

**B.TECH. SEM -II CIVIL 2014 COURSE (CBCS) : WINTER -
2017**

SUBJECT : BUILDING CONSTRUCTION

Day : **Friday**
Date : **24/11/2017**

Time **10.00 AM TO 01.00 PM**
Max. Marks : 60

W-2017-2011

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non-programmable calculator is allowed.
- 4) Assume suitable data if necessary.

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- Q.1 a)** Enlist types of foundations to be provided in black cotton soil and explain anyone of them in detail. **(05)**
- b)** Describe various motors used in construction of masonry. **(05)**
- OR**
- Q.1** Draw a typical cross-section of building (G+1) and describe any five component of building. **(10)**
- Q.2** Define the following terms and show them with a sketch of door - style, lock rail, panel, sash bar. Draw its plan and elevation also. **(10)**
- OR**
- Q.2** Design a dog-legged staircase for a residential bungalow. The space available is 3m x 5m for staircase. Floor to floor height is 3.0 m Draw plan and sectional elevation with a 1:100 scale. **(10)**
- Q.3 a)** Draw a typical semicircular arch and describe their components. **(06)**
- b)** Describe the brick flooring. **(04)**
- OR**
- Q.3 a)** What is lintel? Describe various types of lintels. **(05)**
- b)** Enlist types of Arches and explain any one of them in detail. **(05)**
- Q.4 a)** Describe couple roof with neat diagram. **(05)**
- b)** Write advantages of steel trusses over timber trusses. **(05)**
- OR**
- Q.4** Draw a typical Queen post steel truss with neat diagram. Describe the components. **(10)**
- Q.5** What is pointing? Draw and explain various types of pointing. **(10)**
- OR**
- Q.5 a)** Describe sand faced and smooth cast finish plaster. **(05)**
- b)** Write the application of the following paints and why?
- Oil paint, Enamel paints. **(05)**
- Q.6 a)** What are the requirements of a good form work? **(05)**
- b)** Describe cantilever scaffolding with neat sketch. **(05)**
- OR**
- Q.6 a)** Describe Ferrocete in detail. **(05)**
- b)** Describe Trimix.

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