ARCHITECTURE – KNOWLEDGE TEST

NAME:..... **DATE:**.....

PART 1: MULTIPLE CHOICE (20 QUESTIONS). WRITE THE LETTER "A-B-C-D" IN THE BOX

1. What type of structure is a bridge?

a) Residential b) Commercial c) Infrastructure d) Decorative

2. Which of the following is a traditional building material?

a) Plastic b) Steel c) Adobe d) Fiberglass

3. A dome is shaped like a...

a) Triangle b) Cube c) Half-sphere d) Cylinder

4. What material is commonly used in roofing?

a) Wood c) Asphalt shingles

b) Concrete d) Brick

5. Which trade material is used for electrical wiring?

a) Copper b) Glass c) Clay d) Cement

6. What do we call a very tall building?

a) Hut b) Skyscraper c) Shed d) Bungalow

7. Which of the following is NOT a landscape element?

a) Garden b) Mountain c) Window d) River

8. What is concrete made of?

a) Clay and straw c) Sand and glass

b) Cement, water, and aggregates d) Steel and bricks

9. A triangular structure is often used for...

a) Windows b) Arches c) Roofs d) Doors

10. Which is a soft, natural building material?

a) Steel b) Stone c) Straw d) Plastic

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11. What shape is a cylinder?

a) Round with flat ends
c) Triangle
b) Four equal sides
d) Rectangle

12. Which is a modern building material?

a) Thatch
b) Adobe
c) Glass
d) Mud

13. A pyramid is a structure with...

a) Circular base
c) No corners
b) Four triangular faces
d) Flat top

14. What is a common use for bricks?

a) Roofs
b) Floors
c) Walls
d) Doors

15. A flat surface with four equal sides is a...

a) Rectangle
b) Triangle
c) Square
d) Circle

16. What is 'timber' mainly used for?

a) Plumbing
c) Structural framing
b) Insulation
d) Painting

17. Which shape is best for stability?

a) Circle
b) Triangle
c) Oval
d) Square

18. What is marble commonly used for?

a) Roofing
b) Flooring
c) Insulation
d) Framework

19. What is the purpose of insulation in buildings?

a) Decoration
b) Cooling
c) Soundproofing and temperature control
d) Foundation

20. Which of the following is used in plumbing systems?

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a) Timber b) PVC c) Glass d) Brick

PART 2: WRITE "TRUE" OR "FALSE" IN THE CHART

21. A beam is a horizontal structural element.	21)
22. Sand is commonly used in electrical systems.	22)
23. A dome is shaped like a cube.	23)
24. Bamboo is a sustainable building material.	24)
25. There are no trade materials used in architecture.	25)
26. Concrete is stronger than wood.	26)
27. Landscape includes natural and built environments.	27)
28. Glass is only used for windows.	28)
29. Architects use blueprints to design buildings.	29)
30. Structures are only built for decoration.	30)

PART 3: READ THE TEXT AND CHOOSE THE BEST OPTION

Reading: **TYPES OF STRUCTURES IN ARCHITECTURE**

Architecture relies on various types of structures to support buildings and ensure safety, durability, and functionality. Each structure type has unique features and is chosen for specific architectural needs.

1. Load-Bearing Structure

Load-bearing structures use thick walls to support the weight of the building. These walls carry loads from the roof and floors down to the foundation. Traditional houses and brick buildings often use this type of structure because it is strong and simple.

2. Frame Structure

Frame structures are made of columns and beams that form a skeleton to support the building. This allows for open spaces inside and flexible design. Materials like steel, wood, and concrete are commonly used. Skyscrapers and modern office buildings often use frame structures.

3. Shell Structure

Shell structures are thin, curved, and lightweight. They distribute weight evenly around their shape, so they do not need many internal supports. Examples include domes, arches, and the roofs of stadiums or auditoriums.

4. Truss Structure

Truss structures are made of interconnected triangles, which provide strength and stability. They are often used for roofs and bridges because they can span long distances without extra support.

5. Cable and Arch Structure

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Cable structures use tensioned cables to support weight, commonly seen in suspension bridges or large roofs. Arch structures use curved shapes to distribute weight and are used in bridges and tunnels.

6. Composite Structure

Composite structures combine different materials, such as steel and concrete, to make stronger and more efficient buildings. This allows for innovative and sustainable construction solutions.

Each type of structure is chosen based on the building's function, location, and design needs.

MULTIPLE CHOICE QUESTIONS. WRITE THE LETTER "A-B-C-D" IN THE BOX

31. Which structure uses thick walls to support the weight of the building?

a) Frame structure
c) Shell structure
b) Load-bearing structure
d) Cable structure

32. What is a common feature of shell structures?

a) Made of interconnected triangles
c) Uses tensioned cables
b) Thin, curved, and lightweight
d) Built only with wood

33. Which structure is made of columns and beams to support the building?

a) Load-bearing structure
c) Truss structure
b) Frame structure
d) Arch structure

34. What type of structure is often used for roofs and bridges because it can span long distances?

a) Cable structure
c) Truss structure
b) Shell structure
d) Composite structure

35. Which structure combines different materials for strength and efficiency?

a) Load-bearing structure
c) Cable structure
b) Frame structure
d) Composite structure

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MATCHING QUESTIONS

Match the structure type (A-E) to its correct description (1-5). Write the answer in the chart

Structure Types	Descriptions
A. Load-Bearing Structure B. Frame Structure C. Shell Structure D. Truss Structure E. Composite Structure	1. Made of columns and beams to create open interior spaces. 2. Uses thick walls to transfer weight directly to the foundation. 3. Thin, curved design that evenly distributes weight without internal supports. 4. Combines materials like steel and concrete for enhanced strength. 5. Built with interconnected triangles to span long distances.

1	2	3	4	5

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