

MASTER OF COMPUTER APPLICATIONS (MCA_NEW)

**ASSIGNMENTS
OF MCA_NEW (2Yrs) PROGRAMME
SEMESTER-II**

(July - 2025 & January - 2026)

MCS-218, MCS-219, MCS-220, MCS-221

MCSL-222, MCSL-223



**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-218**
Course Title : **Data Communication and Computer Networks**
Assignment Number : **MCA_NEW(II)/218/Assign/2025-26**
Maximum Marks : **100**
Weightage : **30%**
Last Dates for Submission : **31st October, 2025 (For July, 2025 Session)**
15th April, 2026 (For January, 2026 Session)

Note: Answer all the questions in the assignment which carry 80 marks in total. 20 marks are for viva voce. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the Programme Guide for the format of presentation.

- Q1:** Explain TCP/IP model with layer functionality. Are there any alternative models to TCP/IP. If yes, explain them. **(30 Marks)**
- Q2:** How does Slotted ALOHA improve the performance of the system over Pure ALOHA. **(30 Marks)**
- Q3:** What are various mechanisms for congestion control? **(20 Marks)**