



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

HISTORY OF ARCHITECTURE I

AAR 1103

Examination Paper

December 2017

This examination paper consists of 4 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. Use sketches to illustrate examples wherever possible.

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
TOTAL	100

QUESTION 1

- a. In the dry stone walls of Great Zimbabwe and other similar settlements such as Khami, describe the following wall styles (6)
 - i. P Style
 - ii. Q Style
 - iii. R Style
- b. Name and describe the temple building type used by the Mesopotamians (3)
- c. Name three contextual factors that influenced the forms of primitive and ancient architecture. (3)
- d. Using the example of Egypt, describe how two of these factors influenced the form and character of Egyptian Architecture. (8)
- e. Architecture began when man employed stone as a building material. Do you consider this statement true or false? Discuss. (5)

QUESTION 2

- a. We can learn much about Greece prior to its classical period from its mythology and archaeology.
 - i. Name one Greek Legend that has since found some proof of its existence through the archaeological excavations of Early Greek ruined cities carried out in the last 200 years. (1)
 - ii. Name the ruin and describe its features that support the legend. (4)
- b. The three Greek Classical Orders are often compared with the Man, the Woman and the Maiden.
 - i. Name and draw a sketch of the Column and Entablature of each of these orders annotating at least four features that are similar to all three orders. (5)
 - ii. Identify three features that distinguish these orders from each other. (3)
 - iii. Examine how the form and proportions of each supports the Man, Woman, Maiden comparison. (6)
- c. The Parthenon is both the high point of Classical Greek Architecture and a symbol of Greek reunification – Discuss illustrating your points with sketches. (6)

QUESTION 3

- a. Who first wrote that the three conditions of Architecture were Firmness, Commodity and Delight. Describe these three qualities. (4)
- b. Explain the term Arcuated Structural System. What advantages does this system have over the Trabeated Structural System? (4)
- c. Is a Coffered Slab a trabeated system or an arcuated system? Justify your answer. (2)
- d. Four architectural forms used by the Romans derived from the arch can be found in the Basilica of Constantine. Draw the Basilica naming and illustrating these arcuated forms (8)
- e. The Poet Horace wrote
“Greece had prevailed over the barbarians as she had planted the seed of Art in the land of her conquerors.”
Considering the fundamental differences between Greek and Roman Architecture critically evaluate the above statement. Use examples where relevant. (7)

QUESTION 4

- a. In Early Christian Architecture name two origins of each of the following
 - i. the Rectangular form church (2)
 - ii. the Circular or Centrally planned church (2)
- b. The Old St Peter's in Rome, the predecessor to the present Vatican and centre of the Roman Catholic church was a typical example of a Rectangular form church.
 - i. Draw Old St Peter's identifying at least 6 different elements that are particular to this church form (8)
 - ii. Examine how the form of this church type is adapted to its functional, spatial and spiritual requirements. (7)
- c. The Hagia Sophia is the culmination of Early Christian Architecture. Discuss this statement using sketches to illustrate. (6)

QUESTION 5

- a. Romanesque churches developed from the rectilinear form of the Early Christian Church. Illustrate the development of the following stages in the design of the Nave examining the spatial effect this had on the Romanesque church compared to its Early Christian counterpart.
 - i. The Crossing (2)
 - ii. Basic Unit System (2)
 - iii. Transverse Arch (2)
 - iv. Barrel Vault (2)
 - v. Blind Arch (2)
 - vi. Cross Vault (2)
- b. Describe the constructional advantage of the Gothic Ribbed Vault over the Romanesque Groined Vault. (6)
- c. Romanesque churches are described as *Castellum Dei*. Gothic churches on the other hand are Cathedrals of Light – Critically analyse this difference (7)