



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2013/2014**

**THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE OF BACHELOR OF ARTS (INTERIOR DESIGN) WITH  
INFORMATION TECHNOLOGY**

**(MAIN CAMPUS)**

**ADI 305: LIGHTING AND ACOUSTICS**

Date: 4<sup>th</sup> April, 2014

Time: 8.30 – 10.45 a.m.

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**INSTRUCTIONS:**

- Answer ALL the questions from Section A in the answer booklet provided. (40 marks)
- Answer ANY THREE questions from Section B. (30 marks)



**SECTION A (40 MARKS)**

**Answer ALL the questions in this section**

- Q1. a) Briefly analyze the importance of light in relation to mood and atmosphere of the interior space. **4mks.**
- b) List the values of light as an element of design in the interior space. **2mks**
- Q2. a) Mention at least Three factors that are related to visual comfort **3mks**
- b) Identify positive responses that are significant in improving visual condition. **6mks**
- Q3. a) Giving examples, explain the following terminologies as applied in lighting:-
- i) Artificial light
- ii) Natural light **4mks**
- b) Briefly elucidate any Two merits and demerits of the following light sources:-
- i) Florescence
- ii) Incandescence **8mks**
- Q4. a) In your own words, briefly discuss how sound is caused in the Environment. **6mks**
- b) Analyze Three elements that can be used to solve noise problem in a given space. **4½ mks**
- c) Illustrate the propagation of sound wave from the source to listener in millennium hall. **2½ mks**

**SECTION B (30 MARKS)**

Answer **ANY THREE** questions in this section.

- Q5 a) Give the reason of having glare in an interior space. **3mks**
- b) Discuss the impact of location and direction on light in a residential building. **7mks**
- Q6. You have been commissioned to design structural lighting in a given home, critically explain the procedures you would follow. **10mks**
- Q7. Examine the negative effects you would face when living near a shooting range. **10mks**
- Q8. Critically analyze the most suitable ways of controlling hazardous noise in an environment. **10mks.**