

# Federal University of Technology

## School of Environmental Sciences

### Department of Architecture

#### Theory of Architecture (Arc 405) Examination

Semester: Harmattan

Session: 2014/2015

Time: 1 hr

**Instructions:** Answer 4 questions only

1. "Factors such as wealth and high population densities in cities forced the ancient Romans to discover new architectural solutions of their own." Briefly describe the solution the Romans provided for high population density.
2. The ancient Romans extensively used building components and materials like arches, vaults, bricks and concrete. Briefly outline how they applied these in their designs. (The use of sketches may be useful).
3. Some of the features of Gothic style Cathedral are buttresses and flying buttresses. What distinguishes one from the other?
4. The Greek **Theater** was a central place of formal gatherings in ancient Greece. Briefly describe what the Greek Theatre looks like.
5. In the early medieval period, the Somali-islamic Architecture significantly blossomed. Briefly describe the features of this kind of Architecture.
6. What is 'Biomimicry'? Distinguish between biomimicry and 'Digital morphogenesis'?