

Seat No: _____

Enrolment No: _____

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch. / B.ID Winter 2019-20 Examination

Semester: 4

Subject Code: 01101255

Subject Name: Architecture & Environment IV

Date: 27/11/2019

Time: 10:00am to 12:00pm

Total Marks: 50

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever required.
4. Draw suitable sketches wherever required.

- Q.1** What is Rain water harvesting system? Explain the components of roof top rain water harvesting system with sketches. **(10)**
- Q.2** Answer the following: (Attempt any five out of six) **(20)**
- a) Explain the following:
 - 1) Climate Change.
 - 2) Passive cooling.
 - b) Discuss energy flow in Ecosystem.
 - c) Discuss energy Pyramid with neat Sketch.
 - d) Write a short note on: Eco Friendly Architecture Material.
 - e) Write a Short Note on: Carbon Footprints.
 - f) What are the Micro Level benefits of ECBC?
- Q.3** Explain Briefly: (Attempt any five out six) **(10)**
- a) EVAPORATIVE COOLING
 - b) MNRE
 - c) IGBC
 - d) SHGC
 - e) LEED
 - f) SHADING DEVICES
- Q.4** Answer the following: (Any two) **(10)**
- a) Energy Efficiency in Building.
 - b) What are the different sections of rating and its point weightages in GRIHA rating?
 - c) Enlist tangible and intangible benefits of compliance with IGBC Rating System