

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code: 1036356

B.E. / B.Tech. DEGREE EXAMINATIONS, NOV / DEC 2024
Sixth Semester
Civil Engineering
U20CE611 – SITE INVESTIGATION METHODS AND PRACTICES
(Regulation 2020)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART – A

(10 x 2 = 20 Marks)

1. What is desk study in site investigation?
2. What are the advantages of site investigation?
3. Differentiate between magnetic and gravity method of non-destructive testing used in site investigation.
4. State the advantages of Acoustic Emission monitoring techniques in site investigation.
5. What is the use of plate load test and where it is performed?
6. State the type of soils where Static Cone Penetration Test is preferred?
7. State the causes of disturbances while collecting soil samples.
8. What are the requirements to be looked in an Undisturbed sample?
9. What is the difference between OHSA 18001 and 18002?
10. What are the basic steps in conducting a job safety analysis?

PART – B

(5 x 16 = 20 Marks)

11. (a) Explain the various stages of site investigation. (16)

(OR)

(b) What are the objectives of site investigation and explain the benefits of a Desk Study. (16)

12. (a) Explain briefly about electrical resistivity method with its principle. (16)

(OR)

(b) Briefly discuss the method of seismic refraction method to find the depth and characterization of the bed rock surfaces along with advantage and limitation. (16)

13. (a) Explain in detail the procedure of SPT with its advantages and limitations. (16)

(OR)

(b) Explain briefly about pressure meter test with its advantages and disadvantages. (16)

14. (a) Explain in brief how a geotechnical investigation report to be presented. (16)

(OR)

(b) What are the final recommendations for use of proper selection of type of foundations for different structures? (16)

15. (a) Explain the key elements of an effective safety programme in construction. (16)

(OR)

(b) Brief on the major Safety Issues at Construction Site. (16)

----- xxx -----