Model Paper– 1
Hi-Tech Institute of Engineering & Technology
B.C.A. Examination
(Semester-3rd) Odd Semester
Introduction to DBMS
(BCA-501)

Time: 3 Hours   **Maximum Marks: 75**

Faculty Name: Ms. Charu Singh

Note: Attempt questions from all sections as per instructions.

Section – A

Note: Attempt all questions.   5 x 3 = 15

1. What are the database system applications?
2. What is entity set?
3. What are the mapping cardinalities?
4. Describe weak and strong entity set.
5. What is specialization and generalization?

Section – B

Note: Attempt any two questions.   2 x 7.5 = 15

6. What is Key? Explain different types of keys.
7. Explain Normal Form in brief.
8. What are the relational and structural constrains?

Section – C

Note: Attempt any threequestions.   3 x 15 = 45

9. Write SQL query for the following table Employee(ENo, Ename, DOB, Address, City, Salary, Gender, DNo), Dept(DNo, Dname, MEmpNo, M_startdate)
   a. Display the age of male employee
   b. Display the name of highest salary paid female employee.
   c. Display the name of dept. of Employee XYZ.
10. Explain data models in detail.
11. What are relational model? Explain collision in brief.
12. What is hashing? Describe hashing functions in detail.
13. Give the architecture of database and their characteristics.