2008

COMPUTER SCIENCE

(*Database System*)

PAPER—CS/MSC/1201 M1 & M2

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

PAPER—CS/MSC/1201 M1

[*Marks* : 20]

Answer any *four* questions

1. Define concurrency control scheme. Briefly explain the two-phase locking protocol. 5

2. What is transaction? Write down the ACID properties of a transaction. 5

3. What is query execution plan? Explain the basic steps for query processing. 5

4. What is data replication? What is the major advantage of data replication in DDBMS. Define data transparency. 5

5. Define deductive database system. What is the difference between homogeneous and heterogeneous database system? 5

6. Define 'data mining' and 'data warehousing'. 5

7. Write short note (any *one*): 5

   (*i*) Client server databases

   (*ii*) Mobile database

   (*iii*) OODBMS.

PAPER—CS/MSC/1201 M2

[*Marks* : 20]

Answer any *four* questions

1. (*a*) Write short notes: $1\frac{1}{2} \times 2$

   (*i*) MSIL;

   (*ii*) JITers.

(*b*) What are the differences between boxing and unboxing? Explain with an example. 2

2. (*a*) What are the advantages of disconnected objects over connected objects?

(*b*) Write down the function of dataprovider. 3 + 2

3. (*a*) Describe the architecture of a typical asp.net application?

(*b*) How asp.net applications works? $2\frac{1}{2} + 2\frac{1}{2}$

4. (*a*) What are the differences between $_GET variable and $_POST variable? Give at least one use.

(*b*) Write down the function of session variable. 3 + 2

5. (*a*) What is variable variable? Explain with an example.

(*b*) Describe the differences between numerically indexed arrays and associative arrays. 2 + 3

(*a*) mysql-query

(*b*) mysql-fetch-array.