

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE
2012-13 ACADEMIC YEAR

PART I - FIRST SEMESTER SUPPLEMENTARY EXAMINATIONS – AUGUST 2013
AAR 1103 – HISTORY OF ARCHITECTURE I

Instructions

Duration: 3 Hours

Answer all four questions.

Illustrate your answers clearly and legibly with sketches where appropriate

Number all your sheets.

QUESTION 1

- a. Describe the impact the use of stone as a building material had on prehistoric societies and their architecture. (5)
- b. Name and describe the temple building type used by the Mesopotamians, (4)
- c. Explain six of the following terms used by the Ancient Egyptians
 - i. Sphinx.
 - ii. First Court
 - iii. Hypostyle Hall
 - iv. Sanctuary
 - v. Clerestory
 - vi. Mastabas
 - vii. Stepped Pyramid
 - viii. Great Pyramid
 - ix. Trabeated Structure (6)
- d. Discuss the differences between the Egyptian and Greek climate, religion and society and how they were manifest in the design of their respective temples. (10)

[25]

QUESTION 2

- a. Which excavated Palace gave some credence to the legend of the mythical Minotaur's labyrinth. Explain how features of the building were used as explanations of the myth? (4)

- b. Draw a section of an Ionic Column and Entablature, illustrating and annotating the following.
- i. Fluting
 - ii. Shaft
 - iii. Capital
 - iv. Volute
 - v. Abacus
 - vi. Triglyph
 - vii. Architrave (12)
- c. Explain the term Entasis and how this effect is used in Greek temples (5)
- d. Name the material from which the Classical Greek temples are believed to be derived. Name the type of decoration whereby the original building material was expressed in the stone detailing. (4) [25]

QUESTION 3

- a. Name the one building that is considered the highpoint of the Classical Greek Period. Who was its architect? (3)
- b. Explain, with sketches, four of the following terms and building types
- i. Peripteral
 - ii. In Antis
 - iii. Cella
 - iv. Pilaster
 - v. Caryatids (8)
- c. Name and describe with diagrams the two additional Classical Orders used by the Romans. (6)
- d. Who first wrote the three conditions of Architecture were Firmness, Commodity and Delight. Describe these three qualities. (6)
- e. Discuss the structural advantages of the Coffer Slab as developed by the Romans versus the Flat Slab. (2) [25]

QUESTION 4

- a. Roman architects mastered Space; the Greeks mastered architectural form. Explain this difference illustrating with examples from both civilizations. (8)
- b. Describe the difference between the corbelled arch and the radiating arch; (6)

c. Name and draw three architectural forms used by the Romans derived from the arch. (6)

d. Describe with diagrams one of following building types.

i. Forum of Trajan

ii. Basilica of Constantine (5)

[25]