

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1, February 2016

M.Tech. (CM) 2nd Semester

Course Code: **10M11CE215**

MAX. MARKS: 15

COURSE NAME: Sustainable Design and Construction

MAX. TIME: 1 HR.

COURSE CREDITS: 03

NOTE: All questions are compulsory. Marks are indicated against questions. Carrying of mobile phone is strictly prohibited and will be treated as a case of unfair means.

1. Give a typical breakdown of grey water produced per capita. Discuss the components of a 3-stage grey water filtration system used at household level mentioning its advantages. [4]
2. Using *pi*-chart, give a typical breakup of energy consumption in a building. Give typical energy saving approaches for buildings being used in India. [4]
3. How would you design a typical rainfall harvesting system? Classify rainwater harvesting systems according to their reliability. [4]
4. Mention the basic concepts of sustainability in Civil engineering construction. [3]

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