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BAR-039

BACHELOR OF ARCHITECTURE (B.Arch.)

Term-End Examination

June, 2015

00036

**BAR-039 : ARCHITECTURAL SCIENCES AND
SERVICES – II
(ILLUMINATION AND ACOUSTICS)**

Time : 3 hours

Maximum Marks : 70

*Note : Part A is compulsory. Attempt any five questions
from Part B.*

PART A (Compulsory)

1. Write short notes on the following : $4 \times 5 = 20$
- (a) Reflection of Sound
 - (b) Behaviour of Sound in Enclosures
 - (c) Luminous Intensity
 - (d) Luminous Flux

PART B

Attempt any five questions from Part B.

2. What do you mean by 'room index' ? Explain the coefficient of utilisation and depreciation factor in relation to the lighting scheme. 10
 3. Explain briefly the general acoustic defects and suggest remedial measures. 10
 4. Discuss how Sabine's formula calculation helps in 'theatre acoustics' design. 10
 5. Explain in detail, the various methods for controlling indoor and outdoor noise with the example of a building. 10
 6. What are the factors affecting the lighting design for 'display lighting' ? 10
 7. Discuss the 'recoverable losses' and 'unrecoverable losses' associated with lamps. 10
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