

**MASTER OF COMPUTER APPLICATIONS (Revised)**  
**(MCA)**

**Term-End Practical Examination**

**December, 2017**

**01533**

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET  
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

*Time : 2 Hours*

*Maximum Marks : 50*

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**Note :** *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

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**PART I**

**Advanced Internet Technologies**

**Note :** *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program using JDBC to develop an online leave management system, in which an employee can apply for leave and can see his/her leave balance. Make necessary assumptions. 20

## PART II

### Computer Graphics and Multimedia

**Note:** Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement the Cohen-Sutherland line clipping algorithm in C/C++ using OpenGL. 20
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