

Hall Ticket Number:

Code No. : 14118 N(A)

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CBCS) IV-Semester Main Examinations, May-2019

Green Buildings
 (Open Elective-II)

Time: 2 hours

Max. Marks: 40

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Q.No	Stem of the question	M	L	CO	PO
Part-A (5 × 2 = 10 Marks)					
1.	What is an Air change? Draw a figure showing cross ventilation.	2	1	1	1
2.	Define 63 ½° Rule.	2	1	1	2
3.	Expand the terms GRIHA and LEED.	2	1	2	7
4.	What is heat Island effect?	2	1	2	1
5.	Explain the applicability of Bye laws?	2	3	1	1
Part-B (5 × 6 = 30 Marks)					
6.a)	What is meant by circulation in a building? Mention the types of circulation.	2	1	1	1
	Discuss about the following principles of planning of a Residential Building.	4	1	1	1
b)	i) Aspect ii) Prospect iii) Privacy iv) Sanitation				
7.a)	What are the factors to be considered for the selection of site for Residential building? Explain any two of the factors briefly.	3	3	1	1
b)	Explain the Building bye-laws with reference to open space requirements.	3	3	1	1
8.a)	What is meant by orientation of buildings?	2	1	1	1
	Discuss the orientation criteria of residential building for Indian climatic	4	3	1	1
b)	conditions.				
9.a)	Explain the various benefits of green buildings.	2	3	2	7
b)	Discuss the design criteria of green building with reference to water conservation.	4	3	2	7
10.a)	What are the principles of green Buildings?	2	1	2	7
b)	Describe how a green building can achieve energy efficiency.	4	2	2	7
11.a)	What is green building? What are the objectives of green buildings?	2	1	2	7
b)	List out the various criteria followed in the certification of a green building by GRIHA.	4	1	2	7
12.a)	What are the factors that affects the orientation of a building and explain in brief?	3	1	1	1
b)	Illustrate the case study of a LEED certified Green building.	3	3	2	7

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	59.6
2	Knowledge on application and analysis (Level-3 & 4)	40.4
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	

