

Marking Scheme

U218-116(T1)

OCTOBER 2018/ IN-SEM (T1)

S. Y. B. TECH. (CIVIL) (SEMESTER - I)

COURSE NAME: BUILDING MATERIALS AND CONSTRUCTION

Time: [1 Hour] (CVUA21176) (PATTERN 2017) [Max. Marks: 30]

Q.1) a) It is proposed to construct a residential building on black cotton soil. Which type of foundation is suitable in such condition? Comment with reasons.

[6 marks]

Ans: Type of foundation -2 marks, reasons- 4 marks

b) Classify various types of stone masonry. Draw typical sketches to illustrate the same.

[6 marks]

Ans: Any 3 types of stone masonry- 2 marks each

c) Sketch line diagrams of any four types of shallow foundations

[4 marks]

Ans: Any four – 1 mark each

OR

Q.2) a) Discuss the properties of a good brick used in construction

[6 marks]

Ans: Any 6 properties- 1 mark each

b) Explain the Ashlar chamfered masonry with a neat sketch

[6 marks]

Ans: Explain- 4 marks, sketch-2 marks

c) Explain the necessity of plinth in residential building

[4 marks]

Ans: Necessity-at least 2 points- 2 marks each

Q.3) a) State the advantages of Cavity wall

[6 marks]

Ans: Any 3 advantages- 2 marks each

b) Describe ponding method of curing

[4 marks]

Ans: Describe: 4 marks

c) Identify the advantages of precast concrete

[4 marks]

Ans: Any 2 advantages- 2 marks each

OR

Q.4) a) Enlist methods of curing concrete. Explain any two in detail

[6 marks]

Ans: Enlist any four methods-2 marks. Explain- 4 marks

b) What are the advantages of light weight concrete blocks?

[4 marks]

Ans: Any 2 advantages atleast- 2 marks each

c) Why is formwork necessary?

[4 marks]

Ans: Necessity of formwork- 2 marks each