ASSIGNMENT FOR ENGINEERING GEOLOGY & SEISMOLOGY (CE1305), CIVIL 2K19 Batch

Soft copy of the Assigned Chapter in **Doc & Ppt format** should be mailed to ranjit.met@nitjsr.ac.in through your CR by **14th Sept 2020**. First phase of presentation will start from **15th Sep 2020.** The date of presentation for each group will be declared on 12th Sept 2020.

The subject of the mail should be: Assignment_Civil_2K19

The filename should be the (Lowest registration number of the group)_(Title of the assignment),

Marks will be as follows: 1. Content - 10, 2. Way of presentation - 10, 3. Asking Question - 10, 4. Answer - 10, Timing – 10 (Date of submission & duration of presentation).

Further, each student will submit at least 10 objective questions with their answer through the given Google Form https://forms.gle/1NCgg3CAnrBt4YqA6 by **15th Sept 2020**.

S. No.	Regn Nos.	Topic
1	99, 94	Importance of Geology in Civil Engineering
2	72,81,82	Geological work of Natural Agencies
3	57,55,69	Geological work by Atmosphere (Rock Weathering),
4	48,49,54	Geological work by River, Streams and its various types. The drainage system and various types of drainage patterns,
5	53,42	Geological work by Under groundwater vertical distribution of groundwater types of aquifers,
6	58, 90	Geological work by Oceans – sea erosion - transportation - deposition – coastal protection.
7	62, 95,	Climate and soil formation,
8	61, 92, 2018UGCE 085	Classification of soil - soil erosion and its control.
9	91,43	Structure Features of Rocks: Primary and Secondary structure, Outcrop, Bedding and Stratification, Dip and strike, Intrusions, Flow and Masses,
10	63,89,18	Unconformity, Fracture & Joints
11	36,39,52	Study of folds with special reference to their classification and Plotting in a map,
12	64,66, 68	Fold: Classification, genesis and their significance in Civil Engineering projects
13	13,37,41	Study of faults with special reference to their classification and Plotting in map
14	6,20,70	Fault: Classification, genesis and their significance in Civil Engineering projects.

15	44,50	The internal structure of the earth, P, S & L waves, discontinuities.
16	77, 46, 88	Sources of seismic activity - Continental Drift - Plate tectonics
17	17, 65, 86	Geological conditions necessary for design and construction of dam & reservoirs, tunnels, buildings & road cuttings
18	10, 71	Landslides –definition, classification, causes and their corrections
19	2, 38, 79	Methods of Geological Investigations
20	30, 32, 93	Geophysical Methods of Geological Investigation
21	25,28,35	Numerical related to Engineering Geology
22	45, 73, 96	Tsunami – Introduction – Tsunami velocity – Velocity in deep ocean – Velocity in shallow water – wavelength of tsunami wave
23	19, 67, 98	Drawdown and run-up of a tsunami, inundated of a tsunami wave
24	97,100, 101	Earthquakes, its classification, magnitude, the energy released during the earthquake, Location of an earthquake, epicenter, focus.
25	21, 40, 102	Elastic Rebound Theory, Seismic history of India, Seismic Zone of India, The significance of seismic studies in civil engineering projects.
26	22,76,78	Reservoir associated with the earthquake, Recording of an earthquake, Seismograph
27	07,31,74	Physical properties, chemical composition, occurrence and uses of rock-forming minerals,
28	47, 56, 103	Classification, texture and structure of Igneous rocks
29	323,104, 59	Classification, texture and structure of sedimentary rocks
30	75,83, 84	Classification Texture and structure of metamorphic rocks
31	05,08,09	Description of common and important rock types and their engineering properties and use.
32	14,15,33	Engineering classification of rocks
33	01,03, 04	Suitability of rocks as building and construction materials.
34	26, 51,87	Description, engineering properties and uses of the following rocks – Granite , Gabbro, Basalt, Limestone

35	24,29,34	Description, Engineering Properties and uses of following rocks: Limestone, Sandstone, Shale, Laterite, Quarzite, Marble
36	12,16,80	Dependence of the bearing strength of rock on texture and structure,
37	27,11,85	Texture and structure of of Igneous and metamorphic rocks

Ranjit Prasad/ 23-08-2020