TKM COLLEGE OF ENGINEERING, KOLLAM-5

Sample Question Paper (2015-16)

DETAILS OF THE QUESTION PAPER

Programme: B. Arch.

Semester: 5 (June 2015 to Oct 2015)

Course Code and Name: 13AR1507

1. This examination has 8 Questions in Part A and 8 questions in Part B.
2. Answer **ALL** questions from PART A and **Any Two Full** questions from PART B
3. This examination contributes 100% of the total University mark of this subject.
4. Duration of Exam: 3 hours
5. Maximum Marks: 100

*General Instructions: 1. Answer ALL questions from Part A
2. Answer any TWO questions from Part B*

**PART A**

1. (a) Enumerate the avenues of impact of buildings on global environment
   (b) How does volume-to-surface ratio affect energy efficiency of a building?
   (c) List the different psychometric properties
   (d) On a rough sketch of the psychrometric chart, depict the cooling and dehumidification process
   (e) What are the different types of Air-Conditioning?
   (f) Identify the factors affecting Cooling load Calculation
   (g) How does the location influence reduction of heat gain
   (h) Itemise the conditions for economy and energy saving

 *(5 x 8 Marks)*
PART B (15 Marks each)

Module I

II. Summarise Standard requirements of ventilation for different conditions of living.

III. Outline the procedures for the control of quality, quantity, temperature & humidity of air

Module II

IV. What is the application of Psychometric chart

V. Sketch and identify the salient features of a Summer air conditioning system

Module III

VI. List the Major equipments used in Air conditioning.

VII. Describe with the help of sketches, the types of air conditioning compressors.

Module IV

VIII. Sketch the Layout of supply and return air ducts for a typical installation.

IX. Prepare a Schematic drawing showing the Air conditioning system of an office building