

17MIRC02- Sustainable Planning – Living Space and Resource Management

Part – A

(10 x ½ = 5)

Circle the Correct Answer

1. Building automation refers to
 - a. Decentralized control of a building's heating, ventilation and lighting
 - b. Centralized control of a building's heating, ventilation and lighting
 - c. Decentralized control of a building's fire alarm, ventilation and surety
 - d. Centralized control of a building's surety, construction parameters and safety
2. The 'e-glass insulation' refers to
 - a. glass-reinforced plastic
 - b. glass in the form of strands
 - c. glass embossed plastic
 - d. glass which has high silica content
3. Alternative technology does not include in one of the following
 - a. solar panels
 - b. composting
 - c. electrification
 - d. landfill gas extraction
4. Which organization was established in 1972?
 - a. WHO
 - b. UNEP (UN Environment Programme)
 - c. UNDP
 - d. IPCC
5. Identify the non VOC gas from anthropogenic source
 - a. chlorocarbons
 - b. benzene
 - c. formaldehyde
 - d. carbon dioxide
6. Which of the statement for CFCs is true?
 - a. CFCs are found in the hydrosphere of the environment
 - b. CFCs are vital components of the methane cycle
 - c. CFCs contribute to ozone depletion in the upper atmosphere
 - d. CFCs are not frequently used due to their high toxicity
7. The 3R's concept refers to
 - a. reuse, resell and refurbish
 - b. reduce, refurbish and recycle
 - c. reduce, reuse and recycle
 - d. reduce, reuse and resell
8. Cradle-to-cradle design suggests
 - a. protecting ecosystems
 - b. using minerals as nutrients
 - c. using energy-rich products
 - d. promoting vegetarianism
9. Energy star rating is not given to one of the following products
 - a. Computers
 - b. home electronic equipment
 - c. Lighting
 - d. Clothing
10. The three pillars of sustainability are
 - a. Environmental, civic and economic
 - b. Environmental, social and economic
 - c. Ecofriendly, civic and economic
 - d. Ecofriendly, social and biodegradable

Part – B
Answer the following
Answer should not exceed 200 words or one page

(5 x 4 = 20)

11. a. Differentiate between biotic and abiotic resources.
(OR)
b. Need for conservation of resources.
12. a. Elucidate how energy can be conserved in the usage of appliances.
(OR)
b. Brief on how carbon footprint can be minimized by individuals and the community.
13. a. Write a note on use of effluent treatment plants.
(OR)
b. Analyse the applications of reusing wastewater for household and commercial purposes.
14. a. Write a note on HVAC.
(OR)
b. Briefly discuss about building automation.
15. a. Elucidate about sustainable shelter.
(OR)
b. State the importance of sustainable building materials.

Part – C
Answer the following
Answer should not exceed 600 words or three pages

(5 x 7 = 35)

16. a. Discuss the concepts of sustainability.
(OR)
b. Elucidate in detail the impact of consumption and production in society.
17. a. Explain the consumer's role towards society and environmental responsibility.
(OR)
b. Discuss in detail the life cycle assessment using eco-friendly materials.
18. a. Elaborate upon the advantages and applications of renewable energy.
(OR)
b. Write a note on the 3 R's concept and its relevance in society today.
19. a. Critically analyse the role of UNEP and its aid in saving products for life cycle assessment.
(OR)
b. Write about the types of rainwater harvesting systems highlighting their merits and demerits.
20. a. Discuss in detail how energy can be efficiently used in interiors.
(OR)
b. Explain about energy star labeling and star-rated products.