

Total No. of Questions : 10]

SEAT No. :

P2041

[Total No. of Pages : 2

[5059]-646

B.E. (Computer Engineering)

ADVANCED COMPUTER PROGRAMMING

(2012 Pattern) (Elective - I) (Semester - I)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Figures to the right indicate full marks.
- 2) Assume suitable data if necessary.

- Q1)** a) Explain with examples Distributed Lock using Timestamps. [5]
b) Write a short notes on : [5]
i) A single copy Distributed Shared Memory
ii) A Multi-Copy Distributed Shared memory

OR

- Q2)** a) Explain with examples Object Transfer service using Path Reversal. [5]
b) What is JVM? Why Java is called the “Platform Independent Programming Language”? What is the Difference between JDK and JRE? [5]

- Q3)** a) What is a thread? Describe the complete life cycle of thread? [5]
b) What are the Data Types supported by Java? What is Autoboxing and Unboxing. [5]

OR

- Q4)** a) What are the main benefits of SOA? How to achieve loose coupling in a SOA? [5]
b) Write an applet for each of following graphics methods. [5]
drawoval(), drawrect(), drawline(), filloval()

P.T.O.

- Q5)** a) What's the real difference between HTML and HTML5? Write short notes on HTML and Java Script Programming. [8]
- b) What is Ajax? What are Ajax applications? What are the advantages and disadvantages of Ajax? Also write difference between AJAX and Javascript. [9]

OR

- Q6)** a) What are document oriented databases? Give MongoDB database example for hospital application. [8]
- b) Explain the following JDBC API components: [9]
- DriverManager, SQLException, Connection, Statement, ResultSet.
- Q7)** a) Write a short notes on Hadoop Ecosystem. Also explain features and advantages of Hadoop. [8]
- b) Explain Shared Nothing Architecture (SNA) with advantages and disadvantages. [8]

OR

- Q8)** a) Write a short notes on RDBMS verses Hadoop. [8]
- b) Explain with examples: [8]
i) HDFS Daemons
ii) Hadoop YARN
iii) Word-Count Program

- Q9)** a) Explain the functionalities of Mapper, Reducer, Combiner, Partitioner. Also write Searching and Sorting using MapReduce [8]
- b) Explain with examples Data types and Complex data types in Pig. [9]

OR

- Q10)** a) Write a short notes on Execution modes of Pig and ETL Processing. [8]
- b) Explain with examples Hadoop, MongoDB and MapReduce function. [9]

