Duration: 3 Hours   Maximum Marks: 75

All questions carry equal marks.
Attempt any Four Questions.

1.
- Differentiate between data integrity and data inconsistency with respect to database.
- Define the structure of number system and convert the following numbers from Binary to Decimal representation:

      10011000
      1000.1111
      10000.011

- Convert the following numbers from Decimal to Binary representation.

      1456
      14.56
      199

2. Which one is the fastest memory among register and cache memory? Justify your answer. Explain various types of registers and cache memory. What is the use of BIOS in computer system?

3. What are system and application softwares? What are the services provided by the Operating System? What is the significance of device drivers?

4. Describe the various components of Database system. Describe entities, attributes and relationships, with suitable examples. Elaborate the following formulas based on table given below:

	A	B	C	D
1	NAME	QUIZ1	QUIZ2	QUIZ3
2	ANDY	95		99
3	BOB	80	78	75
4	BETTY	78	89	67
5	FRANK		90	92
6	FRED	65		98
7	JAMES	56	91	
8	LISA	98	92	65

COUNTIF (B2:D8,">78")
AVERAGEA (C2:C8)
MAXA (B2:C8)
SUMIF(B2:D8,"<90")

5.   Differentiate between LAN, WAN and MAN. What are the various categories of wireless networking devices? Explain the architecture of Internet and IP addresses.

6.   Draw a block diagram to illustrate the basic organization of computer system and explain the functions of its various units. Explain various pick and pointing input devices. List any two devices which act as input as well as output devices.