

KATHMANDU UNIVERSITY
End Semester Examination
February, 2025

Marks Scored:

Level : B.Arch.

Year : IV

Exam Roll No. :

Time: 30 mins.

Course : ARCH 422

Semester : I

F. M. : 10

Registration No.:

Date

: 13 FEB 2025

SECTION "A"

[20Q. × 0.5 = 10 marks]

Choose the most appropriate answer and **encircle**.

- Which of the following is a major milestone in the evolution of human settlements?
 - Development of nomadic lifestyles
 - Domestication of animals and cultivation of plants
 - Elimination of traditional farming methods
 - Introduction of houses in rural areas
- Which of the following dimensions does not differentiate a city with rural areas?
 - Employment
 - Workforce
 - Consumption
 - Population
- What was a common characteristic of medieval cities in Europe?
 - Well-planned grid streets
 - Lack of religious edifices
 - Fortifications with walls and gates
 - Absence of marketplaces
- Which factor primarily influenced the location of ancient cities like Mesopotamia, Egypt, and the Indus Valley?
 - Proximity to forests
 - Access to fertile river valleys
 - Availability of large open plains
 - Natural fortifications like mountains
- The "Citadel" in Harappan cities was primarily used for:
 - Administrative and defensive purposes
 - Trade and commercial activities
 - Residential housing for common people
 - Storage of agricultural tools
- The defining feature of Kirata settlements of Nepal was?
 - Location on hilltops and ridges
 - Streets arranged in a radial pattern
 - Use of extensive fortifications
 - Construction of large dams and canals
- While establishing a new town, which measure is not proposed by Chanakya in his Aarthashastra?
 - Exemption from paying taxes for a few years
 - Attract Sudras and working class people
 - Serve trade and commerce
 - Establish public administration
- What term is used to describe the ease with which people can navigate a city?
 - Imageability
 - Spatial clarity
 - Legibility
 - Mental mapping

9. In the "Metropolis" stage, which of the following is a key feature?
 - a. Organic growth
 - b. Migration to the countryside
 - c. Total destruction of cultural institutions
 - d. High population density and large-scale industries

10. If designing a city influenced by the Persian and Hindu traditions seen in Shahjahanabad, what architectural elements would you include?
 - a. Symmetrical gardens, boulevards, and fortified palace complexes
 - b. High-rise buildings around public squares
 - c. Curved streets leading to a single central monument
 - d. Dispersed green spaces and grid-like street layouts

11. Analyze the role of Guthi systems as a contributor to urban governance in traditional settlements like Siddipur, Sankhu, Kirtipur etc. How they are useful and functional till date?
 - a. They focus solely on religious ceremonies.
 - b. They integrate cultural, social, and urban maintenance activities.
 - c. They are irrelevant to urban infrastructure and management.
 - d. They function as private organizations with no public impact.

12. What was Sir Patrick Geddes' key contribution to the planning of Dhaka in 1917?
 - a. Construction of railways
 - b. Expansion of commercial zones
 - c. Open space development and de-densification
 - d. Industrial development

13. Evaluate the urban character of port cities like Bombay, Madras, and Calcutta under British rule.
 - a. They were centers for military operations only.
 - b. They were disconnected from global trade routes.
 - c. They focused on local agricultural development.
 - d. They served as key nodes for trade and administration.

14. Propose an urban design feature inspired by Ebenezer Howard's Garden City Movement.
 - a. Green belts to separate industrial and residential areas
 - b. Road networks designed only for vehicular traffic
 - c. Exclusive industrial zones without community spaces
 - d. Dense high-rise apartments in city centers

15. What concept did the Athens Charter emphasize in urban planning, which was also useful in solving social problems?
 - a. Complete elimination of zoning laws
 - b. Controlled functional segregation and high-rise apartments
 - c. Mixed-use zoning and organic growth
 - d. Preservation of historic areas as the primary focus

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16. Self-Contained sectors with basic amenities in Chandigarh was an Le-Corbusier's idea of Planning, it was an influential outcome of;
 - a. Garden City Movement
 - b. Alternative to industrial
 - c. Neighborhood Planning
 - d. Neheru's enforcement

17. How does Christopher Alexander suggest using patterns in urban design?
 - a. By applying the same solution repeatedly
 - b. By focusing only on materials and construction techniques
 - c. By creating unique solutions for recurring problems
 - d. By creating unique solutions for recurring problems

18. Nepal's Site and Services projects was unsuccessful due several challenges. Which one stood the most crucial one?
 - a. Slow process and low compensation rates
 - b. Absence of urban infrastructure in the plans
 - c. Lack of government involvement in the projects
 - d. Inefficient utilization of rural land

19. Which of the following is not the appropriate tool for urban land development?
 - a. Guided Land development
 - b. Real estate development
 - c. Zoning and Bye-Laws
 - d. Public Park Construction

20. What sustainability features would you propose for a future urban developments inspired by New Urbanism Principle?
 - a. Integrate walkable streets, mixed-use housing, and green transportation
 - b. Promote public spaces in favor of low rise buildings
 - c. Develop low-density, cycle-dependent neighborhoods
 - d. Focus on industrial zoning with residential areas

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SECTION "B"

[4 Q. × 4 = 16 marks]

Answer ANY FOUR of the following questions with necessary sketches and figures.

1. Discuss the key factors that contribute the development of Human Settlement? How urban planning and design helps to shape the cities and settlements?
2. What key principle from ancient settlement planning would you suggest the modern planners and designers to adopt while planning a new settlement?
3. Critically evaluate the concept of "Image of the City." Do you believe the idea of legibility is sufficient in morphological study of urban settlement? What additional features do you suggest?
4. What features of Chandigrah city and Islamabad City planning would you adopt if you are given an opportunity to design a new city in Nepal?
5. "The Urban Design effort of New-Road area was sensibly carried". Do you agree with this statement?

SECTION "C"

[3 Q. × 8 = 24 marks]

Answer the following questions with necessary sketches and figures.

6. How industrial revolution triggered urban development? List the urban planning ideas evolved in response to IR with their salient features.
7. Briefly explaining your understanding of Land Development. Which land development technique prescribed by Town Development Act-1988 is more useful in planning an urban area? Elaborate the process of this technique.
8. Mention various Urban Design Theories you have studied with the key ideas behind them. How Thematic Design is useful in Urban Design? Explain with examples.

OR

What key components are essential for sustainable city planning? How Architecture and Urban Design Helps to make city sustainable? Critically put forward your ideas with appropriate examples.

