

Roll No.

Total No. of Pages : 02

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B.Tech. (CE / CSE / EEE / EE / ECE / ME) (Sem.-7,8)

METRO SYSTEMS & ENGINEERING

Subject Code : OECE-701-18

M.Code : 90629

Date of Examination : 25-01-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write briefly :
- Define TSS.
 - Why there is need of lifts and escalators in metro projects?
 - How does the gauge used in metro system is different from gauges used in railways?
 - Define service building.
 - Define carbon credits.
 - What do you mean by Operation Control Centre?
 - What do you mean by Traction Power?
 - What is the need of Metro System?
 - Discuss about pedestrian facilities that to be required.
 - Define Stand by systems.

SECTION-B

2. Discuss about the route studies of metro system. How it is done?
3. What are the various Environmental factors that should be kept in mind while a planning for a metro projects?
4. What are the different investigations done prior to start of any metro project?
5. Discuss in detail about the facility management module.
6. At what points the fire control systems are provided. What is the need of it?

SECTION-C

7. **Write a short note on:**
 - a) BCC
 - b) SCADA
 - c) OCC.
8. Discuss concept of green building & carbon credit.
9. Discuss about various Environmental and Social safeguards required for Traffic Management Systems.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.