Frequently Asked Questions

Question 01:

Explain the growth and influences of renaissance architecture.

Answer:

- Renaissance architecture is the architecture of the period between the early 15th and early 17th centuries in different regions of Europe, demonstrating a conscious revival and development of certain elements of ancient Greek and Roman thought and material culture.

- Renaissance means Rebirth in French

- The Renaissance was the period that followed (brought Europe out of) the Middle Ages. It was a time of renewed interest in things of this world.

- The Renaissance movement, arising in Italy in the fifteenth century, spread from thence to France, Germany, and England, and over the whole of Western Europe over what had been the Roman empire in the West.

- The invention of printing, which aided the spread of knowledge, the spirit of inquiry, and the diffusion of freedom of thought, led, among the Teutonic races, to a desire to break away from Roman influence.

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- Italian architecture was naturally the first to be affected, because the Gothic style had never taken a firm hold on the Italians.

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- Dante (1265-1321), Petrarch (1304-1374), and Boccaccio (1313-1375) aided in the spread of the newly-discovered classic literature, which caused a revolt against mediaeval art

- The main features in the style were the Classic orders, viz., the Doric, Ionic, and Corinthian, which were often used decoratively, as by the Romans, and at other times with their true constructive significance.

- Buildings designed for more modern wants were clothed in the classic garb of ancient Rome, but it must not be supposed that in this development no advance was made.

- Italy was the headquarters of the new movement.

- Speaking generally, there was an endeavour to reconcile the Gothic and the Roman methods of construction

- The Renaissance architects followed the Byzantine treatment of the Dome, but increased it in importance by lifting it boldly from its substructure and placing it on a " drum," in which windows were formed, thus making it a great external dominating feature

- Likewise, they were the first to introduce as an architectural "motif" the wall of massive rusticated masonry with arched openings

- Renaissance Vaulting: In the beginning of the fifteenth century the Gothic principles of ribbed vaulting were abandoned, giving place to the revival of the Classic method of solid semicircular vaulting.

- This type of vaulting was much used in the halls, passages, and staircases of Renaissance palaces and churches

Question 02:

Differentiate renaissance architecture and gothic architecture

Answer:

RENAISSANCE.

- Symmetry and proportion of part to part Grandeur gained by simplicity

- Fewness and largeness of parts have a tendency to make the building appear less in size than it really is.

- Towers are sparingly used, and when they occur are symmetrically placed.

- The dome is a predominant feature

- Interiors of churches were planned on Roman principles and covered with domes and pendentives.

- The parts are few, the nave being divided into three or four compartments by which a general effect of grandeur is produced.

- Walls were constructed in ashlar masonry

- Door and window openings are semicircular or square headed

- The Classic system of moulded architrave projecting from the wall face was revived.

- Vaults are of simple Roman form without ribs.

- The dome over a large space was generally constructed with an inner and outer covering,

- The Classic columns and orders were revived and used decoratively in facades.

GOTHIC

- Picturesqueness and beauty of individual features more particularly sought after.

- In consequence of the large number of parts, the building appears larger than it really is.

- Towers are a general feature, and are often crowned with a spire

- The tower and spire are predominant features.

- Interiors are more irregular, and are covered with stone vaulting or open-timbered roofs.

- The parts are many, a nave of the same length as a Renaissance church probably divided into twice as many compartments.

- These were often constructed of uncoursed rubble or small stones

- Materials are small in size, and carry out the Gothic idea of multiplicity.

- Door and window openings usually pointed and of considerable size

- This treatment was for the introduction of painted glass

Question 03:

Explain the architecture of the Dome of Florence Cathedral
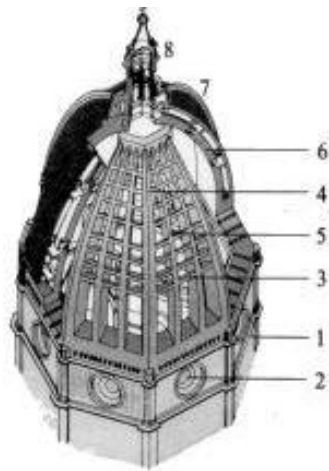
Answer:

- Constructed from A.D. 1420-1434
- Brunelleschi's principal work, his design being accepted in competition.
- Constructed without any centering
- It covers an octagonal apartment 138 feet 6 inches in diameter.
- Santa Maria del Fiore was the new cathedral of the city, and by 1418 the dome had yet to be defined.
- When the building was designed in the previous century, no one had any idea how such a dome was to be built
- It was to be even larger than the Pantheon's dome in Rome and that no dome of that size had been built since antiquity.
- Buttresses were forbidden by the city fathers, and because it was impossible to obtain rafters for scaffolding
- The stresses of compression were not clearly understood, and the mortars used in the period would set only after several days, keeping the strain on the scaffolding for a very long time

- In 1418, the Arte Della Lana, the wool merchants' guild, held a competition to solve the problem.
- The two main competitors were Ghiberti and Brunelleschi, with Brunelleschi winning and receiving the commission.
- The competition consisted of the great architects. None could do it but Brunelleschi
- The architects protested that they could have done the same; but Filippo answered, laughing, that they could have made the dome, if they had seen his design
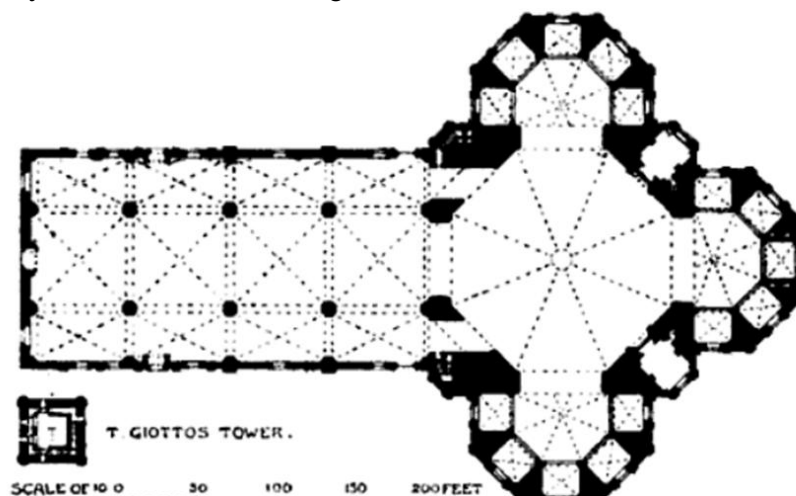
- The dome, the lantern (built 1446–ca.1461) and the exedra (built 1439-1445) would occupy most of Brunelleschi's life
- Brunelleschi used more than four million bricks in the construction of the dome.
- He invented a new hoisting machine for raising the masonry needed for the dome
- Is raised upon an octagonal drum in which are circular windows
- lighting the interior.
- The dome itself is constructed of inner and outer shells
- Pointed in form, being constructed on a Gothic principle with eight main ribs and sixteen intermediate

1 octogonal support
2 round windows
3 horizontal connectors
4 main ribs
5 secondary ribs
6 inner shell
7 outer shell
8 lantern

(lantern not shown)

oculus

ribs

ribs

oculus

drum
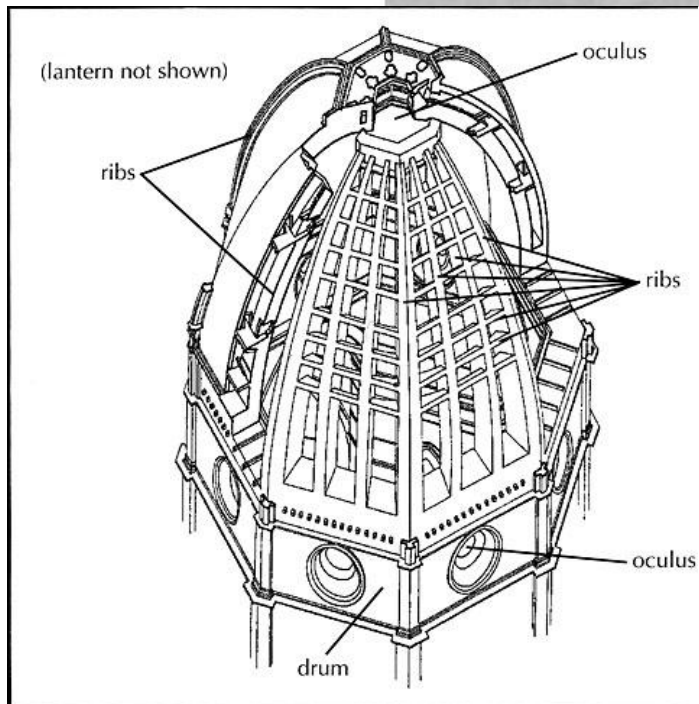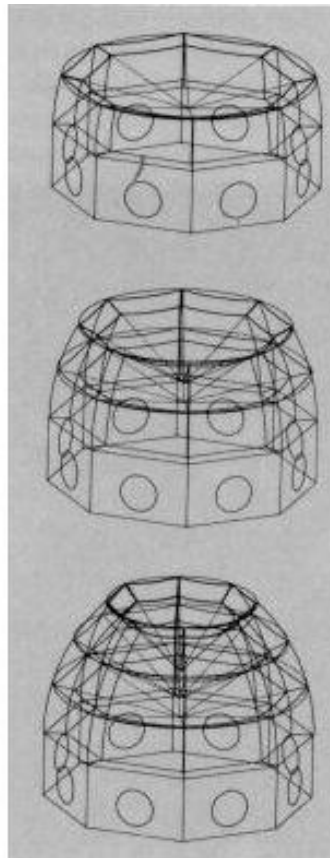
Question 04:

Explain the architecture of Ruccellai Palace.

Answer:

- ➢ A.D. 1451-1455

- ➢ Palazzo Ruccellai is a palatial 15th-century townhouse in Florence.

- ➢ designed by Leon Battista Alberti between and executed, at least in part, by Bernardo Rossellino.

- ➢ Its facade was one of the first to proclaim the new ideas of Renaissance architecture based on the use of pilasters and entablatures in proportional relationship to each other.

- ➢ Shows a lighter and more refined character, although dignity was lost compared with the Pitti Palace, by the reduction in size of the great crowning cornice.

- ➢ The grid-like facade is achieved through the application of a scheme of trabeated articulation.

- ➢ The stone veneer of this facade serves as the background for the smooth-faced pilasters and entablatures which divide the facade into a series of three-story bays.

- ➢ Tuscan order at the base, a Renaissance original in place of the Ionic order at the second level, and a very simplified Corinthian order at the top level.

- ➢ Twin-lit, round-arched windows in the two upper stories are set within arches with highly pronounced voussoirs

- ➢ The facade is topped by a projecting cornice.

- ➢ The palace contains an off-center court three sides of which originally were surrounded by arcades

➢ was used for family celebrations, weddings, and as a public meeting place.

➢ The two buildings (palace and loggia) taken together with the open space between them (piazza), form one of the most refined urban compositions of the Italian Renaissance.