

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

Question and Answer Sheets

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Media Arts and Design
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Notes : **Compulsory Questions** : Answer all three questions. **Elective Questions** : Answer two of the three questions

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Things to note when answering

- (1) **Compulsory Questions** : Answer all questions (Questions I -III).
- (2) **Elective Questions**: Choose and answer two of the three questions(Questions IV-VI).
- (3) Answers to each question should be written directly on the question and answer sheets.

Choice Question and Answer Sheet

(Check the two question boxes of your choice below)

QuestionIV	QuestionV	QuestionVI

※This form must be submitted with the answer sheets.

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

Question and Answer Sheets

Compulsory Questions

Media Arts and Design

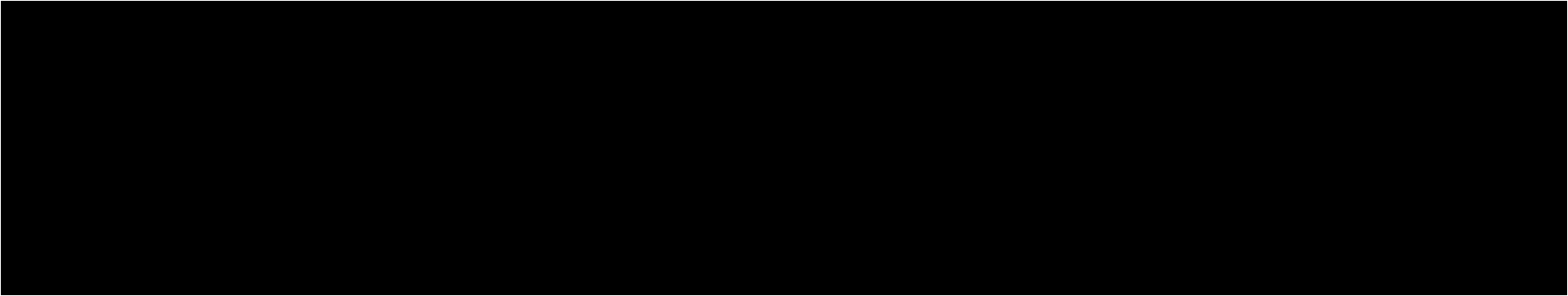
Examinee’s number

Compulsory Questions

Answer all three questions ( I -Ⅲ).    (60 /200 points)

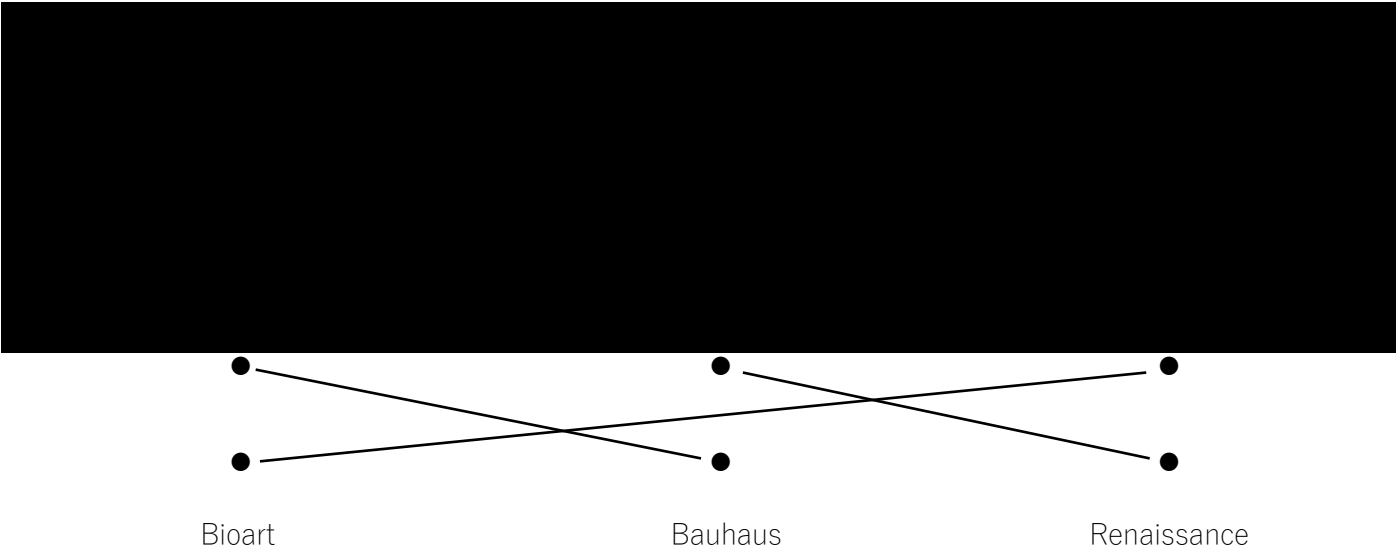
【Compulsory Question I 】

Read the text from John Maeda’s “Artists and Scientists: More Alike Than Different” and answer the following questions.



John Maeda "Artists and Scientists: More Alike Than Different" 2013

(Q1) Regarding the underlined section (a), connect the following three artworks with their related words using lines.



(Q2) Regarding the underlined section (b), write your thoughts on the new creativity that arises from the collaboration between artists and scientists.

This question asks about the future of art and technology, and aims to assess ability to be insightful, discuss, and apply knowledge and skills of the examinee.

The following are some examples of the points to be discussed.

1. Interdisciplinary thinking: Explain the differences and similarities in the approaches to the problem of artists and scientists described in the text, citing past examples outside the text.
2. Application to the real world: Based on the example explained in 1, students should discuss from their own perspectives what can be achieved through collaboration between artists and scientists.
3. Critical reflection: Discuss whether the content of this article, which is already more than 10 years old, is still valid or not.

**Compulsory Questions**    Answer all three questions    ( I -Ⅲ). (60 /200 points)

【Compulsory Question   II 】

Select two of the following 8 terms, and explain each as much detail as possible.

- (1) Classification of Printing Method
- (2) Four principles of layout: proximity, alignment, repetition, and contrast
- (3) Golden Division
- (4) Pictograms of ICAO (International Civil Aviation Organization)
- (5) Sign Planning
- (6) UI (User Interface) Design
- (7) IA (Information Architecture)
- (8) Model of Purchasing Behavior on the Internet

**Intent of the question:** To test whether the examinee has basic knowledge in graphic design.

- 1) **Sample answer:**  
Explain letterpress, intaglio, stencil, and planographic methods with specific examples. Mention may be made of laser and inkjet printing methods for recent business and home printers.
- 2) **Sample answer:**  
Describe how the physical properties of “proximity,” “alignment,” “repetition,” and “contrast” function to form order in information. A psychological perspective is also acceptable.
- 3) **Sample answer:**  
The golden ratio is  $A:B=B:(A+B) =1:1.618$ , a ratio that represents an inherently beautiful shape and form and is pleasing to the eye. Dividing line segments, lengths, etc. This ratio is called the golden division.  
Based on the above, the outline of the face of Leonardo da Vinci's “Mona Lisa” is in the golden ratio, and the golden division is applied to the upper half of the body. Architect Le Corbusier devised the “Modulor,” a standard numerical sequence for buildings, from the dimensions of the human body and the golden ratio.  
You may give examples of principles and designs in which the golden division is applied, such as.
- 4) **Sample answer:**  
The pictogram was designed by Professor Martin Krampen of Ulm University of Art and Design in 1969.  
When he designed the pictogram, he conducted a comprehension survey of over 2,000 people of various nationalities. The results of the comprehension survey showed that “the unfamiliarity of a pictogram is generally better understood when it is depicted figuratively than abstractly”.  
Based on this result, a pictogram called “photo silhouette” was designed.
- 5) **Sample answer:**  
The literal translation is to mark the environment in a planned manner. The contrast in space and environment is used to make it easier to understand the location and to find a route.  
To plan the communication of information in a certain environment or space so that people can fulfill their purposes safely and comfortably.
- 6) **Sample answer:**  
Describe including the following points.  
-UI is an abbreviation for User Interface.  
-Position in the classification of interfaces, UI types  
-Specific fields where UI is implemented
- 7) **Sample answer:**  
Describe including the following points.  
-IA is an abbreviation for Information Architecture (IA)  
-Purpose and methods of IA  
-Specific areas where IA is required
- 8) **Sample answer:**  
Describe about AISAS, AISCEAS, etc. You may mention DECAX, Pulse consumption, etc., which have been proposed in recent years.

Compulsory Questions

Media Arts and Design

Examinee’s number

Compulsory Questions

Answer all three questions ( I -Ⅲ). (60 /200 points)

【Required Question Ⅲ】

Ⅲ-1. Explain the use of "cross media" in commercial production, using examples of collaboration with the web.

Nissin Foods’ "Cup Noodles" CM campaign is a prime example of a successful cross-media strategy that combines TV commercials with web integration. The "HUNGRY DAYS" series, in particular, gained widespread attention due to its unique anime-based storytelling.

- Integration of TV Commercials and YouTube

The "HUNGRY DAYS" series was aired as a TV commercial, followed by an extended version released on YouTube. This approach allowed viewers to become intrigued by the TV commercial and then explore the story further online.

- Enhancing Virality through Social Media

Additional content related to the characters and storyline was shared on X and Instagram, strengthening engagement with the audience. A hashtag campaign encouraged users to discuss and share their thoughts on the CM, amplifying its reach.

- Impact of the Cross-Media Strategy

- 1) Viewers who became interested through TV commercials were able to engage further with the content online, making the brand more memorable.
- 2) The use of anime and social media attracted significant support from younger demographics.
- 3) User-generated posts and shares helped naturally spread the campaign’ s reach.

Ⅲ-2. Explain the effective expression of projection mapping, incorporating the necessary knowledge, skills, and techniques. Use all of the following keywords in your explanation: shape, three-dimensionality, shading, viewpoint, and perspective.

Note: The following is a sample answer. Do not use this text as-is; instead, base your discussion on specific examples or practical cases of projection mapping that you have personally researched.

Projection mapping is a visual expression technique that integrates projection and mapping, fundamentally involving the creation and projection of imagery tailored specifically to the three-dimensional shapes of buildings or objects. By understanding and taking into account the shape of the target object, mapping visuals onto it creates an illusion that the imagery is part of the object itself. Moreover, the use of shading through careful manipulation of light and shadow becomes crucial to emphasize a visual sense of depth. Properly positioned shading can generate a sense of dimensionality and texture even on flat surfaces, allowing viewers to perceive depth, curvature, or movement, thus reinforcing illusions of dynamic transformations or motion in the projected imagery. Furthermore, it is vital to design visual presentations that take into account the viewer's perspective. Viewing from specific vantage points can enhance the illusion of three-dimensionality and dynamism, necessitating visual designs that consider viewing areas and the paths viewers are likely to follow. Finally, by appropriately managing perspective in consideration of both the viewer's viewpoint and the size and shape of the projection targets, it becomes possible to seamlessly blend projected visuals with real-world spaces, achieving a highly immersive experience.



Elective Questions

Media Arts and Design

Examinee’s number

【Elective Questions】 Select and answer two questions from among the three questions (IV-VI). (140 / 200)

【Elective Question IV】 (IV-1 and IV-2)

IV-1. Choose one term from each of the following groups (Group A, Group B, and Group C) and explain each of them. Write down the term of your choice in the box, and then discuss it.

Group A: Select and describe one of the following terms: "**Installation**", "**Relational Aesthetics**", or "**site-specific**".

**Installation:** Installation is a method of expression in contemporary art in which a specific space or location is represented as a work of art. It organically relates the work to the environment in which it is exhibited, rather than as a stand-alone piece, and presents it as a single artistic space. The term “installation” has become common through the environmental art of Allan Kaprow and others in the 1950s, video installations in the 1960s, and minimalism in the 1970s, which Carl Andre described as “sculpture as a place” . Early examples of an installation works is work include Kurt Schwitters' “Merzbau”. (1923-1937. A more recent example is Louise Bourgeois' “Maman” (1999).

**Relational Aesthetics:** The book *Relational Aesthetics* published (1998) by the curator Nicolas Bourriaud names a tendency of the artistic practice of the 1990s as relational art and values it as a new form in the art world debate. Relational art focuses on social contexts and human relationships, emphasizing collaboration and participation. The art works are not passively observed but become a space for dialogue and interaction, with their value stemming from the experiences and connections they create. Rirkrit Tiravanija, Liam Gillick, Philippe Parreno, Pierre Huyghe, Dominique Gonzales-Foerster and Vanessa Beecroft are among the artists mentioned by Bourriaud.

**Site-Specific:** A term that refers to the nature of works of art that belong to a specific place. Site-specific art refers to works of art and processes that are created for a specific location. The expansion of the concept of painting and sculpture in the second half of the 20th century led to the birth of various forms of expression, including land art, public art, and performance. The specific nature of a site may include the properties of an exhibition space, the natural environment of a site, its living environment, and its history and cultural context. Examples of site-specific works include Robert Smithson's “Spiral Jetty” (1970), Christo and and Jeanne Claude's “Surrounded Islands” (1983), and Tadashi Kawamata’s “Pulpit” (2014) in Japan.

Group B: Select and describe one of the following terms: "**Sound Art** ", " **NFT Art** ", or " **Interactive Art** ".

**Sound Art:** Sound art transcends the traditional boundaries of music, focusing on the perception of sound, space, and interaction - sometimes even in the absence of sound. It is an interdisciplinary art form that encompasses music, installation, media art, performance, field recording, environmental art, sculpture, architecture, film, sound poetry, and more. The origins of sound art are often traced back to Intonarumori, a series of sound-producing devices created between 1913 and 1930 by the Italian futurist Luigi Russolo. Subsequently, Dada and Surrealist artists also explored artistic expressions incorporating sound. Notable works include Max Neuhaus’s “Times Square” (1977), Alvin Lucier’s “Music on a Long Thin Wire” (1977), Christian Marclay’s “Recycled Records” (1979–1986), and Janet Cardiff’s “The Forty Part Motet” (2001).

**NFT Art :** NFT art is digital art that utilizes blockchain technology to manage transaction records and ownership rights. NFT technology ensures that digital art cannot be duplicated or redistributed without permission, making each piece unique and rare. Examples of works include Beeple's “Everydays—The First 5000 Days” (2007-2020), a collage of 5000 works created over a period of 13 years, and Larva Labs' “CryptoPunks” (2017).

**Interactive Art:** A general term for art works that are intended to bring about interaction between the work and the viewer. The concept of interactive art, which is completed through audience participation, emerged from avant-garde art movements of the 20th century, such as Fluxus and Happenings. Today, interactivity extends to the use of information processing devices, networks and cloud technology, artificial intelligence, and biological wetware. Examples of such works include Myron Krueger's “Videoplace” (1975), David Rokeby's “Very Nervous System ”(1982-1991), and Toshio Iwai's “Piano as an Imaging Device” (1995).

Elective Questions

Media Arts and Design

Examinee’s number

(Continued from Page 5 of 9)

Group C: Select and describe one of the following terms:" **Graffiti**", " **Subcultures**," or " **The Anthropocene** ".

**Graffiti:** Graffiti is a form of art that uses letters and images scrawled on walls as a means of expression. It is characterized by the fact that it is painted in a guerrilla-like execution, often created without the permission of the property owner or manager. In the 1970s, graffiti was seen in places such as subways and public spaces with the increased availability of spray paint, leading to the rise of artists such as Keith Haring and Jean-Michel Basquiat. In recent years, Banksy, who develops an ironic style while maintaining anonymity, has gained international recognition. There is ongoing debate regarding graffiti’s artistic value, legality, and ownership rights.

**Subculture:** Subculture refers to cultural trends that are located at the fringes of a mainstream culture. Subcultural groups share distinct values, norms, and beliefs. The term is often used in relation to pop culture or youth culture. Among subcultures, those that are deliberately formed in opposition to the values and behavioral patterns of the dominant culture are called countercultures. Subcultures can over time become mainstream or mass culture. In Japan, the term “subculture” is often used in relation to cultural phenomena around manga, video games and anime.

**Anthropocene:** A geological epoch classification that separates the “Holocene” (11.7 million years ago - present day) from a new epoch, the “Anthropocene”, beginning in the 18th century, when the impact of humans on the global environment became significant. This concept was introduced in the paper “The Anthropocene” by atmospheric chemist Paul J. Crutzen and phycologist Eugene F. Stoermer. This proposal questions anthropocentrism by highlighting the limitations of treating nature solely as a resource for exploitation and by encouraging deeper reflection on global climate change.

IV-2. Check (✓) the work of **James Turrell** (1943-).

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Elective Questions

Media Arts and Design

Examinee’s number

【Elective Question V】 (V-1～V-3)

**V-1.** Pictogram A below means "for all persons with disabilities" and is the international symbol pictogram and was developed by the Rehabilitation International in the 1960s.; the pictogram B was created in the United States in the 2010s as a critical response to the pictogram A and was implemented in some areas of the United States. Compare the two pictograms and write down the positive and negative aspects of each pictogram from the perspective of the signifier. Also, based on the two designs, write your thoughts on how pictograms representing “disabled” and “Accessible” should be designed.



A



B

Pictogram types	Positive aspects	Negative aspects
A	The specific nature of the obstacle is left to the imagination of the viewer, as it is expressed in abstract form. etc.	It gives a passive and static impression. The only human figure in the pictogram is represented by a stick figure. The only pictogram in which the human figure is represented by a stick figure. A person and a wheelchair are integrated. The expression is problematic from the viewpoint of human rights. etc.
B	It gives the impression of being active, positive, positive, and proactive. etc.	Independence is seen as being related to the body. The pictogram is uncomfortable for people with severe disabilities who require electric wheelchairs, attendant care, breathing assistance, feeding tubes. etc.

How should pictograms representing “Disabled” and “Accessible” be designed?

1)About the design process

B is a pictogram proposed and implemented by a core group of philosopher Brian Glennie and designer Sarah Hendren, in collaboration with disabled organizations and citizens, who criticized the international symbol mark as “static and mechanical”. As in this activity, pictograms are a form of public design, a design that represents society. Therefore, they should be designed with the opinions of not only designers but also more people including the people concerned.

2) Scope and type of disability:

Representing wheelchair users does not mean representing all “disabled people.

3) Regarding the expression of “disability”

It would be better if the expression is not about the physical characteristics (impairments) of individual disabled people, but about what kind of social barriers (disabilities) can be solved from the aspect of services that can be provided to them.  
It would be desirable to consider the above three perspectives such as.



Elective Questions

Media Arts and Design

Examinee’s number

- V-2. Discuss the affinity between web design and grid systems.
- Intended purpose: To test the degree of understanding of methods commonly used in graphic design across media such as print and web.
- Sample answer;
- Describe including the following points.
- The grid system is a method proposed by Swiss graphic designer Josef Müller-Brockmann.
  - The grid system facilitates clarity by presenting information elements, mainly images and text, in an organized and systematic arrangement.
  - The layout work can be done more efficiently while maintaining a sense of unity because it can be developed systematically in a common format.
  - The grid system is also suitable for the process of creating wireframes with tables and CSS boxes and arranging elements in the web design process.
  - The grid system is particularly effective for websites with many pages or that are updated frequently, and can be easily expanded to display on devices with different widths.
  - The grid system is useful in the way that it promotes easy viewing and understanding by vertically dividing the contents into sections.
- V-3. Create three different types of logos using the word DESIGN (both capital and small letters are acceptable) and explain each of the three types. One design should be carefully drawn in each frame, and a description of each of the three types should be provided in the space below the frame.

Intended purpose: To evaluate the ability to systematically organize and develop expression in graphic design, and the ability to explain it logically.

- Sample answers:
- A proposal that simply processed letters
  - A proposal that pursues visual interest by combining abstract figures
  - A proposal that adds meaning by adding figurative motifs
- The explanation should be the same.

Explanations should be similar. Explain in concrete terms where the ingenuity was applied.

[Explanation of three types]



Elective Questions

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Examinee’s number

【Elective Question VI】(VI-1～VI-4)

VI-1. In their book *The Illusion of Life*, Disney animators Frank Thomas and Ollie Johnston referred to 12 basic principles used for giving life to their characters. Of those principles, explain the following:

(1) Anticipation

Anticipation is a technique that makes a character’s movement more natural and helps the audience understand what will happen next. In the real world, large movements require preparation. For example:

- Before jumping, a character bends their knees and lowers their body.
- Before throwing a punch, they pull their arm back.
- Before running, they lean slightly backward.

These preparatory movements signal the next action to the audience, making it easier to follow. Using anticipation properly ensures that animations feel smooth and realistic.

(2) Exaggeration

Exaggeration is a technique that enhances movements, expressions, or actions beyond realism to make animation more engaging and visually appealing. Instead of replicating real-world motion precisely, exaggeration emphasizes key elements to convey emotions and actions more clearly. Examples include:

- A surprised expression → The character’s eyes widen dramatically.
- Running motion → Legs move so fast they appear to rotate like wheels.
- A powerful punch → The opponent flies off the screen.

By applying exaggeration, animators can maximize the expressiveness and storytelling impact of their characters.

VI-2. Explain objective and subjective filmmaking techniques.

The objective filming technique presents the story from a third-person perspective, allowing the audience to observe the events without directly participating. The camera acts as an external observer, showing the actions and situations of the characters.

Common Shots:

- Wide Shot: Captures a broad view to establish the scene.
- Medium Shot: Shows characters' expressions and movements with balance.
- Over-the-Shoulder Shot: Used in conversations, filming over the shoulder of one character toward another.

The subjective filming technique recreates the point of view of a character, allowing the audience to experience the scene as if they were seeing it through the character's eyes. This approach enhances immersion and emotional connection.

Common Shots:

- POV Shot (Point of View Shot): Directly represents the character’s line of sight.
- Subjective Moving Camera: Mimics a character’s walking or running movements.
- Slow-Motion Subjective Shot: Emphasizes dramatic moments or a character’s fading consciousness.

By combining objective and subjective filming techniques, filmmakers create effective and engaging storytelling in movies.

Elective Questions

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VI-3. Explain the technique known as **Cinemagraph**, which is used for effective expression in web advertising, in terms of its [Visual expression characteristics] and [production methods].

Note: Be careful not to confuse 'cinemagraph' with 'cinématographe.'

[Visual expression characteristics]

Combine the following points in your discussion:

- "Cinemagraph" is a coined term combining "cinema" (video/movie) and "photograph" (still image).
- Parts of the image appear entirely still, while only specific movements are looped repeatedly, creating visual contrast between stillness and motion to draw viewers' attention.
- Cinemagraphs deliver strong visual impact and evoke a sense of wonder or intrigue.
- Mention practical applications and provide examples of media where cinemagraphs are employed.
- Provide specific creative examples, such as a close-up of a hand holding a mug, where the hand and mug remain completely still, but the coffee within subtly moves, showing ripples and rising steam.

[Production techniques]

Combine the following points in your explanation:

- Filming: Securely fix the camera on a tripod and record a short video clip of about a few seconds to around 10 seconds.
- Selection of dynamic parts: Identify sections of the recorded video that have movements suitable for seamless looping.
- Editing: Use editing software such as Photoshop or After Effects to isolate the moving parts for looping while keeping the rest of the image as a still frame. Techniques such as dissolves or reverse playback are employed to hide the loop transitions, ensuring a seamless effect.
- Rendering: Export the final product as an animated GIF or MP4 video file.

VI-4. The image below was created using the **light painting** technique. Explain the possible photography techniques and production procedures that could be used to create this image.



Compose your essay by combining the following points:

- Light Painting:

A photographic technique involving moving a handheld light source within a dark environment while capturing its movement using a camera set to long exposure. Frequently utilized in photography and video, this method allows photographers to use the space in front of the camera as a canvas and treat the moving light source as a "brush," creating images, words, or abstract patterns. This enables unique and creative photographic expressions.

• Basic Procedure for Shooting and Production:

- 1.Choose a dark location, such as outdoors at night or in a dark room.
- 2.Securely fix the camera using a tripod or similar equipment to ensure stability throughout the shoot.
- 3.Set a slow shutter speed (typically ranging from about 5 seconds to several tens of seconds).
- 4.Move various light sources, such as LED lights, flashlights, or glow sticks freely in front of the camera to "draw" within the space.
- 5.After exposure, confirm that the movement trails of the lights have been captured clearly in the photograph.

Note: The person handling the light should move quickly or wear dark clothing during exposure to minimize visibility in the captured image.