

Examination Subject Urban and Architectural Design

(Page 1 of 3)

Question 1: Explain all 20 keywords related to environmental design listed below. (5 points x 20)

- (1) Affordance
- (2) Neighborhood Unit
- (3) La Ville Radieuse
- (4) Functionalism
- (5) Conventional Wood-framed Construction
- (6) DX (Digital Transformation)
- (7) Vegetation of Japan
- (8) Garden City
- (9) City park / Urban park
- (10) Resilience
- (11) Plywood
- (12) Vibration Control of Buildings
- (13) Air Pollutants
- (14) Thermal Transmittance
- (15) ZEB (Net Zero Energy Building)
- (16) SDGs (Sustainable Development Goals)
- (17) Gothic Revival
- (18) Globalization
- (19) Tatami Mat
- (20) Renaissance

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(Page 2 of 3)

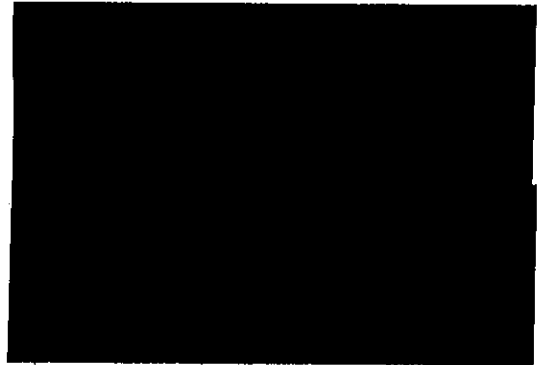
- * Select and answer two of the questions from among Question 2 to Question 5. If more than three questions are answered, they will not be marked.
- * Use the third and fourth answer sheets, and separate answer sheets for each question to keep each answer on one sheet.

Question 2: Questions on Architectural Planning (50 points)

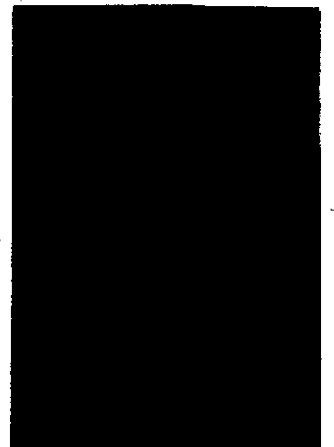
1. Explain what it means to open a "dwelling" to the city. (10 points)
2. Explain each method of "school management system" (10 points)
3. Explain "total institution" using the example of medical environment. (10 points)
4. Discuss the "public nature" of space from the perspective of architectural planning, citing specific examples. (20 points)

Question 3: Questions related to Urban and Architectural Design (50 points)

1. Answer the following questions (1) and (2) regarding urban design. (Your answer must be about 1/2 length of the answer sheet.)
 - (1) Describe the author and explanation of the "Urban Analysis" diagram regarding the figure on the right. (10 points)
 - (2) Choose any one city and describe your own "analysis of the city". (15 points)



2. Answer the following questions (1) and (2) about Architectural Design. (Your answer must be about 1/2 length of the answer sheet.)
 - (1) Describe the author and the contents of the architectural drawing shown at right. (10 points)
 - (2) Discuss your own vision on the new office building in the Post-COVID 19 Era. (15 points)



Examination Subject Urban and Architectural Design

(Page 3 of 3)

Question 4: Question on Architectural Environmental Design(50 points)

1. Explain human vision in terms of "field of vision" and "accuracy of perception by position within the visual field". (10 points)
2. Explain the design of sound environments from the two aspects of "reverberation" and "insulation". (10 points)
3. Explain "privacy" and "territory" with examples of their application to architectural design. (15 points)
4. Explain what is known from environmental psychology about how the distance between people and their position in relation to others are determined in various scenes and human relationships. (15 points)

Question 5: Question on Architecture and Building Construction(50 points)

1. Around the world, wood, earth, *kaya* (grass), and other materials have been used in traditional *minka* (vernacular) houses. Explain why various apparently inferior materials have been used, and what characteristics of building form appear when these materials are used. (10 points)
2. Explain, based on your own ideas, the ideal relationship between Building Construction Design (which can be rewritten as material selection and detail design) and Architectural Design, and where Building Construction Design can contribute to Architectural Design. (15 points)
3. Describe the town or city in which you were born and raised in terms of geography, history, climate and topography. Next, explain the buildings that determine the landscape of the town or city where you were born and grew up, from the viewpoints of building construction characteristics or of architectural production. (15 points)
4. Name one of your favorite architects. Give an example of one of the architect's major works, explain the work in terms of its Building Construction Design characteristics or architectural production, and explain why you like the architect. (10 points)