# ROYAL CIVIL SERVICE COMMISSION BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2024 EXAMINATION CATEGORY: TECHNICAL

## PAPER III: SUBJECT SPECIALISATION PAPER FOR BEAUTIFICATION OFFICER

**Date** : October 5, 2024

**Total Marks** : 100

Writing Time : 150 minutes (2.5 hours)

**Reading Time** : 15 minutes (prior to writing time)

#### **GENERAL INSTRUCTIONS:**

1. Write your Registration Number clearly and correctly on the Answer Booklet.

- 2. The first 15 minutes is provided to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
- 3. This paper consists of **TWO SECTIONS**, namely SECTION A & SECTION B:
  - **SECTION A** has two parts: Part I 30 Multiple Choice Questions

Part II - 4 Short Answer Questions

All questions under SECTION A are COMPULSORY.

- **SECTION B** consists of two Case Studies. Choose only **ONE** case study and answer the questions of your choice.
- 4. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
- 5. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating the Section, Part and Question Number will NOT be evaluated and no marks will be awarded.
- 6. Begin each Section and Part in a fresh page of the Answer Booklet.
- 7. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
- 8. Use of any other paper including paper for rough work is not permitted.
- 9. You must hand over the Answer Booklet to the Invigilator before leaving the examination hall.
- 10. This paper has **7 printed pages**, including this instruction page.

## **GOOD LUCK**

## **SECTION A**

## **PART I: Multiple Choice Questions (30 marks)**

Choose the correct answer and write down the letter of your chosen answer in the Answer

Booklet against the question number e.g. 31 (d). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.	
1.	The Dzongkha translation for the Dzongkhag Beautification Officer is:
	<ul> <li>a) Dzongkhag Zeycha Gopoen</li> <li>b) Dzongkhag Zeydhen Gopoen</li> <li>c) Dzongkhag Dumrai Gopoen</li> <li>d) Dzongkhag Dumrig Gopoen</li> </ul>
2.	The Global Floriculture market hit a value of approximately in the year 2023.
	<ul> <li>a) US \$ 60 billion</li> <li>b) US \$ 70 billion</li> <li>c) US \$ 80 billion</li> <li>d) US \$ 90 billion</li> </ul>
3.	Which country is the largest producer of cut flowers?
	<ul><li>a) China</li><li>b) United States of America</li><li>c) France</li><li>d) Netherlands</li></ul>
4.	The direct supervisor of the Dzongkhag Beautification Officer is:
	<ul> <li>a) Hon'ble Secretary, Ministry of Agriculture and Livestock</li> <li>b) Dasho Dzongdag</li> <li>c) Dzongkhag Agriculture Officer</li> <li>d) Director, Department of Agriculture</li> </ul>
5.	The Dzongkhag Beautification Sector was established under the Royal Command. When did the Royal Civil Service Commission create the post of Dzongkhag Beautification Officer?
	<ul> <li>a) 3rd September, 2018</li> <li>b) 4th September, 2018</li> <li>c) 5th September, 2018</li> <li>d) 6th September, 2018</li> </ul>
6.	The "Queen of Bhutan" is a name ofdeveloped and named in honor of Her Majesty the Gyaltsuen, offered by the United Kingdom.
	<ul><li>a) Rose</li><li>b) Tulip</li></ul>

c) Chrysanthemum

d) Marigold

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- 7. According to the basic rule of floral arrangements, a 12-inch flower vase should have flowers of:
  - a) 12-14 inches tall
  - b) 14-16 inches tall
  - c) 18-24 inches tall
  - d) 25-30 inches tall
- 8. What is the purpose of landscape architecture?
  - a) Designing buildings
  - b) Creating functional and aesthetic outdoor spaces
  - c) Cultivating crops
  - d) Managing indoor plant care
- 9. What is the term for flowers that are harvested for use in floral arrangements?
  - a) Potted plants
  - b) Cut flowers
  - c) Wildflowers
  - d) Ground cover
- 10. Which part of the flower is typically removed to extend the vase life of cut flowers?
  - a) Petals
  - b) Leaves
  - c) Stamens
  - d) Sepals
- 11. Which plant is commonly grown for its ornamental foliage?
  - a) Tomato
  - b) Maple
  - c) Grass
  - d) Lavender
- 12. Which of the following is an example of an annual ornamental plant?
  - a) Tulip
  - b) Petunia
  - c) Rose
  - d) Oak
- 13. Which type of garden is designed to require minimal water?
  - a) Rock Garden
  - b) Xeriscape Garden
  - c) Formal Garden
  - d) Tropical Garden
- 14. Which garden style is known for its symmetry and order?
  - a) Japanese Garden
  - b) Cottage Garden
  - c) Formal Garden
  - d) Wildflower Garden

- 15. What is a key feature of a Japanese Garden?
  - a) Bright, colorful flowers
  - b) Water elements and minimalism
  - c) Vegetable plots
  - d) Desert plants
- 16. Which flower is often called the "Queen of the Night"?
  - a) Dahlia
  - b) Jasmine
  - c) Epiphyllum
  - d) Night-blooming cereus
- 17. Which of the following is NOT a landscape design principle?
  - a) Unity
  - b) Balance
  - c) Proportion
  - d) Complexity
- 18. Which garden style is characterized by asymmetry, rocks, and a focus on natural beauty and simplicity?
  - a) French Formal Garden
  - b) English Landscape Garden
  - c) Japanese Zen Garden
  - d) Persian Garden
- 19. What is the optimal temperature range for storing most cut flowers to prolong their freshness?
  - a) 0-2°C
  - b) 3-5°C
  - c) 6-8°C
  - d) 9-12°C
- 20. Photoperiodism in floriculture is essential for regulating flowering times. Which statement best explains its significance in commercial flower production?
  - a) It helps in pest control by altering the light cycle.
  - b) It enables synchronization of flowering with market demands and holidays.
  - c) It maximizes leaf production for ornamental foliage.
  - d) It enhances soil nutrient absorption through light exposure.
- 21. In landscape architecture, unity is a critical design principle. How does the principle of unity most effectively contribute to the aesthetic appeal of a garden?
  - a) By ensuring that no single element stands out
  - b) By creating a harmonious relationship between all parts of the landscape
  - c) By using a wide variety of plant species
  - d) By emphasizing symmetry and formal arrangements

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- 22. Japanese Zen Gardens are renowned for their minimalist design. Which cultural and philosophical beliefs primarily influence their design principles?
  - a) Shintoism and industrial efficiency
  - b) Zen Buddhism and the concept of wabi-sabi
  - c) Confucianism and social hierarchy
  - d) Taoism and dynamic balance
- 23. Post-harvest treatments are crucial for cut flowers. How does silver thiosulfate (STS) treatment specifically benefit cut flowers?
  - a) It enhances photosynthesis in vase conditions.
  - b) It inhibits ethylene action, thereby delaying senescence.
  - c) It improves water uptake by modifying stem structure.
  - d) It promotes the growth of flower buds.
- 24. Storage temperature is critical for cut flowers. Why is the range of 3-5°C (37-41°F) optimal for most cut flowers?
  - a) It prevents the freezing of cell sap.
  - b) It slows down metabolic processes without causing chill damage.
  - c) It enhances the uptake of floral preservatives.
  - d) It increases the diffusion of ethylene.
- 25. Tagetes spp., known for their vibrant colors, are annual plants. What is a significant ecological benefit of incorporating Tagetes spp. in ornamental horticulture?
  - a) Attracting pollinators and beneficial insects
  - b) Fixing nitrogen in the soil
  - c) Enhancing the growth of neighboring plants
  - d) Reducing the need for irrigation
- 26. Colombia's dominance in the export of cut flowers, particularly roses and carnations, can be attributed to which combination of factors?
  - a) High domestic consumption and advanced breeding programs
  - b) Ideal climatic conditions and extensive greenhouse infrastructure
  - c) Large labor force and proximity to major markets
  - d) Government subsidies and high-tech farming methods
- 27. Zen Gardens incorporate specific design elements to create tranquility. How do the elements of rocks and water feature in these gardens to enhance the sense of peace?
  - a) Rocks symbolize permanence and water represents the flow of life, together creating a balanced environment.
  - b) Rocks are used for seating, and water is used for irrigation purposes.
  - c) Rocks represent wealth, and water symbolizes prosperity.
  - d) Rocks are used to create barriers, and water serves as a decorative element.

- 28. The symbolic use of flowers in various cultures often conveys specific meanings. Which analytical approach best explains the persistence of floral symbolism across different societies?
  - a) Biological determinism
  - b) Cultural diffusion and shared human experiences
  - c) Random cultural development
  - d) Geographic isolation and unique cultural practices
- 29. In Buddhist practice, offering flowers is a ritual symbolizing impermanence. How does this practice relate to the core Buddhist concept of Anicca?
  - a) It represents the eternal nature of the Buddha's teachings.
  - b) It symbolizes the accumulation of material wealth.
  - c) It reflects the transient nature of life and all things.
  - d) It denotes the pursuit of personal enlightenment.
- 30. The lotus flower holds significant meaning in Buddhism. What does the growth of a lotus from muddy water to bloom symbolize in the context of Buddhist teachings?
  - a) The journey from ignorance to enlightenment
  - b) The importance of material prosperity
  - c) The benefits of ritual purity
  - d) The power of the natural environment

## **PART II: Short Answer Questions (20 marks)**

This part has 4 Short Answer Questions. Answer ALL the questions. Each question carries 5 marks.

- 1. Among the various types of gardens, describe five gardens briefly. (5 marks)
- 2. What are the prospects of floriculture for Bhutan? (5 marks)
- 3. As a Beautification Officer, how will you promote urban gardening? (5 marks)
- 4. From a Buddhist point of view, why is offering flowers to *Ken-chho-suum* considered an act of generosity? (5 marks)

## **SECTION B: Case Study (50 marks)**

Choose either CASE I or CASE II from this section. Each case study carries 50 marks. Marks for each sub-questions is indicated in the brackets.

#### CASE I

Every Bhutanese is aware of the upcoming developments in the Gelephu Mindfulness City. In developed countries, landscaping and beautification are integral to urban planning and environmental management.

1. What are some of the key aspects of aesthetic interventions in developed cities? (15 marks)

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- 2. In your opinion, how would Gelephu Mindfulness City (GMC) contribute to the growth of the floral industry? (20 marks)
- 3. What challenges do you anticipate in implementing urban landscaping in GMC? (15 marks)

## **CASE II**

The Royal Bhutan Flower Exhibition (RBFE) is an annual event organized by the Ministry of Agriculture and Livestock. The first RBFE, held in 2016, reportedly incurred over Nu. 20 million. The Ministry plans to resume the event next year.

- 1. Why do you think organizing the RBFE is important? (15 marks)
- 2. If you, as a Dzongkhag Beautification Officer were given the responsibility to host the next RBFE, how would you host it differently? (20 marks)
- 3. Considering the significant cost and resources required to conduct the RBFE, how would you develop a more sustainable floristry strategy for your Dzongkhag as a Beautification Officer? (15 marks)

TASHI DELEK