



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engineering and Technology)
VII Semester Final Re- Examination – March 2023
2019 Admission

Cien.1101

Basic Civil Engineering (2+1)

Marks: 50
Time: 2 hours

I Fill in the blanks **(10x1=10)**

1. Jar test is used in water treatment plants in order to determine the
2. The portion of the structure immediately above the ground and between the surface of the floor and the surrounding ground is known as
3. The branch of surveying in which the curvature of earth is taken into consideration is known as

Choose the correct answer

4. Orientation of plane table is done by
 - (a) Spirit level
 - (b) Trough compass
 - (c) Plumbing fork
 - (d) Drawing sheet
5. The weight of standard brick should be
 - (a) 1000g
 - (b) 1500g
 - (c) 2500g
 - (d) 3000g
6. Which of the following is hardest mineral?
 - (a) Quartz
 - (b) Felspar
 - (c) Garnet
 - (d) Amphibole

State True or False

7. Solid part of sewage is commonly known as sludge.
8. Rocks which are formed by the cooling of magma are known as igneous rocks.
9. Two point problem and three point problem are two cases of compass surveying.
10. Metallic cloth tapes are used for high precision surveying.

II Write short notes on ANY FIVE of the following **(5x2=10)**

1. Distinguish between substructure and superstructure of a building.
2. Functions of septic tank
3. Plumbing fork
4. What are basic principles of surveying?
5. Differential leveling
6. Composition of cement
7. What are the qualities of good brick?

III Answer ANY FIVE of the following **(5x4=20)**

1. What are the various methods for area and volume calculation?
2. List out all the tests for assessing the quality of water.
3. Explain the term BOD.

4. Distinguish between stadia method and tangential method.
5. What are the properties of fresh and hardened concrete?
6. Name and discuss the four mechanisms thought to occur during coagulation.
7. Differentiate between prismatic compass and surveyor's compass.

IV Write an essay on ANY ONE of the following (1x10=10)

1. What do you understand by prestressed concrete? What are its advantages and disadvantages?
2. What are the various steps in water treatment? Explain with neat sketches and a flow chart.
