

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (Sem.-6)
GEOSYNTHETIC ENGINEERING

Subject Code : PECE-602D-18

M.Code : 79397

Date of Examination : 05-07-22

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/Fill in the blank :

- a) Geotextiles are available in market in rolls up to what length.
- b) Name any 2 tests of geosynthetics.
- c) Write a short note on DSF fabrics.
- d) Write any 2 major factors to be considered in the selection of a geosynthetic for field application.
- e) Why natural fibres degrade?
- f) Write applications of geosynthetics in Geotechnical Engineering for Ground Improvement.
- g) Enumerate the potential uses of geotextiles in the Indian context.
- h) Write application of geosynthetics in water resource.
- i) Write two basic similarities between geotextiles and geogrids.
- j) Geotextiles are available in the thickness varying from.....

SECTION-B

2. List the various test methods developed for measuring the size of openings in geotextile.
3. List the various processes by which (i) non-woven geosynthetics and (ii) geogrids are manufactured.
4. Explain the historical applications of the reinforced soil.
5. Explain the bearing capacity improvement method with geogrid.
6. Explain creep and long term performance of geosynthetics.

SECTION-C

7. Explain installation technique of soil reinforcement.
8. What are natural geosynthetic? What are their advantages? Explain the typical situations where natural geosynthetic can be employed.
9. Explain physical-mechanical properties of geotextiles.

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.