

S. B. Roll. No.....

**GREEN BUILDINGS**  
**6<sup>th</sup> Exam/Civil/9517/Nov'24**  
**(For 2018 Batch Onwards)**

**Duration: 3Hrs.**

**M.Marks:75**

**SECTION-A**

**Q1. Fill in the blanks.**

**15x1=15**

- a. One of the key objectives of green buildings is to \_\_\_\_\_ natural resources and improves the quality of the environment.
- b. The main benefits of green buildings include \_\_\_\_\_ energy consumption, improved indoor air quality, and reduced environmental impact.
- c. \_\_\_\_\_ Selection and planning are critical in the design of a green building.
- d. The orientation of a building can significantly affect its \_\_\_\_\_ efficiency.
- e. Shading devices and \_\_\_\_\_ choice play a significant role in reducing heat gain.
- f. \_\_\_\_\_ Concrete blocks and aggregates are common eco-friendly building materials.
- g. \_\_\_\_\_ Reflective paints are applied to reduce heat absorption by buildings.
- h. The net metering system allows excess solar power to be fed back into the \_\_\_\_\_.
- i. Energy-efficient \_\_\_\_\_ labelled appliances help reduce energy consumption.
- j. \_\_\_\_\_ Water management involves the treatment and reuse of wastewater.
- k. Low \_\_\_\_\_ materials are used to reduce indoor air pollution and improve health.
- l. One of the primary objectives of green buildings is to enhance the well-being of the building's \_\_\_\_\_.
- m. \_\_\_\_\_ is one of the popular green building rating systems used in India.
- n. GRIHA stands for \_\_\_\_\_ for Integrated Habitat Assessment.
- o. Passive solar design concepts include building \_\_\_\_\_ roof design, and fenestration.

**SECTION-B**

**Q2. Attempt any six questions.**

**6x5=30**

- i. Write down objectives of green buildings.
- ii. Write short note on star labelled appliances.
- iii. Explain various eco-friendly materials. Explain any two.
- iv. Write short note on UPVC.
- v. Write short note on net metering system.
- vi. What is the role of air ventilation in building?
- vii. Write short note on passive solar design.
- viii. Write short note on water efficiency.

**SECTION-C**

**Q3. Attempt any three questions.**

**3x10=30**

- a. Explain features of green buildings.
- b. Explain in detail about roof top solar power plant.
- c. What are low VOC materials? Explain any two.
- d. Write detailed note on solid waste management.
- e. What are the factors to be considered while selection of site for green building.

P.S.B.T.E.&I.T.

