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Question Paper Code: U8461

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

One credit

Civil Engineering

21UCE861 - GREEN BUILDING CONCEPTS

(Regulations 2021)

(Common to ALL Branches)

Duration: 1.30 Hours

Maximum: 50 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which of the following is a disadvantage of green building? CO1-U
 - (a) Increases 15-20% cost as compared to normal building
 - (b) Modern techniques are required
 - (c) Experts technicians are required
 - (d) All of the above

2. When GRIHA was launched in India? CO1-U
 - (a) 2001
 - (b) 2008
 - (c) 2010
 - (d) 2011

3. What rating did the Government of India make mandatory for government buildings in 2010? CO1-U
 - (a) GRIHA - 2 Star
 - (b) GRIHA – 3 Star
 - (c) Gold
 - (d) Platinum

4. Which of the following rating systems are currently working in India? CO1-U
 - (a) LEED
 - (b) GRIHA
 - (c) Both (a) & (b)
 - (d) None of the above

5. Full Name of TERI CO1-U
 - (a) The Energy & resources Institute
 - (b) The Energy & rating Institute
 - (c) The Energy & resources India
 - (d) The Energy & Research Institute

6. How many set of criteria formulated by GRIHA for Rating the building? CO1-U
 - (a) 34
 - (b) 33
 - (c) 32
 - (d) 31

7. The expansion of ECBC is CO1-U
- (a) Energy Consumption Building Code
- (b) Energy Conservation Building Code
- (c) Energy Conservation Building Committee
- (d) Energy Consumption Building Committee
8. Which rating star is given by GRIHA for points between 71-80? CO1- U
- (a) 5 (b) 4 (c) 3 (d) 2
9. How many points are Minimum to earn in order to Achieve LEED Certifications CO1- U
- (a) 35 (b) 40 (c) 55 (d) 45
10. GRIHA Means CO2- U
- (a) Green rating for Indian Habital assessment
- (b) Green rating for Integrated Habital assessment
- (c) Green rapid for International Habital assessment
- (d) Green rating for International Habital assessment

PART – B (5 x 2= 10 Marks)

11. Define U-value or What is Heat Transfer co-efficient? **CO1-U**
12. Define global warming. **CO1-U**
13. List some of the effects of global warming. **CO1-U**
14. What is PMV? **CO1-U**
15. Define Biomass. **CO1-U**

PART – C (2 x 15= 30 Marks)

16. (a) Implemented the environmental implications of green energy in buildings. **CO2-App** (15)
- Or
- (b) Executing the remedial measures that are to be taken for the effects of global warming. **CO2-App** (15)
17. (a) Explain in detail about the green buildings in different climatic regions. **CO1-U** (15)
- Or
- (b) Briefly explain the green buildings and materials used in green buildings. **CO1-U** (15)

