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Question Paper Code: 59404

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

Elective

Civil Engineering

15UCE904-TOWN PLANNING AND ARCHITECTURE

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. A type of balance in which both sides of a composition are balanced yet different CO1- R
(a) Asymmetrical (b) Radial (c) Symmetrical (d) Geometric
2. Optimization of urban mobility can be intervened at the infrastructure level by use of: CO1- R
(a) SUV lanes (b) HOV lanes (c) Toll free lanes (d) Slow lanes
3. For industrial development it is intended to serve more than 2 or 5 plots minimum width is _____ CO2- R
(a) 12 m (b) 7.2 m (c) 13 m (d) 1.5 m
4. Outlying residential district of a city termed as CO2- R
(a) Urban sprawl (b) Urban note (c) Suburban area (d) Fringe area
5. The space for the one car park that has to be provided is _____ CO3- R
(a) 5m x 5m (b) 2.5m x 5m (c) 2.5m x 2.5m (d) 3m x 2.5m
6. _____ is stabilizing the land values and avoid speculation of land. CO3- R
(a) Land use control (b) Sub division control
(c) building by laws (d) height controls

7. Which type of trees are suitable for shading purposes CO4- R
 (a) Deciduous (b) Non deciduous (c) Bamboo (d) Neem tree
8. A.....is a town designed for healthy living & industry of a CO4- R
 size that makes possible a full measure of social life but not larger.
 (a) garden city (b) master plan (c) town plan (d) none of these
9. Which one is legal implications CO5- R
 (a) Easements (b) Cost of land (c) Cost of vehicle (d) Cost of building
10. In town planning, the residential zone lies between _____ CO5- R
 percentage
 (a) 20-30 (b) 30-40 (c) 40-50 (d) 50-60

PART – B (5 x 2= 10 Marks)

11. Write a note on “Architectural Design” CO1- R
12. Explain different theories of developments CO2- R
13. Differentiate between commercial and Industrial buildings. CO3- R
14. Name any four passive cooling concepts. CO4- R
15. State the objective of zoning regulations. CO5- R

PART – C (5 x 16= 80 Marks)

16. (a) (i) Briefly discuss about basic elements in architectural design CO1- U (8)
 (ii) How do you integrate aesthetics and functions in architectural design CO1- U (8)
- Or
- (b) Discuss in detail about the principles involved in an architectural design CO1- U (16)
17. (a) Explain in details the various Layout design concepts. CO2- U (16)
- Or
- (b) (i) Mention the various factors to be considered in site analysis CO2- U (8)
 (ii) Give side setbacks as per Chennai DCR for multistory buildings CO2- U (8)
18. (a) (i) Describe the safety standards to be adopted in commercial and industrial building CO3- U (8)
 (ii) Explain the need of integration of building services. CO3- U (8)

Or

- (b) Draw a sketch of a typical 'basement floor' and 'mezzanine floor' with dimensions as stipulated by NBC CO3- U (16)
19. (a) State the characteristics of the climate types and what do you understand by active and passive energy controls? CO4- U (16)
- Or
- (b) Discuss in detail about Passive and active energy controls. CO4- U (16)
20. (a) Draw a park and play ground with suitable landscaping for a neighborhood with a population of 10,000. CO5- U (16)
- Or
- (b) Discuss briefly on urban renewal. Explain the concepts of public participation in urban renewal projects. CO5- U (16)

