Government College of Engineering, Amravati Civil Engineering Department

Class test 2

III Sem.B.Tech. (Civil Engg.) 2016-17 CEU 304: Building Construction and Materials

Date: 21/09/2016

Duration: One Hour

Maximum Marks: 15

Solve any three of the following

- Define the term 'window'. What are the points to be kept in view while making provision for windows in a room? Also give the classification of windows based on various criteria. Explain in detail clere storey window along with a neat sketch.
- Discuss the various considerations that are made in planning of staircases. Illustrate the different types
 of staircases generally used indicating their suitability for specific use.
- 3) What are the functions of lintels and arches? In a neat sketch show the parts of the latter giving their technical terms and explain each one of them in brief. (5)
- 4) Explain the various sources and effects of dampness in buildings. (5)

GOVT. COLLEGE OF ENGINEERING, AMRAVATI CIVIL ENGINEERING DEPARTMENT CLASS TEST II

SUBJECT: BUILDING CONSTRUCTION & MATERIALS CEU304
III SEM B. TECH. CIVIL ENGINEERING

Time: 1 Hr Max. Marks: 15

- Q.1 Define Lintel. State its types and suitability of each type. Draw neat sketches of L-section and cross section of R. C. C. lintel with chajja projection showing the reinforcement details in it. (04)
- Q.2 List different types of steel roof trusses and state spans for which they are suitable.

 Draw line diagrams of any four types of steel roof trusses. Also draw a sketch showing fixing of roofing sheet with purlin. (04)
- Q. 3 State the requirements of a good stair. Explain the factors which should be considered while locating the stair in the building. (03)
- Q.4 Design a suitable stair for the residential building from the following data.
 - i. Floor to floor height = 3.6 m
 - ii. Size of staircase hall = $4.7 \times 2.0 \text{ m}$

Draw to a suitable scale the plan of the designed stair.

(04)

OR

Draw neat sketches showing

- i) Details of connections of steel roof truss at support
- ii) Details of fixing of roofing sheets and angle purlin over the principal rafter

