



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2020 Admission
III Semester Final Examination – March 2022

Iden.2104

Building Construction and Cost Estimation (2+0)

Marks: 50
Time: 2 hours

- I Fill in the blanks** **(10x1=10)**
1. The process of iron react with oxygen is known as_____.
 2. _____apparatus is used for testing the consistency of cement.
 3. Calculation of present market cost of building is called_____.
 4. The end support of an arch is known as_____.
 5. The horizontal platform between two consecutive flights in a stair is _____.
- State True or False**
6. The finishing of mortar joints in brick masonry is called plastering.
 7. The compressive strength of concrete increases with increase in w/c ratio.
 8. Materials having good durability are not preferred for construction purpose.
 9. The refractory materials are used for high temperature conditions.
 10. Fineness of cement is express as gm/cm².
- II Write short notes on ANY FIVE of the following** **(5x2=10)**
1. Write a short note on any four qualities of good brick.
 2. Differentiate lime and slaked lime.
 3. What are the precautions to be taken while storing the cement?
 4. Briefly explain any two properties of good sand.
 5. Write a short note on workability of concrete.
 6. List out any four functional requirements of buildings.
 7. Write a short note on centre line method of estimation.
- III Answer ANY FIVE of the following** **(5x4=20)**
1. List out and briefly explain any 5 important physical properties of building materials.
 2. List out any two types of tiles, its properties and usage.
 3. Define building estimation. Briefly explain any three types of building estimation.
 4. Define Natural bed of stone and discuss its importance.
 5. Briefly explain any four tests on aggregates.
 6. What are the qualities of good timber?
 7. Draw a cross section of a typical staircase and mark any six of the following components: Run, Rise, Landing, Riser, Nosing, Thread, Soffit, Waist, Baluster, Handrail, Newel, Newel cap
- IV Write an essay on ANY ONE of the following** **(1x10=10)**
1. List out 10 different types of cement. Mention the main properties of each cement.
 2. Describe the manufacturing process of bricks.
