

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

**Term-End Practical Examination**

**December, 2015**

01809

**MCSL-054(P)/S4 : 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 program in JSP to create a web page which takes roll number of the student as input and displays the list of courses (of MCA 5<sup>th</sup> semester of IGNOU) for which assignments are not yet submitted to the study centre. Also display the current date and time on the page. Do proper formatting and colouring of the page. Make necessary assumptions, if required.

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## 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 Bresenham Circle Generation algorithm in C/C++ using OpenGL. 20

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