JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATION- APRIL -2019

M.Tech IV Semester

COURSE CODE: 10M13CE334   MAX. MARKS: 25

COURSE NAME: Principles of Affordable Housing

COURSE CREDITS: 03   MAX. TIME: 1.5 HRS

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. Explain the strategies for how the building environment can be cooled by natural air movement. (4)

Q2. What are the different forms of heat? Explain the three different heat transfer mechanism in detail. (4)

Q3. What are the important applications of thermal insulation in building design? Explain various insulating materials used in building. (4)

Q4. "Moisture problems in buildings are normally due to the movement of a mixture of water vapour and air around and through the building shell". Elaborate the statement in view of surface condensation in buildings. (4)

Q5. Determine the required ventilation rate and number of air changes for the following data, Volume of room, $V = 1355$ cubic feet, Indoor temperature, $T_1 = 80^\circ$ F, Outdoor temperature, $T_2 = 70^\circ$ F, Heat Load to be removed, $Q = 15,000$ BTU/Hr. (3)

Q6. Explain the key affordable housing policies in Maharashtra. (3)

Q7. Explain- (i) Pradhan Mantri Awas Yojna, and
          (ii) GST rates on affordable housing in India (3)