

**ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2016
EXAMINATION CATEGORY: TECHNICAL**

PAPER III: SUBJECT SPECIALIZATION PAPER FOR URBAN PLANNING

Date:	2 October 2016
Total Marks:	100
Examination Time:	150 minutes (2.5 hours)
Reading Time:	15 minutes (<i>prior to examination time</i>)

GENERAL INSTRUCTIONS

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is being provided to check the number of pages, printing error, clarify doubts and to read instructions in Question Paper. You are NOT permitted to write during this time.
3. This paper consists of **TWO Sections, namely Section A and 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 2 case studies. Choose only **ONE** case study and answer the questions under 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 correct Section, Part and Question Number will NOT be evaluated and no marks would 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 are required to hand over the Answer Booklet to the Invigilator before leaving the examination hall.
10. The Question paper has 10 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 (c). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. Thromde Act of 2007 guided the pre-requisites of declaring Thromdes, the functions and responsibilities of Thromde Tshogde. Which of the following statement is correct?
 - a. It was revised in 2015.
 - b. It is repealed by Local Government Act of 2009.
 - c. It is replaced by Land Pooling Rules 2009.
 - d. It is repealed by Land Act 2007.

2. The Structure plan for Thimphu 2002-2027 was prepared based on the principles of
 - a. Garden City
 - b. Smart City
 - c. New Urbanism
 - d. Intelligent Urbanism

3. Which of the following types of towns in Bhutan were approved by the Parliament in 2010?
 - a. Gewog and Yenlag Throms
 - b. Class A and B Throms
 - c. Gyelyong Throms and Yenlag Throms
 - d. None of the above

4. Lee Curbusier planned the city of
 - a. Singapore
 - b. Colombo
 - c. Thimphu
 - d. Chandigarh

5. Major cause of urbanization in Bhutan is
 - a. natural growth of population.
 - b. rural-urban migration.
 - c. international migration.
 - d. None of the above.

6. In the present context of Bhutan, local area plans are increasingly prepared by using _____ technique over other alternatives.
 - a. land acquisition
 - b. guided land development
 - c. land pooling
 - d. None of the above.

7. New Urbanism is a planning and development approach adopted for a long time based on walkable blocks and streets, housing and shopping, and accessibility to public spaces.
 - a) False
 - b) True

8. The urban population of Bhutan as per Population and Housing Census of Bhutan 2005 was
 - a. 21%
 - b. 31%
 - c. 50%
 - d. 15%

9. The concept of “Garden City” was initiated in late nineteenth century by
 - a. Lee Curbusier
 - b. Sir Ebenezer Howard
 - c. Christopher Charles Beninger
 - d. John Turner

10. Which of the following three different kinds of roads are recognised by the urban roads standards of Bhutan?
 - a. Primary, Secondary and Tertiary roads
 - b. Gewog centre roads, farm road and feeder roads
 - c. Community roads, Gewog and Thromde roads
 - d. Yenlag Thromde, Gewog Thromde and Primary National Highways

11. As per the provisions of Bhutan Building Rules 2002, an elevator is mandatory in buildings with more than _____ floors
 - a. three
 - b. four
 - c. six
 - d. None of the above.

12. A zoning plan is a planning technique adopted by local governments to plan exclusively for national open space system.
 - a. True
 - b. False

13. The Royal Government of Bhutan took a policy decision to promote only traditional Bhutanese structures/buildings with two floors and without allowing any external plastering in the newly created Dzongkhag town of
 - a. Gasa
 - b. Trashiyangtse
 - c. Tsirang
 - d. Dagana

14. The concept of neighbourhood unit was introduced in the twentieth century by
 - a. Otto Koenigsberger
 - b. Kenneth Livingstone
 - c. Nigel Harris
 - d. Clarence Perry

15. The first five year plan of Bhutan which influenced urbanization and urban development was started in
 - a. 1981
 - b. 1971
 - c. 1961
 - d. 1958

16. There is a shortage of residential housing in Thimphu for _____ group.
 - a. low income and middle income
 - b. high income
 - c. expert
 - d. None of the above.

17. Majority of the Housing finance in Bhutan is provided by
 - a. Finance Ministry
 - b. Financial Institutions
 - c. Personal Finance
 - d. National Pension and Provident Fund

18. Traditional architecture of Bhutan was made mandatory in all modern buildings since
 - a. 2013
 - b. 1997
 - c. 1991
 - d. 1983

19. Who is the first professional female urban planner of Bhutan?
 - a. Latha Chhetri
 - b. Tashi Wangmo
 - c. Rebecca Gurung
 - d. Dorji Wangzom

20. Changjiji Government housing complex in Thimphu has been developed on a 43 acre acquired land that has _____ units (approximately) with a theatre, football & futsal stadium, primary school and a recreational park.
 - a. 700
 - b. 600
 - c. 500
 - d. 400

21. In the conventional method of planning, a strict land use was followed. However, in the recent years, mixed use is increasingly practiced by the planners and the implementers in the residential buildings because
- it is flexible enough to allow upto 20% commercial functions in residential buildings.
 - the building can be used as per the wish of the owner.
 - other uses are permitted as long as 20% of the building remains residential in use.
 - it is not necessary to retain residential use if vehicular parking is adequate.
22. Norzin Lam of Thimphu has gone through an informal renewal phase due to
- modernization of family members of owners.
 - pressure from the financial institutions to take loans from them.
 - political pressure.
 - economic pressure.
23. The Thimphu Thromde is currently constructing a road side footpath from Babesa to Changlimithang. Which of the following statements is the least applicable at the moment?
- Constructing of an environment friendly tram line.
 - Minimize vehicular and pedestrian conflict.
 - Encourage walkers and joggers.
 - Reduce the environmental impact in the urban environment.
24. Changlimithang stadium in Thimphu was redeveloped to
- host the SAARC Summit
 - celebrate the Coronation of His Majesty the 5th King of Bhutan.
 - host the Asian Cup football.
 - celebrate the admission of Bhutan to the United Nations.
25. The Thromde Thsogde is chaired by
- The Executive Secretary
 - The Cabinet Secretary
 - The Thrompon
 - The MoWHS Secretary
26. The Local area plans are prepared by the urban planning team for discussion with public in
- Closed door meetings.
 - Office of the Executive Secretary.
 - Office of Dasho Dzungdag.
 - Open consultation meetings.
27. Urban renewal programmes are initiated by the local governments to
- improve the physical infrastructure and to revive the vibrancy of the area.
 - respond to the pressure from the residents of the area.
 - increase the property tax.
 - promote a uniform size and colour of the buildings.

28. Construction of buildings around Tashichhodzong is not permitted to
- retain the sanctity of the national icon.
 - reduce the entrance of vehicular traffic.
 - reduce the cost of land in the vicinity.
 - allow the people to participate in the annual Tshechhu.
29. The Bhutanese are migrating to economically active areas mostly from
- The western region
 - The southern region
 - The Central region
 - The Eastern region
30. Which of the following statements is not significant for the cause of rural-urban migration in Bhutan?
- High income in the urban areas.
 - Lack of modern employment in the rural areas.
 - Harsh working conditions in the rural areas.
 - Low interest housing loans in the urban areas.

PART II – Short Answer Questions (20 marks).

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

Question 1

- Describe the process of land acquisition from the registered land owners for the preparation of a layout plan for a neighbour shopping area. (2 marks)
- Once the land is acquired, briefly describe the process of preparing a layout plan for seeking approval from higher authorities. (2 marks)
- Who implements the layout plan and what is the first step of implementing the layout plan? (1 mark)

Question 2:

What is a development control regulation (DCR) and why is it required? Please articulate your answers with sketches, if necessary. (5 marks)

Question3:

Demographic information is a pre-requisite for the purpose of preparing a structure plan. Please describe why this is required and how do you obtain such data. (5 marks)

Question 4:

Geographic information system (GIS) is an important tool for the preparation of urban development plans in general. Please give a short description of two important features of GIS that are used by planners in the process of preparing a local area plan in our hilly areas.

(5 marks)

SECTION B

Case Study

Choose either Case 1 or 2 from this section. Each case study carries 50 marks.

Case 1

The concept of neighbourhood unit is widely followed since the twentieth century. Please examine this concept:

- a) Give at least three principles that will enhance the quality of life. (15 marks)
- b) Discuss the shortcoming of the chosen principles (15 marks)
- c) Articulate whether such a concept is applicable in the context of Bhutan. (20 marks)

OR

Case 2

The layout plan for Thsongdu town in Paro has been prepared in three phases. The town is almost built up and is economically active. It has a combination of traditional two storeyed buildings and more than four storeyed modern buildings. Please study the attached layout plan and the photographs and give your critical comments so that the local government can prepare itself to make interventions.

- a) How would you organize yourself in carrying out such a study? (5 marks)
- b) What are the shortcomings of this plan? List at least five of them giving reasons. (5 marks)
- c) If you were to prepare an urban renewal programme for this area, what are the major changes that you will suggest? Support your justification with sketches, if necessary. (20 marks)
- d) Prioritize two of the proposals, with justification, to enable the Chief Executive Officer of the town to discuss in the Thromde meeting and mobilize resources for implementation. (20 marks)

PARO LOCAL AREA PLAN LAYOUT



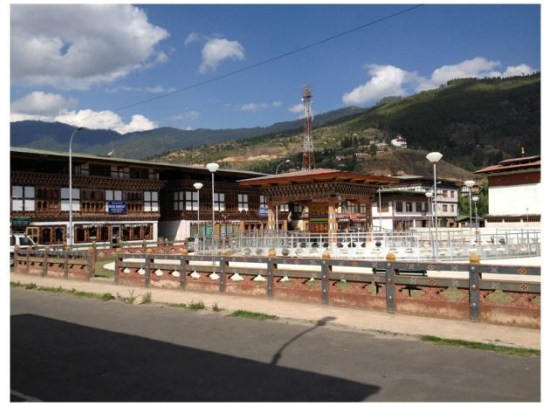


Birds Eye View of Paro Tshongdu



Paro Valleys with Tshongdu

Central Plaza with a Manidungkor and an amphitheatre



Streetscape with Modern and Traditional Buildings

