



PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF ENGINEERING END TERM EXAMINATION - JUN 2023

Semester : Semester VI - 2020 Course Code : CIV2041 Course Name : Sem VI - CIV2041 - Fundamentals of Smart City Program : CIS&CIV Date : 12-JUN-2023 Time : 9.30AM - 12.30PM Max Marks : 100 Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS

1. There are different dimensions that are to be considered for smart city planning and implementation. This complexity of the dimension, the use of technology, and their integration bring the risk perspectives into the implementation of the smart city concept. Mention the various dimensions of smart city development.

(CO1) [Knowledge]

2. A resilient city is the design of a city to endure physical, social and economic shocks and stresses. List any 5 challenges in building resilient cities.

(CO2) [Knowledge]

3. Using Public Private Projects (PPP) have been justified in various ways over time. Advocates generally argue that PPPs enable the public sector to harness the expertise and efficiencies that the private sector can bring to the delivery of certain facilities and services. On the other hand, critics suggest that PPPs are part of an ideological program that seeks to privatize public services for the profits of private entities. Discuss the role of public and private in PPPs.

(CO2) [Knowledge]

4. The purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially technology that leads to Smart outcomes. List the core elements of a smart city.

(CO1) [Knowledge]

(5 X 5 = 25M)

5. National Smart Cities mission monitoring aims to create a framework for monitoring and evaluating smart city projects across India for their transparency, accountability and participatory inclusion of citizen views and concerns. List the committees established at various levels (Central, State & ULB) to monitor smart cities' progress.

(CO3) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

- 6. The inclusive city has Participatory planning and decision making at the heart of its development policy. Consultation is done with the community for whom the plan is intended. UN-HABITAT's Global Campaign on Good Urban Governance sees public participation in urban decision- making process as the key strategy for governments and civil societies to solve urban problems. List any 5 advantages and challenges of urban consultation process.
- 7. The urbanization boom in India is not taking place without heated discussions and an attempt at inclusive planning. If crafted correctly, Indian cities can serve as role models in participatory planning. In fact, many India-based projects and enterprises are leading the way with more inclusive planning methods, hoping to create human-centric cities. Briefly explain the components of inclusive planning and also list any 5 factors which influences inclusive planning.

(CO2) [Comprehension]

(CO2) [Comprehension]

8. Betting on the technology and its best practices being embraced by smart cities, India has set big goals for urban development, expanding the successful projects and new age practices to 4,000 cities with a population of 5.00.000 each by running the mission into a movement in the next two years or before its deadline ending in 2023. This plan and promise of smart cities across the country though promising is riddled with challenges. Enumerate the key challenges in smart city development and suggest the measures required to overcome these challenges.

(CO1) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

9. The smart city proposal of each shortlisted city includes either one or a combination of the area-based development and pan-city initiatives featuring smart solution(s). A key feature in the smart city plan is to try to ensure that there is a sense of inclusiveness among citizens. Elaborate on the Area based proposal, SWOT analysis, Implementation plan and Financial plan presented in the Smart City Proposal of the City allotted to you for your assignment.

(CO3) [Application]

10. The theories and models of smart city make up the systemic approach that governs its readiness. This contains the in depth analysis of the concepts of the smart city as it relates to the environment as wells as the energy present. Briefly explain the features of any 5 smart city models.

(CO1) [Application]

11. The implementation of the Mission at the City level will be done by a Special Purpose Vehicle (SPV) created for the purpose. Write a note on (i) Implementation by SPV (ii) Financing by convergence with other schemes.

(CO3) [Application]

 $(3 \times 10 = 30M)$

(3 X 15 = 45M)