



KERALA AGRICULTURAL UNIVERSITY
B.Tech. (Ag. Engg.) 2018 Admission
III Semester Final Examination-December-2019

Iden.2104

Building Construction & Cost Estimation (2+0)

Marks: 50
Time: 2 hours

I State True or False

(10x1=10)

1. Ultimate tensile strength of mild steel is about 60kN/m².
2. The stretcher bond in brick masonry can be used only when the thickness of wall is 90mm.
3. Early attainment of strength in rapid hardening cement is mainly due to finer grinding.
4. Hydraulic lime is generally used in lime mortar.
5. The main function of alumina in brick earth is to impart plasticity.
6. The stone suitable for rubble masonry should be light and soft.
7. Bullet proof glass is made of thick glass sheet sandwiched by a layer of steel.
8. Brick walls are measured in sq. meter if the thickness of the wall is 10cm.
9. According to ISI method of measurement, the order of the sequence is height, breadth, length.
10. Sand stone is an igneous rock.

II Write Short notes on any FIVE of the following

(5x2=10)

1. What is the purpose of rate analysis?
2. Define Valuation.
3. Define Market Value.
4. What is the difference between White Cement and Ordinary Portland Cement?
5. Define Rapid Hardening Cement.
6. Define mortar.
7. Describe Stretcher bond with neat sketch.

III Answer any FIVE of the following.

(5x4=20)

1. Prepare an approximate estimate or rough cost estimate of a hospital building for 50 beds. The cost of construction altogether for each bed is Rs. 60,000/-. Determine the total cost of hospital building.
2. Describe the specifications of First class Brick required for superstructure.
3. What is seasoning of timber? Why it is required?
4. What are the constituents of good brick earth? Write function of each constituent.
5. Describe initial and final setting time of cement.
6. Discuss in detail the various methods of curing.
7. How is mud flooring constructed?

IV Write an essay on any ONE of the following

(1x10=10)

- 1 Explain in detail the different types of estimates.
- 2 Write the names of common building stones of India. Give quality and uses of each type.
