

Architectural Marvels and Mechanics

Architecture · Practice Test · 15 Questions

1. Which ancient architectural feature was developed by the Romans to allow for wider spans and more stable structures than simple post-and-lintel construction?

- A) The cantilever
- B) The true arch
- C) The flying buttress
- D) The geodesic dome

2. What is the specific name of the central stone at the top of an arch that locks all other stones into place?

- A) Keystone
- B) Capstone
- C) Foundation stone
- D) Corbel

3. Which architectural style, common in the Middle Ages, is characterized by pointed arches, ribbed vaults, and flying buttresses?

- A) Romanesque
- B) Neoclassical
- C) Gothic
- D) Art Deco

4. The Great Pyramid of Giza was originally covered in what material that made it shine brightly in the sun?

- A) White limestone
- B) Polished marble
- C) Gold leaf
- D) Glazed ceramic tiles

5. Which famous architect is known for 'organic architecture' and designed the house known as Fallingwater?

- A) Antoni Gaudí
- B) Frank Lloyd Wright
- C) Le Corbusier
- D) Zaha Hadid

6. What structural element is used in skyscrapers to counteract the force of wind, keeping the building from swaying too much?

- A) A decorative spire
- B) A tuned mass damper
- C) A hydraulic piston
- D) An external skeleton

7. The Sydney Opera House, designed by Jørn Utzon, is famous for which unique architectural feature?

- A) Its massive wooden spire
- B) Its concrete shell roof
- C) Its underground theater
- D) Its rotating floors

8. Which ancient structure was built as an amphitheater for gladiatorial contests and public spectacles in Rome?

- A) The Pantheon
- B) The Parthenon
- C) The Colosseum
- D) The Forum

9. In architecture, what does the term 'facade' refer to?

- A) The interior staircase
- B) The foundation depth
- C) The exterior face or front of a building
- D) The roof drainage system

10. Which material did Gustave Eiffel primarily use to construct the framework of the Eiffel Tower?

- A) Cast iron
- B) Wrought iron
- C) Steel
- D) Reinforced concrete

11. What is the architectural purpose of a 'flying buttress'?

- A) To support heavy walls from the outside
- B) To provide a place for gargoyles
- C) To improve ventilation
- D) To create an entrance arch

12. Which building is the tallest man-made structure in the world as of 2024?

- A) Shanghai Tower
- B) Burj Khalifa
- C) Merdeka 118
- D) Abraj Al Bait

13. The Parthenon, located on the Acropolis of Athens, was built primarily to honor which Greek deity?

- A) Zeus
- B) Poseidon
- C) Athena
- D) Apollo

14. What type of truss is commonly used in bridges because of its high structural efficiency and simple geometric shape?

- A) Warren truss
- B) Catenary truss
- C) Curved truss
- D) Suspension truss

15. Who is the architect famous for the modernist buildings in Barcelona, such as the Sagrada Família, which feature curvy, nature-inspired shapes?

- A) Ludwig Mies van der Rohe
- B) Antoni Gaudí
- C) Frank Gehry
- D) Oscar Niemeyer