

No. of Printed Pages : 2

**MIO-003**

**DIPLOMA IN SMART CITY  
DEVELOPMENT AND MANAGEMENT  
(DSCDM)**

**Term-End Examination**

**June, 2023**

**MIO-003 : SMART URBAN ENERGY AND SMART  
TRANSPORTATION SYSTEM**

*Time : 3 Hours*

*Maximum Marks : 70*

---

**Note :** *Answer any seven of the following questions.*

*All questions carry equal marks.*

---

---

1. (a) Discuss the grid applications of Battery storage. 5  
(b) Describe Solar floating PV panels with the help of a neat sketch. 5
2. Discuss the advantages and limitations of various clean energy options for the transportation sector. 10
3. Discuss the application of SCADA in energy transmission system. 10

**P. T. O.**

4. Describe the Bluetooth Beacon Technology with its limitations. 10
5. (a) Explain the Personal Rapid Transit (PRT) system in detail. 5  
(b) Describe the properties of Alert Management System. 5
6. (a) Discuss the impacts of CAVs on users and mobility. 5  
(b) Explain the 5 V's of big data in brief. 5
7. Discuss the applications of IOT in transportation sector. 10
8. (a) Explain the Smart Mobility System. 5  
(b) What are the advantages and limitations of BEVs ? 5
9. Write short notes on any *two* of the following :
  - (a) Hybrid Electric Vehicles 5
  - (b) Current status of Electric vehicles in India 5
  - (c) B-Trac Scheme 5
  - (d) ITS technologies for smart city traffic management 5