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Reg. No. : ☐☐☐☐☐☐☐☐☐☐

Question Paper Code: 97103

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

Seventh Semester

Civil Engineering

19UCE703 – SMART CITY TECHNOLOGIES

(Regulations 2019)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Where are smart cities developing the fastest?   CO1- U

    (a) Europe   (b) North America   (c) Gulf Region   (d) South Asia

2. Sustainable building means   C03-Ana

    (a) Green building   (b) Environmental building

    (c) Both A and B   (d) None of above

3. Sustainable Development focuses on more use of: CO1- U

    (a) Renewable resources   (b)Abiotic resources

    (c) Natural Resources   (d) None of the above

4. Which of the following city got first Smart City nomination?   CO1- U

    (a) Hubballi-Dharwad   (b) Surat   (c) Pune   (d) Puducherry

5. The core element of architecture of smart city is _____   CO1- U

    (a) Mobile Unified Service   (b) Urban Application Platform

    (c) Management center   (d) Integrated Information Provider

PART – B (5 x 3 = 15 Marks)

6. Classify the benefits of smart cities.   CO1- U

7. Examine the pollution prevention in smart cities   CO2- App

8. What is meant by Traffic Management?   CO1- U

9. What is meant by waste management system?   CO1- U

10. Discuss in detail about commercialization   CO1- U

PART – C (5 x 16= 80 Marks)

11. (a) How to analysis Feasibility of smart cities and what are the steps involved in Smart city construction?   CO3- App

Or

(b) While planning smart city elaborate the planning standards to be followed with suitable examples   CO3- App

12. (a) Explain in detail about Environmental energy management system.   CO2- App

Or

(b) Examine all the factors involved in climatic condition in detail.   CO2- App

13. (a) How to implement IOT in smart transportation   CO2- App

Or

(b) How does digitalization fit into the wider transport policy?   CO2- App

14 (a) Discuss the importance of decentralization in waste management   CO2- App

Or

(b) Explain the five R approaches in resource conservation   CO2- App

15 (a) Describe the project organizational structures of the Madurai smart city project   CO1- U

Or

(b) Explain in detail about the need for the project management and analysis the risk factor   CO1- U

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