

**M. Arch. Sem- II (Sustainable Architecture) (2014 Course) (CBCS)
: SUMMER - 2019**

SUBJECT: ENERGY CONSERVATION-II

Day: Saturday
Date: 04/05/2019

S-2019-3740

Time: 10.00 A.M. TO 12.00 NOON
Max Marks: 60

N.B.:

- 1) Solve any **THREE** questions from each section.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Answers to both the sections should be written in **SEPARATE** answer books.
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SECTION-I

- Q.1** Define the following terms (**ANY FIVE**) **(10)**
- a) Luminous Efficacy
 - b) Electronic Ballast
 - c) Fluorescent Lamps
 - d) Daylight Factor
 - e) Glare
 - f) Transmittance
- Q.2** Write Short notes on the following (**ANY TWO**) **(10)**
- a) Veiling Reflections & Reflected Glare.
 - b) Equivalent Spherical Illumination and Relative Visual Performance.
 - c) PSALI
- Q.3** Describe the following (**ANY TWO**) **(10)**
- a) Explain the Factors of Visual Acuity in detail.
 - b) Explain the Fundamentals of Color.
 - c) Enlist the various types of lamps and explain any one in detail.
- Q.4** Enlist the various methods of Daylight Analysis and Design and explain any **(10)**
one in detail.
- Q.5** Enlist the Types of Sky Condition and Explain in detail the concepts and **(10)**
characteristics of Daylight Factor and Daylight Analysis.

P. T. O.

SECTION-II

- Q.6** Define the following terms (**ANY FIVE**) **(10)**
- a) General Lighting
 - b) Louvers & Baffles
 - c) Batwing Diffusers
 - d) Switching
 - e) Variable Time Scheduling
 - f) Remote Source Lighting
- Q.7** Write Short notes on the following (**ANY TWO**) **(10)**
- a) Luminaire Efficacy Rating
 - b) Fiber Optic Lighting : Arrangements and Applications
 - c) Light Pollution
- Q.8** Describe the following (**ANY TWO**) **(10)**
- a) Explain Illumination Methods and Types of Lighting Systems in detail with sketches.
 - b) Explain Lighting Controls and Lighting Control Initiation.
 - c) Hollow light Guides
- Q.9** Explain the “Lighting Design Procedure” with the help of a chart and explain the calculation of Horizontal Illuminance by “Lumen (Flux) Method.” **(10)**
- Q.10** Explain in detail with sketches Lighting Design Considerations for Offices with Visual Display Terminals (VDT’s). **(10)**

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