techniques and innovations currently used in building design and construction sites to solve labor shortages in building production (15 points).
- 2. List five of your favorite buildings and analyze and describe each in terms of building construction methods. (25 points)
- 3. Give two examples of architectural renovations and explain the pre- and post-renovation states of each example. (10 points)