DEPARTMENT OF CIVIL ENGINEERING

Mid Assignment / Quiz (*Spring 2020)*

Subject: Pavement Material Engineering **Duration: 6 Days**
Instructor: Engr. Shabir Ahmad **Total Marks: 30**
Semester: M.S (Civil Engineering)

Note: Attempt all questions.

Q. No. (01)

1. Given **Figure. 1** refers to which phenomena of the pavement conditions?
2. Find the phenomena and discus that phenomena / behaviour for flexible pavement with granular base and stabilized base.

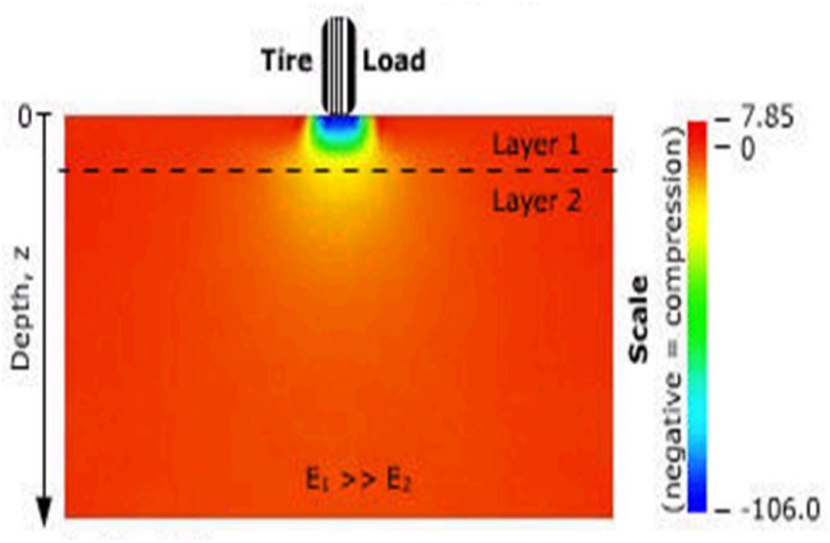


Figure. 1

Q. No. (02)

Being a material design expert, if client department award you the consultancy for preparation of the geotechnical report for the upcoming road project.

1. Which steps (General Procedure) you would consider while soil investigation and preparation of Geotechnical Report.
2. Also elaborate the steps briefly in your own words.

Q. No. (03)

The below **Figure. 2-1.7** refers to the CBR results showing penetration of the piston in X-axis and bearing value on Y-axis. At y-axis right side of the graph, it shows ranges in percentage from 5% to 100% referring to different degrees of the subgrade (any material) quality in reference to CBR test.

1. Please elaborate the Figure in your own words in detail.

Note: If required, assume any other necessary data.

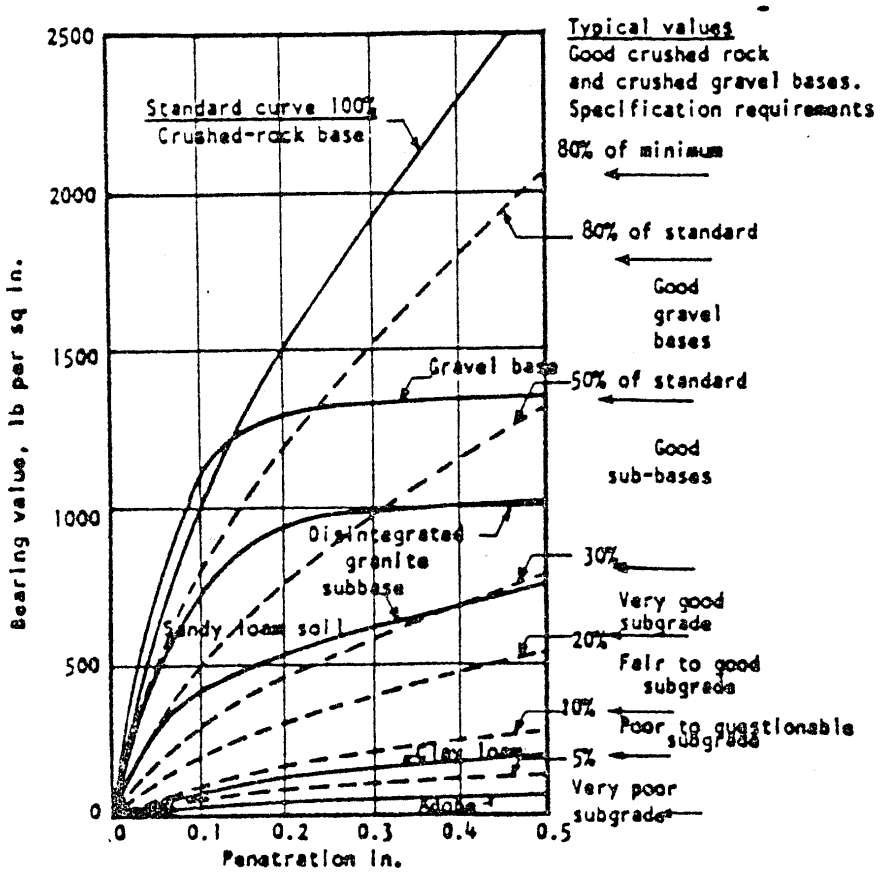
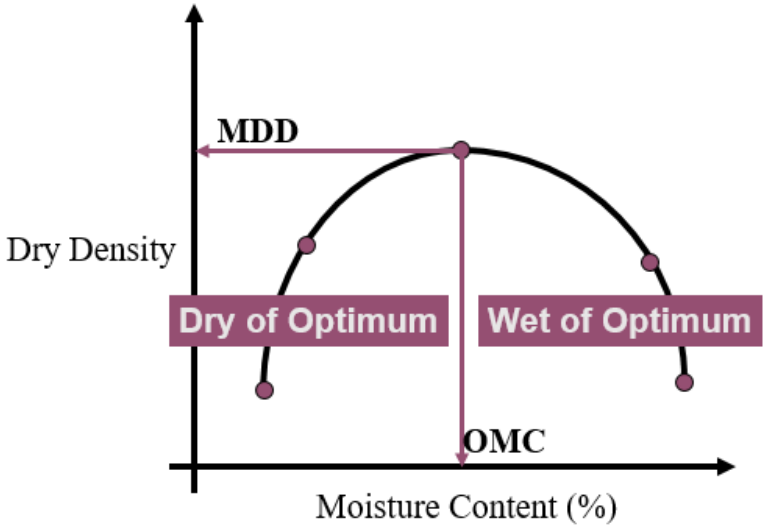


Figure 2-1.7. CBR Testing Procedure and Load-Penetration Curves for Typical Soils.

Q. No. (04)

1. In the Figure given below what is Dry of optimum and Wet of optimum? Explain?
2. What are effects of compaction on Engineering properties of soil? Details.



Note: If required, assume any other necessary data.