



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF THE BUILT ENVIRONMENT**

**DEPARTMENT OF ARCHITECTURE**

**HISTORY OF ARCHITECTURE I**

**AAR 1103**

**Examination Paper**

**December 2015**

This examination paper consists of 5 pages

**Time Allowed: 3 hours**

**Total Marks: 100**

**Special Requirements: N/A**

**Examiner's Name: Professor John Knight**

**INSTRUCTIONS**

1. Answer any four (4) questions
2. Each question carries 25 marks
3. Use of calculators is permissible

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
1.	25
2.	25
3.	25
4.	25
5.	25
<b>TOTAL</b>	<b>100</b>

## QUESTION 1

- a. In the dry stone walls of Great Zimbabwe and other similar settlements , describe the following wall styles
- i) P Style
  - ii) Q Style
  - iii) R Style (6)
- b. It was during the Neolithic Period that man started making durable structures the remains of which are still present to this day.
- i) What is the other term given for the Neolithic Period? (1)
  - ii) Name one Neolithic settlement found in Anatolia and one found in the Levant (2)
- c. The names of these ages are defined by the tools being used.
- i) Name the two ages that came after the Neolithic period. (2)
  - ii) Which of these ages relates to the dry stone settlements of Great Zimbabwe? (2)
- d. Explain the following terms used by the Ancient Egyptians
- i. Clerestory
  - ii. Trabeated Structure
  - iii. Mastabas
  - iv. Stepped Pyramid
  - v. Great Pyramid (10)
- e. Explain why the preservation of the body was so important to the Ancient Egyptians. (2)

## QUESTION 2

- a. Compare the Social and Religious differences between Egyptian and Greek Civilizations. (4)
- b. Comment on how the above affected the Architecture of each civilization. (6)

- c. Draw a section of an Ionic Column and Entablature, illustrating and annotating the following;
- i. Capital
  - ii. Fluting
  - iii. Volute
  - iv. Dentils
  - v. Architrave
- (10)
- d. Draw the plan form of a Classical Greek Peripteral Temple that is Hepterstyle/six columns in width. Indicate the principal spaces within the temple.
- (5)

### QUESTION 3

- a. Explain the following fundamental differences between Greek and Roman architecture.
- i. Art for its own sake vs Art for Propaganda
  - ii. Architectural Form with Intrinsic Quality vs Architectural Form as Decoration
  - iii. Architectural Form vs Architectural Space
  - iv. Temples of Faith vs Monuments of Conquest
  - v. Simple Form vs Complex Form
- (10)
- b. Name and draw three architectural forms used by the Romans derived from the arch.
- (6)
- c. Discuss the structural advantages of the Coffer Slab as developed by the Romans versus the Flat Slab.
- (4)
- d. Describe with diagrams one of following building types.
- i. Forum of Trajan
  - ii. Coliseum
  - iii. Basilica of Constantine
  - iv. Pantheon
- (5)

#### QUESTION 4

- a. Two distinct forms rose from the Early Christian churches. Name these and describe with diagrams how each of these forms suited different concepts of church design. (6)
- b. Name the origins of each of these forms (2)
- c. Draw a plan of an Early Christian Church that illustrates
  - i. the nave
  - ii. the aisle
  - iii. the transept
  - iv. the choir
  - v. the cloisters (10)
- d. Describe what the Westwerk of the pre-Romanesque period represented relative to the church and God. (4)
- e. Name and describe the architectural element used to support a dome on a square plan. (3)

#### QUESTION 5

- a. Describe the following ways in which Romanesque architecture distinguished itself from Early Christian architecture
  - i. Plan – the Crossing
  - ii. Plan – Basic Unit System
  - iii. Introduction of Cross Vaulting (9)
- b. Describe the differences between Romanesque and Gothic architecture with regard to the following;
  - i. Directional emphasis of the Nave
  - ii. Quiet Harmony vs Dynamic Energy
  - iii. Proportion of the Nave width to height
  - iv. Plan Form (12)

c. Describe the one of the following terms that are particular to Gothic architecture

- i. Pointed Arch
- ii. Ribbed Vault
- iii. Flying Buttress

(4)