



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH AND APPLIED SCIENCES

DEPARTMENT OF PREVENTATIVE HEALTH SCIENCES

QUALIFICATION : BACHELOR OF ENVIRONMENTAL HEALTH SCIENCES	
QUALIFICATION CODE: 08 BOHS	LEVEL: 5
COURSE NAME: HOUSING AND HEALTH	COURSE CODE: HAH 521S
SESSION: NOVEMBER 2023	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY: QUESTION PAPER

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MODERATOR: Mr. Joshua Hidinwa

INSTRUCTIONS

1. Answer the questions in Sections A, B and C
2. Please write neatly and legibly.
3. Do not use the left-side margin of the exam paper. This must be allowed for the examiner.

PERMISSIBLE MATERIAL:

1. Non-Programmable Calculator

THIS QUESTION PAPER CONSISTS OF 6 PAGES (Including this front page)

QUESTION 1

(10 Marks)

1.0 Evaluate the statements in each numbered section and select the most appropriate answer or phrase from the given possibilities.

- 1.1 In a floor plan, what does the dashed line usually represent? [1]
- A. A load-bearing wall
 - B. An electrical outlet
 - C. Water pipes
 - D. A proposed future expansion
 - E. None of the above
- 1.2 What does the term "open concept" refer to in the context of house floor plans? [1]
- A. A floor plan with no doors
 - B. A design that emphasizes large, connected spaces.
 - C. A floor plan with many windows
 - D. A floor plan with a small kitchen
 - E. None of the above
- 1.3 What is the primary purpose of a foundation plan in house construction? [1]
- A. To show the layout of furniture in the house
 - B. To illustrate the landscaping around the house
 - C. To detail the structural support for the house
 - D. To display the colour scheme for the exterior
 - E. To display the colour scheme for the interior
- 1.4 Which building system helps protect a structure from moisture and weather? [1]
- A. HVAC system
 - B. Plumbing system
 - C. Roofing system
 - D. Elevator system
 - E. None of the above
- 1.5 Which of the following is an example of sustainable development in town planning? [1]
- A. Building a large parking lot in a residential area
 - B. Preserving a natural greenbelt around a city
 - C. Zoning for heavy industry in a residential neighbourhood
 - D. Allowing unlimited high-rise construction
 - E. None of the above

- 1.6 Which of the following is NOT typically a common zoning category? [1]
- A. Residential
 - B. Agricultural
 - C. Recreational
 - D. Tourist
 - E. None of the above
- 1.7 Which architectural drawing typically includes information about wall thickness, door and window locations, and structural elements? [1]
- A. Site plan
 - B. Floor plan
 - C. Roof plan
 - D. Electrical plan
 - E. Town plan
- 1.8 What is the primary purpose of zoning regulations in town planning? [1]
- A. To maximize property values
 - B. To encourage mixed-use development
 - C. To promote public safety and orderly growth
 - D. To minimize property taxes
 - E. None of the above
- 1.9 What is the primary purpose of internal walls? [1]
- A. To provide structural support to the building
 - B. To protect the building from external weather conditions
 - C. To divide the interior space into functional areas
 - D. To enhance the building's exterior appearance
 - E. To protect the building from strong winds.
- 1.10 What is the purpose of a foundation in a building? [1]
- A. To provide structural support and distribute loads
 - B. To create additional living space
 - C. To enhance the aesthetic appearance
 - D. To facilitate rainwater harvesting
 - E. To uplift the building

QUESTION 2

(10 Marks)

- 2.0 Evaluate the statements and select whether the statement is true or false. Write the word. 'True' or 'False' next to the corresponding number on your ANSWER SHEET.
- 2.1 The primary advantage of using PVC (Polyvinyl Chloride) pipes in the plumbing system is the resistance to high temperatures and corrosion. [1]
- 2.2 The engineering brick is characterized by its high resistance to heat and is mostly used in fireplaces and furnace linings. [1]
- 2.3 The purpose of a site plan in house construction is to illustrate the landscaping and outdoor amenities. [1]
- 2.4 What is the purpose of a building code? To provide guidelines for safe and functional construction. [1]
- 2.5 When you build a house, the minimum height should be 1.6 m in the South because people in the South are short and 2.5 m in the East because of people in the East are big and tall.
- 2.6 Example of a noxious industrial building Acid plant (smelter mine). [1]
- 2.7 The house should be at least three (3) meters away from the municipal road. [1]
- 2.8 The structure of the building is as follows: height 3 meters, length 5 meters, 2 widths. The size of the window should be 3.0m². [1]
- 2.9 The primary purpose of 'zoning' is to segregate land uses thought to be incompatible. [1]
- 2.10 The Cultural features of a community do not have any influence on layout planning. [1]

QUESTION 3**(10 Marks)**

3.0 Match the correct description or statement in Column B with Column A.

COLUMN A	COLUMN B	
3.1 Benefits of town planning	A. Guide, structure plans town planning schemes.	[1]
3.2 The objectives of the townships & division of land Ordinance, of 1963, as amended.	B. Public involvement in planning must be promoted and be inclusive of all those affected or interested in planning matters.	[1]
3.2 Town planning tools	Protect the existing natural, environmental, and cultural resources and promote public interest over private interests.	[1]
3.4 There are two components to a town planning scheme,	D. The discouragement of low-density urban sprawl	[1]
3.5 The principle of sustainability	E. Promote racial integration and it should promote mixed-use development.	[1]
3.6 The principle of equality	F. A settlement with a few services such as a church, public house, and a small shop.	[1]
3.7 The principle of efficiency	G. A very large settlement with a large railway station, shopping complex, cathedral, a large hospital, museum university and office blocks.	[1]
3.8 The principle of integration	H. The regulation of development ensures it does not negatively affect others or reduce the capacity of the land and natural systems.	[1]
3.9 Village	I. The map and the document with its regulatory clauses.	[1]
3.10 City	J. New townships be established in an orderly manner through the technical evaluation of all such proposals/intentions which may lead to the establishment of a new township	[1]

SECTION B:**[45 MARKS]**

Please answer ALL the questions in this section.

QUESTION 4**(20 Marks)**

4.0 Give an example or another name for the following:

4.1 Artificial light [1]

4.2 Natural light [1]

4.3 Wires in a building wall [1]

- 4.4 Gutters attached to roof collecting water [1]
- 4.5 Artificial ventilation – fans [1]
- 4.6 Differentiate between an external wall and an internal wall. [4]
- 4.7 Explain to the plumber the main three pipes that one should purchase for a building. [6]
- 4.8 Owner X wants to build a house. Advise him on the three common breaks used to build a house. [5]

QUESTION 5 (25 Marks)

- 5.1 Mention the objectives of town planning to the District Development Committee. [5]
- 5.2 Summarize the challenges and constraints a local authority might experience when proper town planning is not practice. [10]
- 5.3 Describe at least three types of health indicators and give examples of each. [10]

SECTION C:

[25 MARKS]

QUESTION 6

(25 Marks)

- 6.0 Write a guide and explain the requirements to build a house in an urban area. [25]

END OF QUESTION PAPER