

Frequently Asked Questions

Question 01:

Explain in detail about the Greek architecture, its style and influences.

Answer:

The following factors influenced the Greek Architecture:

(i)Geographical:

The country surrounded on three sides by the sea, possessed of many natural harbors, and convenient for the development of trade. By means of these havens .the Phoenician merchants in early times carried on commerce with the country. Again, the mountainous character of the country, with scarcely a road until Roman times, was calculated to isolate the inhabitants into small groups, and together with the tempting proximity of a whole multitude of islands, was instrumental in producing a hardy and adventurous people, who might be expected to make good colonists.

(ii)Geological:

In Greece the principal mineral product was marble, the most monumental building material in existence, and one which favours purity of line and refinement in detail. This material is found in great abundance in various parts of Greece. The lime were in many cases coated with a fine cement formed of marble dust and lime ; where stone was employed, and elsewhere, it appears also to have been coated with this marble cement. The country was also rich in silver, copper, and iron.

(iii)Climatic:

The climate of Greece is remarkable for the hot sun and the heavy rains, factors probably answerable for the porticos which were important features of the temples. Greece enjoyed a position intermediate between the rigorous surroundings of the Northern nations and the relaxing conditions of Eastern life. Hence the Greek character combined the activity of the North with the passivity of the East in a way that conduced to the growth of a unique civilization.

(iv)Religious:

The Greek religion was in the main a worship of natural phenomena, of which the gods were personifications. There are, however, numerous traces of

ancestor-worship, fetishism, and other primitive forms of religion. The priests had to perform their appointed rites.

(v)Social:

The early inhabitants were known to the ancients under the name of Pelasgi. Their civilization belonged to the bronze age, as is evident from the remains of it

found at different points. The war against Troy affords proof of an early connection of the inhabitants of Greece with Asia. The Achaeans in their turn succumbed to a fresh influx of invaders from the North, hardy mountaineers called Dorians, who established themselves at Sparta and elsewhere in the Peloponnese. As regards the people themselves, it is clear that the national games and religious festivals united them in reverence for their religion, and gave them that love for music, the drama, and the fine arts, and that emulation in manly sports and contests for which they were distinguished.

(vi)Historical:

It was not till some 500 years after the fall of Troy that the new Hellenic civilization was evinced in the construction of the Temple of Corinth, one of the earliest Doric temples known. As regards the people themselves, it is clear that the national games and religious festivals united them in reverence for their religion, and gave them that love for music, the drama, and the fine arts. Many of the important buildings of Greek architecture, especially in the Ionic style, are in their colonies of Asia Minor, and that this connection with the East had some influence upon their architecture. Much as Greek culture owed to the preceding Oriental civilizations, still the change effected by the Greeks has so profoundly influenced the development of European progress that Greece must be regarded as the veritable source of literary and artistic inspiration.

Question 02:

Elaborate the architecture of Hellenic period.

Answer:

- Contains all the principal temples and monuments which were erected between the years B.C. 700 and the Roman occupation B.C. 146.
- The masterpieces of Greek architecture, however, were all erected in the short space of about 150 years, viz., between the defeat of the Persians, B.C. 480, and the death of Alexander, B.C. 323.

- Many of the Greek cities were upon or in the immediate vicinity of a hill which was known as the Acropolis
- The Temples formed the most important class of buildings erected during this period
- They were built with special regard to external effect, and were ornamented with sculpture of the highest class in order to form fitting shrines for the deities in whose honour they were erected.
- They were generally placed in a "temenos" or sacred enclosure, and consisted of a "naos" or cell, usually oblong in plan/ in which was placed the statue of the god or goddess ; a treasury or chamber beyond and a front and rear portico, with flanking colonnades.
- In the larger temples were internal colonnades of columns placed
- over each other to support the roof
- On the two end facades above the columns a triangular shaped pediment, usually but not always filled with sculpture, terminated the simple span roof.
- These roofs were constructed of timber and covered with marble slabs
- The door was almost always placed in the centre of the end wall, behind the portico of columns, and frequently planned so that the sun might enter and light up the statue opposite.
- The general absence of windows in the temple, that at Agrigento being the sole exception, has given rise to many theories as to how light was admitted.
- The method of lighting with a clear storey concealed within the roof is one such example.
- The temple was occasionally "hypaethral," that is to say, there was an opening in the roof which admitted air and light to the central portion of the naos or cell.
- The temple was the house of the local god, being merely a glorified dwelling-house.

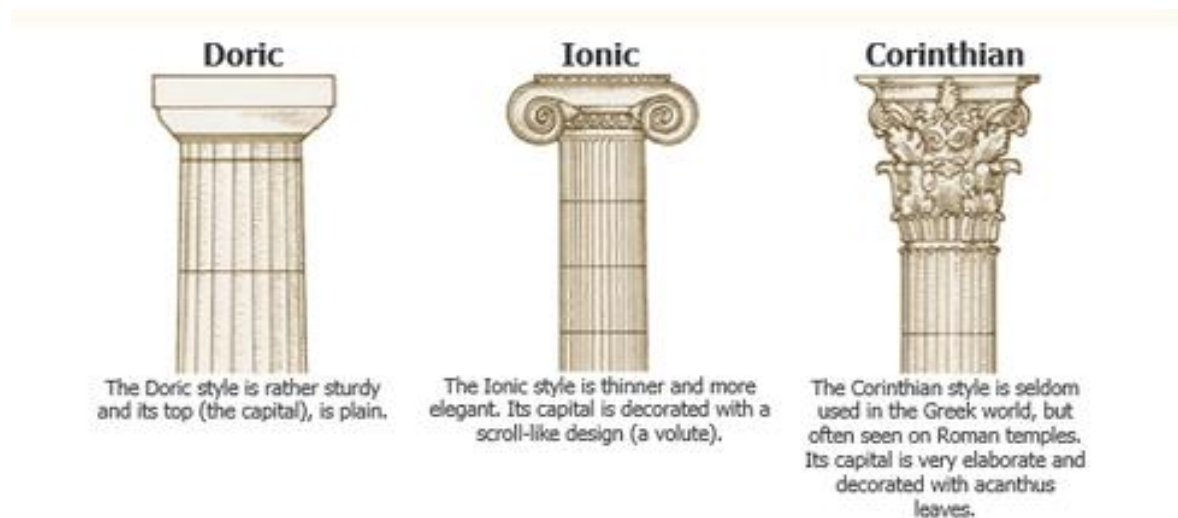
Note: Add sketches to supplement your answer.

Question 03:

What are the 3 classic Greek orders? Explain in detail the Doric order with examples.

Answer:

- There are three distinct orders in Ancient Greek architecture: Doric, Ionic, and Corinthian.
- These three were adopted by the Romans, who modified their capitals. The Roman adoption of the Greek orders took place in the 1st century BC.
- Each style has distinctive capitals at the top of columns and horizontal entablatures which it supports, while the rest of the building does not in itself vary between the orders.

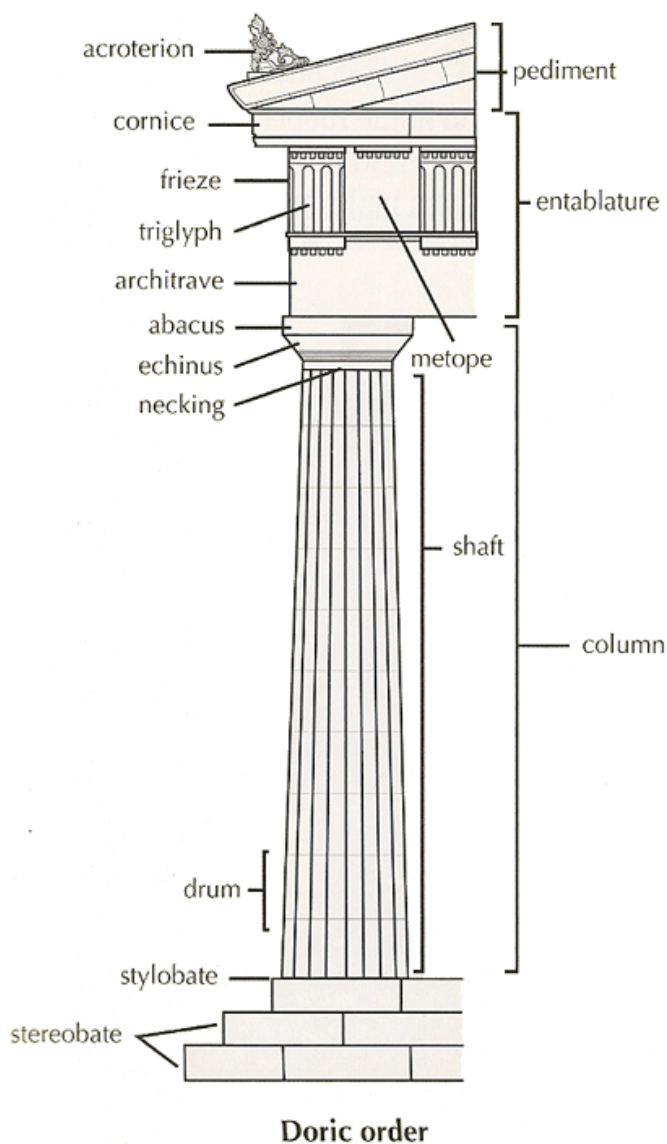


The Doric Order:

- The Doric order, the oldest, plainest, and most sturdy, is traced by many to an Egyptian prototype as exemplified at Beni-Hasan
- Perrot and Chipiez, in their monumental work on " Art in Primitive Greece," discuss the question of the wooden origin of the Greek Doric column and its entablature, and endeavour to show its derivation from the wooden-built porch of the Mycenaean palace
- Viollet-le-Duc, however, held a decided opinion that the orders of Greek architecture involved an original stone treatment.
- Original stone uprights, fluted to express their function of vertical support, and therefore treated in this respect in the same manner as the columns, which were certainly fluted when in position

- The column, which has no base, but stands directly or on a stylobate usually of three steps is, including the cap, from 4 to 6.5 times "the diameter at the base in height.
- The circular shaft diminishing at the top to from $\frac{3}{2}$ to $\frac{2}{3}$ of this diameter is divided as a rule in 20 shallow flutes or channels separated by sharp arrises.
- The division into twenty flutes seems to have been selected in order that a projection might come under each of the angles of the square abacus above, and at the same time a flute in the centre of the column as seen from the front, back or sides.
- The shaft has normally an outward curvature of profile called the "entasis", to counteract the hollow appearance of the straight sided columns.
- The column is surmounted by a distinctive capital formed of abacus, echinus and annulets. The abacus is a square slab under which is a large convex moulding called the echinus, which is somewhat similar in outline to a human hand supporting a book.
- The entablature, usually about one quarter of the height of order, is supported by columns, and has three main divisions :
- The architrave is derived from its prototype, the wooden beam. It has considerable depth, and only one vertical face, whereas in the Ionic and Corinthian orders the usual number is three. The frieze has triglyphs, ornamented with three channels, and metopes or square spaces between them, sometimes filled with sculpture of the highest quality
- The triglyphs are placed at equal distances apart, and come immediately over the centre of each column and intercolumniation.
- The cornice consists of an upper or crowning part consisting of cymatium and birdsbeak mouldings beneath which is a vertical face known as the corona. The soffit is inclined upwards and parallel with the slope of the roof, and its underside has flat projecting blocks called mutules, which recall the feet of sloping rafters, one over each triglyph and metope, their soffits being ornamented with eighteen guttae in three rows of six each.
- The Doric order originated on the mainland and western Greece. It is the simplest of the orders, characterized by short, faceted, heavy columns with plain, round capitals (tops) and no base.

- With a height that is only four to eight times its diameter, the columns are the most squat of all orders. The shaft of the Doric order is channelled with 20 flutes.
- The capital consists of a necking which is of a simple form. The echinus is convex and the abacus is square.
- Above the capital is a square abacus connecting the capital to the entablature.
- The Entablature is divided into three horizontal registers, the lower part of which is either smooth or divided by horizontal lines. The upper half is distinctive for the Doric order.
- Eg: The Heraion, Olympia.

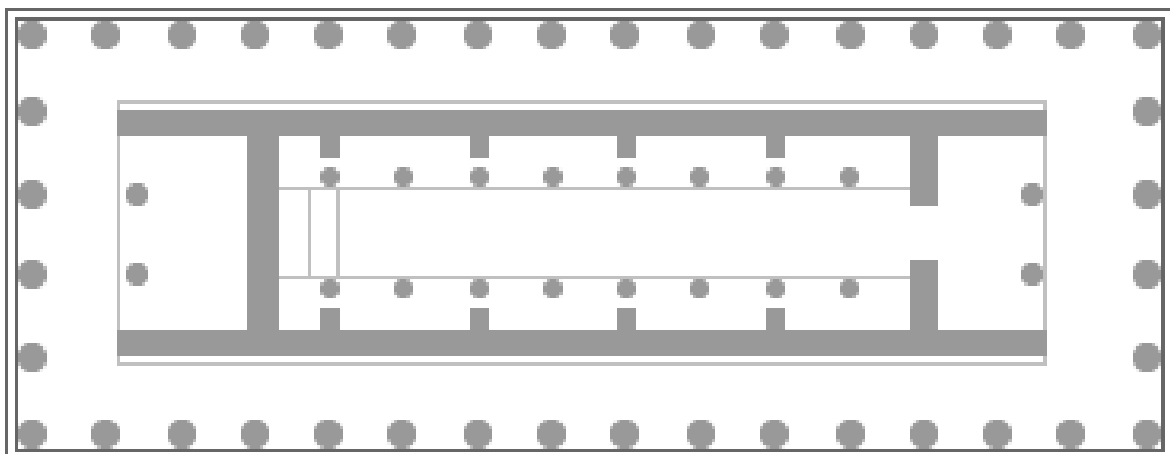


Question 04:

Elaborate the architecture of the Heraion, Olympia.

Answer:

- One of the earliest Doric temples in Greece, and the oldest peripteral temple at that site, having a single row of columns on all sides. The location may have previously been the place of worship of an older cult.
- Also called the Temple of Hera
- Constructed in BC 700
- Believed to be the most ancient of all Greek Temples hitherto discovered.
- Stands on a stylobate of two steps, measuring 168 feet by 64 feet 6 inches.
- The cella is very long in proportion to its width and has on either side a range of eight columns, the alternate ones being connected to the cella wall by means of short transverse walls.
- The peristyle columns, which with the capitals measured 17 feet in height, varied much in diameter and are both monolithic and built in drums.
- It is generally held that the original columns were of wood replaced by stone columns as they decayed



Temple of Hera plan

