Total No. of Questions : 6]

SEAT No. :

P109

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APR - 18/BE/Insem. - 77

B.E. (Information Technology)

ADVANCED DATABASES

(2012 Pattern) (Semester - II) (414462)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Solve Q1 or Q2, Q3 or Q4, Q5 or Q6.***
2) ***Figures to right indicate full marks.***
3) ***Neat diagrams must be drawn wherever necessary.***
4) ***Assume suitable data, if necessary.***

Q1) a) For each of three partitioning techniques, namely round-robin, hash partitioning, and range partitioning, explain with an query example. **[5]**

b) Explain the two approach of data storage in distributed database system. **[5]**

OR

Q2) a) Explain two phase commit protocol in distributed databases. **[5]**

b) Describe Interoperation Parallelism w.r.t pipelined and Independent Parallelism. **[5]**

Q3) a) What is persistent object? Explain the approaches to make the object persistent. **[5]**

b) Explain efficient evolution of XML Queries in detail. **[5]**

OR

Q4) a) Explain complex data types in object oriented database. **[5]**

b) What is a DOM? How to access the DOM? **[5]**

P.T.O.

Q5) a) Explain the three dimensions of big data? **[5]**

b) How index works in Cassandra? What do you mean by secondary index in Cassandra? **[5]**

OR

Q6) a) Explain the key components of Cassandra. **[5]**

b) Draw and explain Dynamodb and its data model. **[5]**

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