MASTER OF COMPUTER APPLICATIONS (MCA_NEW)

ASSIGNMENTS
OF MCA_NEW (2Yrs) PROGRAMME
SEMESTER-I

(January - 2026 & July - 2026)

MCS-211, MCS-212, MCS-213, MCS-214, MCS-215

MCSL-216, MCSL-217

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	**:**	**MCSL-217**
Course Title	**:**	**Software Engineering Lab**
Assignment Number	**:**	**MCA_NEW(I)/217/Assign/2026**
Maximum Marks	**:**	**100**
Weightage	**:**	**30%**
Last Dates for Submission	**:**	**30th April 2026 (for January session)** **31st October 2026 (for July session)**

This assignment has one question for 40 marks. 20 marks are for viva voce. Your lab record will carry 40 marks. You may use illustrations and diagrams to enhance the explanations. Please go through the guideline regarding assignments given in the Programme Guide for the format of presentation.

Q1:

ABC is a network of Electronics stores across the Country. Also, ABC is having an online shop from where any electronic appliance can be bought which will be delivered at the address given by the Customer or delivery can also be taken from the store selected by the Customer. There is also provision to visit any store and also buy goods. Whenever, goods are bought online or at store in person, the software that consists of information about the quantity of appliance that is available will be reduced appropriately. Assume that you need to develop a software system that encompasses the above mentioned acativities.
Make assumptions, wherever necessary. Also, list them very clearly.

Now, with reference to the above, answer the following:

(1) List the Entities **(10 Marks)**
(2) For each Entity, list Attributes **(10 Marks)**
(3) Define relationships between the Entities **(10 Marks)**
(4) Finally, draw the Entity Relationship Diagram **(10 Marks)**