

Seat No. : \_\_\_\_\_

# TB-201

B.Arch/ID/BCT Sem.-IV

May-2013

## AR-405 : Building Services – I

Time : 2 Hours]

[Max. Marks : 50

- Instructions :** (1) All questions are compulsory.  
(2) Use a neat sketch to illustrate your answer, if necessary.  
(3) Figures on right indicate the marks of the respective question.

1. From the following define any **five** terms : 15
- (a) Dew Point
  - (b) Sensible Heat
  - (c) Humidity
  - (d) Relative Humidity
  - (e) Wet Bulb Temperature
  - (f) Dry Bulb Temperature
  - (g) Heat Load

2. Enlist the factors to be considered while designing the Air-conditioning for a building. 5

**OR**

Write a note on importance of knowledge of building services in the field of Architecture.

3. Write a short note on different types of wiring systems. 5

**OR**

Write a short note clearly explaining Convection, Convection & Radiation with example and diagram.

4. From the following define any **three** terms : 9
- (a) Voltage
  - (b) Current
  - (c) Efficacy of a lamp
  - (d) LUX
  - (e) Photometry



5. Answer any **two** questions : **10**
- (1) Write a short note on different types of switches based on their classification and usages.
  - (2) What is earthing ? Enlist different types of earthing. Give name of protection device used for controlling earth leakage in the building.
  - (3) Give the name of the term used to specify the light output of a light source and also name the major parts that a luminaire (Light Fitting) comprises of.
6. Give long forms of any **three** : **3**
- (a) LAN
  - (b) EMF
  - (c) ASHRAE
  - (d) NEC
  - (e) Short expression of Electrical Power, Voltage & Current
7. From the following given areas mention Recommended LUX values of any **three** : **3**
- (a) Textile Industry
  - (b) Working Areas of Offices
  - (c) Leather Industry
  - (d) Engineering Industry
  - (e) Pharmaceutical Industry
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