

NAME:AYLWIN ISOKARIARI,O

MATRIC NO:17/ENG03/027

DEPARTMENT:CIVIL ENGINEERING

**1. MENTION 7 TYPES OF SOILS AND THEIR
PERMEABILITY VALUES**

TYPE OF SOIL	PERMEABILITY VALUE
Clean gravel	100 to 1.0
Coarse sand	1.0 to 0.01
Fine sand	0.01 to 0.001
Silt	0.001 to 0.00001
Clay	Less than 0.000001
Delhi silt	0.0000006
Boston blue clay	0.000000007

**2. EXPLAIN THE RELEVANCE OF SOIL
PERMEABILITY IN SOIL ENGINEERING**

Permeability is the measurement of the soil's ability to allow water to flow through its pores or voids. The relevance of soil permeability in soil engineering includes:

- ❖ Soil permeability is applicable in the determination of the rate of settlement of a saturated compressible soil layer.
- ❖ Soil permeability helps in the calculation of seepage through the body of earth dams and stability of slopes for highways.
- ❖ Soil permeability is necessary in the calculation of uplift pressure under hydraulic structure and their safety against piping.
- ❖ Soil permeability is necessary in the design of filters made of soils.
- ❖ Soil permeability plays a key role in the design of retaining walls.