

# **MASTER OF COMPUTER APPLICATIONS (MCA\_NEW)**

**ASSIGNMENTS  
OF MCA\_NEW (2Yrs) PROGRAMME  
SEMESTER-IV**

**(July - 2025 & January - 2026)**

**MCS-230, MCS-231**



**SCHOOL OF COMPUTER AND INFORMATION SCIENCES  
INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
MAIDAN GARHI, NEW DELHI – 110 068**

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### Important Notes

1. Submit your assignments to the Coordinator of your Study Centre on or before the due date.
2. Assignment submission before due dates is compulsory to become eligible for appearing in corresponding Term End Examinations. For further details, please refer to Programme Guide of MCA (2Yrs).
3. To become eligible for appearing the Term End Practical Examination for the lab courses, it is essential to fulfill the minimum attendance requirements as well as submission of assignments (on or before the due date). For further details, please refer to the Programme Guide of MCA (2yrs).
4. The viva voce is compulsory for the assignments. For any course, if a student submitted the assignment and not attended the viva-voce, then the assignment is treated as not successfully completed and would be marked as ZERO.

**Course Code** : **MCS-231**  
**Course Title** : **Mobile Computing**  
**Assignment Number** : **MCA\_NEW(IV)/231/Assign/2025-26**  
**Maximum Marks** : **100**  
**Weightage** : **30%**  
**Last Dates for Submission** : **31<sup>st</sup> October, 2025 (For July, 2025 Session)**  
**15<sup>th</sup> April, 2026 (For January, 2026 Session)**

**There are four questions in this assignment, which carry 80 marks. Each question carries 20 marks. Rest 20 marks are for viva voce. You may use illustrations and diagrams to enhance the explanations, if necessary. Please go through the guidelines regarding assignments given in the Programme Guide for the format of presentation.**

- Q1:** Explain Thick Client Architecture and Thin Client Architecture. Also, explain the differences between them. **(20 Marks)**
- Q2:** What are Smart Sensors? What are Actuators? Explain the differences between them. **(20 Marks)**
- Q3:** What is the need for Mobile IP? Explain the working of Mobile IP. **(20 Marks)**
- Q4:** What is Adaptive Clustering? Explain it. **(20 Marks)**