

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Online End Semester Examination, January 2021

Program Name : M.Tech. – Energy System + Renewable Energy Engg. Semester: I

Course Name : Green Building

Time : 03 hrs.

Course Code : EPEC 8009

Max. Marks: 100

SECTION A

1. Each question carry 5 marks

2. Instructions : Complete the statement / Select the correct answer(s)

	Question	CO
Q 1	The bare minimum components of a green building are /is (Select all the correct statements) a) Building Envelope b) HVAC c) Lighting d) Renewable Energy	CO1
Q 2	Green building leads to (Select all the correct statements) a) Reduced GHG b) Reduced CO2 c) Low height building d) Reduced energy consumption	CO1
Q 3	All three green building rating systems like IGBC, GRIHA and LEED are : (Select all the correct statements) a) Almost similar b) Totally different c) having lot of relation d) Internationally acceptable	CO1
Q 4	EPI is calculated based upon (Select all the correct statements): a) Electrical energy b) Built-up Area c) Total area of building d) open area	CO2
Q 5	Rain water harvesting, saves (Select all the correct statements) a) Water b) Energy c) Environment d) None	CO3

Q 6	The most stringent GB rating system is (Select all the correct statements) a) IGBC c) LEED b) GRIHA d) None	CO4
SECTION B		
1. Each question carry 10 marks 2. Instructions : Write short / brief notes		
Q 7	Briefly explain the key components of evaluation in a typical Green Building.	CO1
Q 8	Illustrate the factors causing the poor IAQ and their remedies.	CO2
Q 9	Describe the building material concerns addressed in ECBC.	CO2
Q 10	Illustrate the energy conservation opportunities in the HVAC system of a typical five star hotel.	CO3
Q 11	Compare the energy efficiency and advantages of various electrical Lighting devices.	CO3
SECTION-C		
1. Question carries 20 Marks. 2. Instruction: Write long answer.		
Q 12	Compare the various criteria of LEED rating and GRIHA rating OR Describe the rest criterion of GRIHA, which are not taken care by ECBC.	CO4