

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET B**

**SCHOOL OF ENGINEERING  
END TERM EXAMINATION – MAY / JUNE 2024**

**Semester :** Semester VI - 2021  
**Course Code :** CIV2042  
**Course Name :** Urban Mobility  
**Program :** B.Tech.

**Date :** June 21, 2024  
**Time :** 01.00pm to 04.00pm  
**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 any 4 questions**

**4\*5=20M**

1. Define mobility? and list the different forms of urban mobility  
(CO1) [Knowledge]
2. List and explain any two merits of Sustainable Transportation  
(CO1) [Knowledge]
3. Explain any four Policy instruments in Smart mobility  
(CO2) [Knowledge]
4. Explain the Parking related problems in urban mobility  
(CO2) [Knowledge]
5. List and explain the pillars of sustainable development  
(CO3) [Knowledge]
6. List and explain the supports to sustainable mobility  
(CO3) [Knowledge]
7. List and explain the data required to calibrate the urban mobility model.  
(CO4) [Knowledge]
8. List the elements of urban mobility planning  
(CO4) [Knowledge]

**PART B**

**Answer any 4 questions**

**4\*10=40M**

9. An Urban Mobility Plan is a planning tool which comprises objectives and measures oriented towards safe, efficient and accessible urban transport systems. Explain the benefits and objectives of Urban Mobility Plans (UMP)  
(CO1) [Comprehension]
10. Concerning public transport in the city, it is possible to define stakeholders that can influence the concept of building mobility in the city. Write a short notes on stakeholders involved in public transport  
(CO1) [Comprehension]
11. The ways to get around in cities may be non-motorized (pedestrians, bicycles, scooters, skating, etc.) or motorized (motorbike, car, van, trailer, bus, trolley, metro, etc.), and they usually form a complex network. Write a short notes on urban transport problems.  
(CO2) [Comprehension]
12. Sustainable transportation refers to low- and zero-emission, energy-efficient, and affordable modes of transport, including electric and alternative-fuel vehicles, as well as domestic fuels. With the help of neat sketch explain the reverse traffic pyramid  
(CO2) [Comprehension]
13. A sustainable urban mobility planning (SUMP) tackles transport related problems in urban areas more strategically. It is the result of a structured planning process that comprises status analysis, vision building, objective and target setting, policy and measure selection, active communication, monitoring and evaluation and the identification of lessons learnt. Explain briefly basic characteristics of sustainable urban mobility planning  
(CO3) [Comprehension]
14. Transport system data must be collected for all modes, including walking, cycling and public transport. Explain briefly minimum data on the transport system required for urban mobility planning.  
(CO4) [Comprehension]

**PART C**

**Answer any 2 questions**

**2\*20=40M**

15. Concerning public transport in the city, it is possible to define stakeholders that can influence the concept of building mobility in the city. Explain the following concepts related to urban mobility in detail.  
a) Stakeholder consensus on transport improvements.  
b) Aligning local activities and societal goals  
(CO1) [Application]
16. Through the Smart City concept, mobility management is directly linked to information and communication means that can collect, transmit, and analyze data in real-time. Discuss in detail the “smart mobility” challenge in India  
(CO2) [Application]
17. Cities frequently face major barriers while creating their own Sustainable Urban Mobility Plans. Discuss in detail Common challenges & constraints of urban mobility planning in India  
(CO3) [Application]
18. Write a short notes on present status of urban transport facilitates, challenges and opportunities in the below mention metropolitan cities.  
a) Hyderabad b) Mumbai  
(CO4) [Application]