## The University of Burdwan

M.Sc. 1<sup>st</sup> Semester Examination, 2020

**Subject: Computer Science and Application** 

Paper: MCSA-102

Full Marks: 40 Time 2 Hours

## Answer any eight questions (All questions contain equal marks)

(8 X 5 = 40)

- 1. Draw the Entity Relationship Diagram of a Company Database Systems.
- 2. Differentiate between Trivial and Non-Trivial functional dependencies with example.
- 3. State the Armstrong's Axioms.
- 4. Write short notes on Normalization.
- 5. Differentiate between distributed and centralized DBMS.
- 6. How deadlock is handled in distributed system?
- 7. Describe JOIN process with an example.
- 8. Discuss different types of fragmentation in distributed database.
- 9. Explain different types of keys in DBMS.
- 10. Write the function of Database Manager and Database Administrator.