



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

HISTORY AND THEORY OF ARCHITECTURE I

BAR 1108

Examination Paper

December 2024

This examination paper consists of 5 pages

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Mr. S. N. Mkandhla

INSTRUCTIONS

1. Answer question 1 and any 3 other questions.

MARK ALLOCATION:

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

QUESTION 1

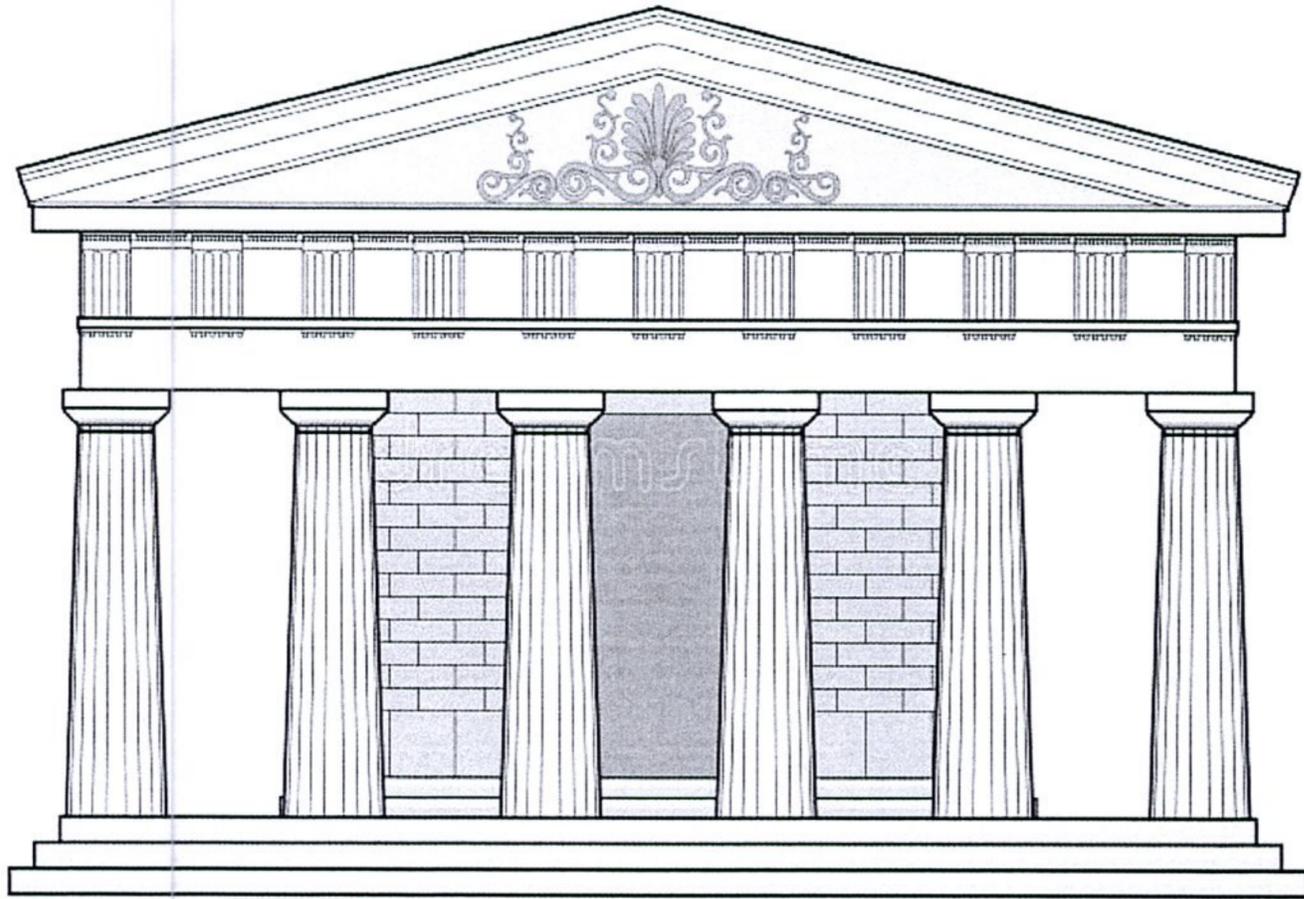


Figure 1: Elevation of a typical Greek temple

- a) Figure 1 above shows the elevation of a typical classical Greek temple composed in a particular order. Regarding this diagram:
- Identify the order used in this temple and the other three classical orders. (3)
 - State what each of the orders symbolizes. (3)
 - Briefly describe the societies behind the three classical orders and how these characterizes represented in each order. (6)
- b) Sketch the typical floor plan for the Temple shown in Figure 1 and therefore explain how this building exemplifies the Classical Greek laws of composition. (8)
- c) Identify 3 typical buildings in modern times which make use of classical architecture and thereby evaluate the extent to which Classical architecture has influenced modern-day built environments. (5)

QUESTION 2

- a) What is the *Progressive Axis* in Egyptian architecture? (2)
- b) State the symbols that were often found on Egyptian columns. (3)
- c) Describe Egyptian burial practices and the stages in pyramid development that culminated in the construction of the Great Pyramids of Giza. (10)
- d) Explain how Egyptian religious beliefs influenced their architecture and environment. (10)

QUESTION 3

- a) State the style of architecture, language and religion used in the East and Western Roman Empire after the great schism. (6)
- b) Describe graphically five Roman architectural features based on the arch. (10)
- c) Evaluate the impact of the invention of concrete on Roman architecture and subsequent movements. (9)

QUESTION 4



Figure 2: Robert Gabriel Mugabe International Airport

- a) Figure 2 above shows a key feature of the Robert Gabriel Mugabe International Airport:
- Which national Monument is this design based on? (1)
 - Identify 2 features derived from the identified monument. (2)
 - Briefly explain how the above building conforms to the three key pillars of good architecture according to the Vitruvian Treatise. (6)
- b) Discuss how local architecture can be used to celebrate Zimbabwe culture and heritage concerning the following:
- Forms (2)
 - Materials (2)
 - Symbols and Motifs (2)
- c) With aid of relevant examples, evaluate the extent to which Afrocentric design knowledge has been applied to the built environments of Zimbabwe's urban centres as compared to Eurocentric knowledge. (10)

QUESTION 5

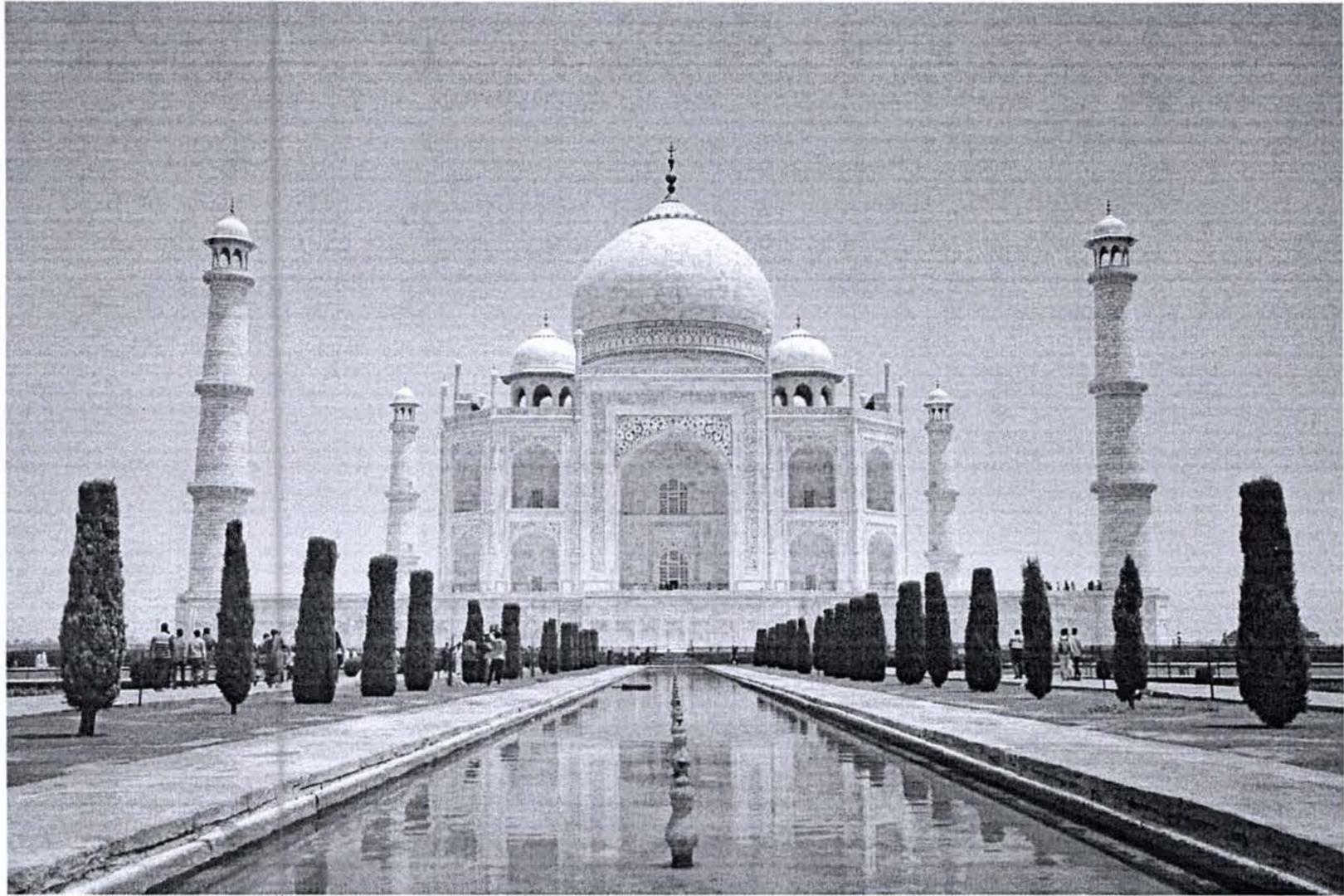


Figure 3: Monument

- a) State the name, the style of architecture associated with the monument shown in Figure 3 as well as the religion it is normally associated with. (3)
- b) Identify 3 key features in the building shown in Figure 3 one which are commonly used in this style of architecture. (6)
- c) Differentiate between a Church, a Cathedral and a Basilica in Christian architecture. (6)
- d) Compare and contrast Islamic architecture with Christian architecture. (10)