ARCHITECTURE – KNOWLEDGE TEST UNIT II

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

Part I: Modern Building Materials

1. Steel is commonly used in construction because: _____

- a) It is lightweight and fragile
- b) It has high strength and durability
- c) It is cheaper than wood

2. Glass is often used in modern buildings to: : _____

- a) Block natural light
- b) Enhance structural stability
- c) Allow transparency and light entry

3. Plastic is chosen in architecture for: : _____

- a) Its ability to rust
- b) Its flexibility and light weight
- c) Its permanent rigidity

4. Metal panels are used in building facades because they: : _____

- a) Are always transparent
- b) Provide aesthetic appeal and protection
- c) Replace concrete in foundations

5. Architects use composite materials mainly to: : _____

- a) Reduce costs without compromising strength
- b) Avoid using sustainable practices
- c) Build temporary structures only

Part II: Reading Comprehension - Architecture Passage

Modern architecture emphasizes the use of innovative materials and sustainable designs. Architects now focus on integrating materials such as steel, glass, and composite panels to enhance both functionality and visual appeal. Additionally, there is a growing interest in green buildings, which prioritize energy efficiency and the use of renewable resources. Technological advancements in construction techniques have enabled architects to realize complex geometries and adaptive designs.

6. What is a key focus of modern architecture? : _____

- a) Building with wood only
- b) Using outdated designs
- c) Innovation and sustainability

7. Which materials are highlighted in modern architecture? : _____

- a) Steel and glass
- b) Clay and straw
- c) Sand and water

8. What is the main benefit of green buildings? : _____

- a) They cost more to maintain
- b) They focus on energy efficiency
- c) They are built faster

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9. Which statement is true about new construction techniques? : _____

- a) They limit architectural creativity
- b) They make buildings more expensive only
- c) They allow for complex and adaptive designs

10. According to the text, modern buildings aim to be: : _____

- a) Temporary and easy to remove b) Functional and visually appealing c) Built from recycled paper only

Part III: Match the vocabulary with the correct definition

VOCABULARY	DEFINITION	ANSWER
1. Ratio	a) A numerical quantity that is not a whole number	
2. Design	b) One part of something divided into one hundred equal parts	
3. Space	c) To represent or convey in words or symbols	
4. Fraction	d) A plan or drawing produced to show the look and function of a building	
5. Hundredth	e) A set of rules for representing real objects in smaller/larger sizes	
6. Express	f) A comparison between two quantities	
7. Scale system	g) A continuous area or expanse that is free, available, or unoccupied	

Part IV: Fill in the blanks with the correct measurement word

cubic meter	imperial	ton	gram	centimeter	tonne	pound
kilogram	meter	inch	liter	yard	foot	ton

1. The concrete volume for the foundation is measured in _____.

2. A small architectural model might use a _____ to represent wall thickness.

3. Steel bars are usually weighed in _____.

4. One _____ of water is required for mixing cement on site.

5. Heavy machinery has a mass over one _____.

6. We measure small ingredients in construction mixtures in _____.

7. An _____ is part of the imperial measurement system.

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8. The plot of land is 5 _____ wide.

9. Cement bags weigh approximately 50 _____ each.

10. A ceiling height of 10 _____ is considered standard.

11. A shipping container may weigh up to one _____.

12. The blueprint is drawn using the _____ system, not metric.

13. The building's length is over 100 _____.

Part V: Multiple Choice Questions

1. What is the main purpose of using a scale system in architecture? _____

- a) To save paper when printing
- b) To represent real dimensions accurately in a drawing
- c) To make the design look more artistic

2. If one floor of a building has an area of 100 square meters and the building has 5 floors, what is the total area? _____

- a) 500 square meters
- b) 105 square meters
- c) 1000 square meters

3. Which unit would be most appropriate to measure the mass of a steel beam? _____

- a) Gram
- b) Pound
- c) Liter

4. Which of the following best defines a 'fraction' in architectural calculations? _____

- a) A whole number
- b) A decimal over 1
- c) A part of a whole or division of a number

5. The ratio 1:100 in a blueprint means that 1 cm in the plan equals: _____

- a) 100 cm in real life
- b) 10 cm in real life
- c) 1000 cm in real life

Part VI: Types of Maps and Photogrammetry

1. What is the main purpose of a physical map?_____

- a) To show city boundaries
- b) To represent natural features like mountains and rivers
- c) To display election results

2. A political map typically includes: _____

- a) Elevation levels
- b) Population density
- c) Country and city boundaries

3. Which type of map is best for showing climate zones or crop distribution? _____

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- a) Political map b) Thematic map c) Physical map

4. Photogrammetry is the science of: _____

- a) Drawing artistic maps b) Taking measurements from photographs
- c) Sketching site plans by hand

5. A thematic map may show which of the following? _____

- a) Mountain ranges b) Country borders c) Average annual rainfall

Part VII: Sketch Stage and Plans in Architecture

6. What is the sketch stage in architectural design used for? _____

- a) Building the structure b) Getting permits c) Exploring basic design ideas

7. Which document contains detailed information like material types and dimensions?

- a) Concept sketch b) Construction plans c) A zoning map

8. What do floor plans typically show?

- a) Exterior views of buildings b) Vertical elevations c) Horizontal layout of rooms and spaces

9. Why is the sketch stage important for communication?

- a) It helps finalize permits
- b) It visually expresses early concepts to clients
- c) It's used for structural testing

10. Which of the following would be developed after the sketch stage?

- a) Final design plans
- b) Survey maps
- c) Mood boards

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