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Section (B)

Subject: Geotec - Enginee

Quize #1

write a note different Software which are used in Geotechnical Engineering.

1. Plaxis 3D:: It is a 3D Software which uses finite element method of analysis to calculate deformations, stability and settlement.

It is widely used in geo technical engineering in various application such as tunneling, mining, embankments and excavations and rock mechanics.

2 Geo STudio::

Geo Studio::

SLOPE-W It is used to analyse the Slope stability of different type of soils and rock under different loading and pore water pressure conditions. It can solve both simple and complex problem and by using different theories and it will clearly indicate the critical slip surface or we can say failure surface.

3. **Deep Soil:** It is a 1D Site response analysis which can perform both

- linear and nonlinear analysis.
- Equivalent linear analysis.

Q No 1:: write a geotechnical report of any civil engineering project which close to your home town.

Transpeshawar:: or peshawar Bus Rapid transit (peshawar BRT) is a bus rapid transit system currently under construction by the Peshawar Development Authority (PDA) in peshawar Capital of Pakistan Khyber Pakhtunkhwa (KP) Province Divided into two Separate Phases the first Phase of the transpeshawar BRT System will encompass an east - west Corridor to be served by 30 Stations with an initial 220 buses out of which 155 are 12-meter-long buses while 65 are 18-meter-long buses 88% of funding is being Provided by the Asian development bank.

Bus rapid Transit (BRT) :-

Brt are also called busway are transit way is a bus-based public transport system designed

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to improved capacity and reliability relative to a conventional bus system typically a brt system includes roadway that are dedicated to buses and gives priority to buses at intersections where buses may interact with other traffic alongside design features to reduce delay caused by passanger boarding or leaving buses or purchasing fares BRT aim to combine the capacity and speed of a metro with the flexibility lower cast and simplicity of a bus system.

The first BRT system in the world was the transitway system in Ottawa, Canada, which entered service in 1983.

As of March 2018 a total of 166 cities in six continents have implemented BRT system accounting for 4,906 km (3,048mi) of BRT lines and about 32.2 million passangers every day

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07 Which about 19.6 million passanger ride daily in Latin Americd which has the most cities with BRT Systems with. 54 led by brazil with 21 cities The Latin American Countries with the most daily ridership are Brazil (10.7M) Colombia (3.6m) and Mexico (2.5M) in the other regions China (4.3M) and IRan (2.1M) also stand out Currently transjakarta is considered as the largest BRT network in the world

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