

B.C.A. (V Semester) Examination, March 2011
APPLICATION PROGRAMMING

Time : 3 Hours

Max. Marks : 80

Instructions : Answer *all* questions in Part A, 6 out of 8 questions in Part B, and 3 out of 5 questions in Part C.

Part A : Questions from 1 to 8 carry 1 mark *each* and 9 to 14 carry 2 marks *each*.

Part B : *Each* question carries 5 marks.

Part C : *Each* question carries 10 marks.

PART – A

1. What is GUI ?
2. What are events ?
3. What is an API ?
4. Define attribute.
5. What is Meta data ?
6. Define SQL.
7. What is DBMS ?
8. What is Storage manager ?
9. What do you mean by atomicity and aggregation ?
10. Write an SQL command to create a table.
11. Define primary key and foreign key.
12. What is normalization ? Name the different levels of it.
13. Name the characteristics of good API.
14. List the principles for effective GUI design.

P.T.O.

PART – B

1. Write the life cycle of event.
2. Distinguish between command line and event-driven programming.
3. Explain Guidelines for designing conceptual model.
4. Define affordance. Give some examples.
5. Explain different interaction styles with example.
6. What are the design principles while selecting the color for GUI ? Explain.
7. List some graphics APIs and their uses.
8. Explain GUI design principles.

PART – C

1. Design a simple GUI demonstrating the use of C graphics API.
 2. Explain Human computer interaction in detail.
 3. Differentiate between API and Batch programs.
 4. How do you write the following queries in SQL ?
 - a) List all employees that is, all the rows in the table **employee**.
 - b) List all the department names, that is, the column **name** for all the rows in the table **dept**.
 - c) Which employees have a salary between 9000 and 10000 ?
 - d) Which employees have a last name that ends with “son” ?
 - e) Which items have been supplied by a supplier named “Playskool” ?
 5. Write short notes on C/C++ API.
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