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| **HTML BASICS** | | | |
|  | **QUESTION** | **OPTION** | **EXPLANATION** |
|  | Which of the following input control represents a date and time (year, month, day, hour, minute, second, fractions of a second) encoded according to ISO 8601 with no time zone information in Web Form 2.0? | [A - datetime](javascript:void(0);)  [B - datetime-local](javascript:void(0);)  [C - date](javascript:void(0);)  [D - month](javascript:void(0);) | Answer : B  Explanation  'datetime-local' input control represents a date and time (year, month, day, hour, minute, second, fractions of a second) encoded according to ISO 8601 with no time zone information. |
|  | Which of the following attribute is used to group elements? | A - item  [B - itemprop](javascript:void(0);)  [C - itemcheck](javascript:void(0);)  [D - itemgroup](javascript:void(0);) | Answer : AExplanation item − Used to group elements. |
|  | Which of the following attribute triggers event when an element gets user input? | [A - onhaschange](javascript:void(0);)  B - oninput  [C - ondata](javascript:void(0);)  [D - onloadeddata](javascript:void(0);) | Answer : BExplanation oninput − Triggers event when an element gets user input. |
|  | Which of the following tag represents a generic document or application section in HTML5? | A - section  [B - article](javascript:void(0);)  [C - aside](javascript:void(0);)  [D - header](javascript:void(0);) | Answer : AExplanation 'section' tag represents a generic document or application section. It can be used together with h1-h6 to indicate the document structure. |
|  | Which of the following tag provides a hint to the user of what can be entered in the field in HTML5? | [A - output](javascript:void(0);)  B - placeholder  [C - autofocus](javascript:void(0);)  [D - required](javascript:void(0);) | Answer : BExplanation HTML5 introduced a new attribute called placeholder. This attribute on <input> and <textarea> elements provides a hint to the user of what can be entered in the field. The placeholder text must not contain carriage returns or line-feeds. |
|  | Which of the following method returns a geolocation object in HTML5? | A navigator.geolocation  [B - browser.geolocation](javascript:void(0);)  [C - API.geolocation](javascript:void(0);)  [D - None of the above.](javascript:void(0);) | Answer : AExplanation navigator.geolocation returns geolocation object. |
|  | . Which plugins can provide the fallback support for old browsers? | a) Flash b) Quicktime c) Both Flash and Quicktime d) Fireback and Quickertime | Answer: c Explanation: An attribute of the format: type=”application/x-shockwave-flash” will justify the purpose. |
|  | The \_\_\_\_\_\_\_\_\_\_\_\_\_ attribute specifies an inline style associated with an element, which determines the rendering of the affected element. | a) dir b) style c) class d) article | Answer: b Explanation: Style attribute specifies an inline style for an element. The style attribute will override any style set globally |
|  | HTML is what type of language ? | [A.](javascript:%20void%200;)  Scripting Language  [B.](javascript:%20void%200;)  Markup Language  [C.](javascript:%20void%200;)  Programming Language  [D.](javascript:%20void%200;)  Network Protocol | Answer b  Explanation:  HTML is the standard markup language for Web pages. |
|  | Which HTML tag produces the biggest heading? | [A.](javascript:%20void%200;)h7>  [B.](javascript:%20void%200;)<h9>  [C.](javascript:%20void%200;)<h4>  <h1> | Answer : Option D  Explanation  Headings are defined with the <h1> to <h6> tags.  <h6> defines the least important heading. |

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|  | QUESTION | OPTION | EXPLANATION |
|  | A table on the many side of a one to many or many to many relationship must: | a) Be in Second Normal Form (2NF) b) Be in Third Normal Form (3NF) c) Have a single attribute key d) Have a composite key | Answer: d Explanation: The relation in second normal form is also in first normal form and no partial dependencies on any column in primary key. |
|  | Which-one of the following statements about normal forms is FALSE? | a) BCNF is stricter than 3 NF b) Lossless, dependency -preserving decomposition into 3 NF is always possible c) Loss less, dependency – preserving decomposition into BCNF is always possible d) Any relation with two attributes is BCNF | Answer: c Explanation: We say that the decomposition is a lossless decomposition if there is no loss of information by replacing r (R) with two relation schemas r1(R1) andr2(R2). |
|  | Functional Dependencies are the types of constraints that are based on\_\_\_\_\_\_ | a) Key b) Key revisited c) Superset key d) None of the mentioned | Answer: a Explanation: Key is the basic element needed for the constraints. |
|  | \_\_\_\_\_\_\_\_\_\_\_removes all rows from a table without logging the individual row deletions. | a) DELETE b) REMOVE c) DROP d) TRUNCATE | Answer: d Explanation: TRUNCATE statement is a Data Definition Language (DDL) operation that marks the extents of a table for deallocation. |
|  | If you don’t specify ASC or DESC after a SQL ORDER BY clause, the following is used by default | a) ASC b) DESC c) There is no default value d) None of the mentioned | Answer: a Explanation: ASC is the default sort order. Null values are treated as the lowest possible values. |
|  | What is the purpose of the SQL AS clause ? | a) The AS SQL clause is used change the name of a column in the result set or to assign a name to a derived column b) The AS clause is used with the JOIN clause only c) The AS clause defines a search condition d) All of the mentioned | Answer: a Explanation: SQL Aliases are defined for columns and tables. Basically aliases is created to make the column selected more readable. |
|  | With SQL, how can you return the number of not null records in the “Persons” table ? | a) SELECT COUNT() FROM Persons b) SELECT COLUMNS() FROM Persons c) SELECT COLUMNS(\*) FROM Persons d) SELECT COUNT(\*) FROM Persons | Answer: a Explanation: COUNT(column\_name) is used to count the number of rows of a table where column name is a column that does not allow NULL values. |
|  | Which of the following command makes the updates performed by the transaction permanent in the database ? | a) ROLLBACK b) COMMIT c) TRUNCATE d) DELETE | Answer: b Explanation: Commit command is used to permanently save any transaction into database. |
|  | What type of join is needed when you wish to include rows that do not have matching values? | a) Equi-join b) Natural join c) Outer join d) All of the Mentioned | Answer: c Explanation:OUTER JOIN is the only join which shows the unmatched rows. |
|  | A UNION query is which of the following? | a) Combines the output from no more than two queries and must include the same number of columns b) Combines the output from no more than two queries and does not include the same number of columns c) Combines the output from multiple queries and must include the same number of columns d) Combines the output from multiple queries and does not include the same number of columns | Answer: c Explanation: A single UNION can combine only 2 sql query at a time. |
|  | The following SQL is which type of join: SELECT CUSTOMER\_T. CUSTOMER\_ID, ORDER\_T. CUSTOMER\_ID, NAME, ORDER\_ID FROM CUSTOMER\_T,ORDER\_T? | a) Equi-join b) Natural join c) Outer join d) Cartesian join | Answer: d Explanation:Cartesian Join is simply the joining of one or more table which return the product of all the rows in these tables. |
|  | Dynamic Management View is a type of | a) System Defined Views b) User Defined View c) Simple View d) Complex View | Answer: a Explanation: Dynamic Management Views were introduced in SQL Server 2005. These Views give the administrator information of the database about the current state of the SQL Server machine. |
|  | What is SCHEMABINDING a VIEW? a | a) Schema binding binds your views to the dependent physical columns of the accessed tables specified in the contents of the view b) These are stored only in the Master database c) These types of view are defined by users on specified schema d) These are used to show database self describing information | Answer: b Explanation: SCHEMABINDING binds the view to the schema of the underlying table or tables. When SCHEMABINDING is specified, the base table or tables cannot be modified in a way that would affect the view definition. |
|  | The attribute name could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called | a) Simple attribute b) Composite attribute c) Multivalued attribute d) Derived attribute | Answer: b Explanation: Composite attributes can be divided into subparts (that is, other attributes). |
|  | \_\_\_\_\_\_\_\_\_\_\_\_ is preferred method for enforcing data integrity | a) Constraints b) Stored Procedure c) Triggers d) Cursors | Answer: a Explanation: Constraints are specified to restrict entries in the relation. |
|  | There are two functional dependencies with the same set of attributes on the left side of the arrow: A->BC A->B This can be combined as | a) A->BC b) A->B c) B->C d) None of the mentioned | Answer: a Explanation: This can be computed as the canonical cover. |
|  | Consider a relation R(A,B,C,D,E) with the following functional dependencies:  ABC -> DE and  D -> AB  The number of superkeys of R is: | a) 2 b) 7 c) 10 d) 12 | Answer: c Explanation: A superkey is a combination of columns that uniquely identifies any row within a relational database management system (RDBMS) table. |
|  | Which of the following is a tuple-generating dependencies? | a) Functional dependency b) Equality-generating dependencies c) Multivalued dependencies d) Non-functional dependency | Answer: c Explanation: Multivalued dependencies, do not rule out the existence of certain tuples. Instead, they require that other tuples of a certain form be present in the relation. |
|  | We can use the following three rules to find logically implied functional dependencies. This collection of rules is called | a) Axioms b) Armstrong’s axioms c) Armstrong d) Closure | Answer: b Explanation: By applying these rules repeatedly, we can find all of F+, given F. |
|  | Suppose now that R(A,B) and S(A,B) are two relations with r and s tuples, respectively (again, not necessarily distinct). If m is the number of (not necessarily distinct) tuples in the result of the SQL query:  R intersect S;  Then which of the following is the most restrictive, correct condition on the value of m? | a) m = min(r,s) b) 0 <= m <= r + s c) min(r,s) <= m <= max(r,s) d) 0 <= m <= min(r,s) | Answer: d Explanation: The value of m must lie between the min value of r and s and 0. |
|  | A relation empdt1 is defined with attributes empdt1(empcode, name, street, city, state,pincode). For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in | |  |  | | --- | --- | | [A.](javascript:void(0);) | 1 NF only | | [B.](javascript:void(0);) | 2 NF and hence also in 1 NF | | [C.](javascript:void(0);) | 3NF and hence also in 2NF and 1NF | | [D.](javascript:void(0);) | BCNF and hence also in 3NF, 2NF and 1NF | | **Option:** B  **Explanation :**  **empdt1 {empcode, name, street, city, state, pincode)** Given functional dependency pincode -> (city) (state) (street) (city) (state) -->pincode   This is in I NF and 2NF but not in 3NF because it contain transitive dependency. Hence correct answer is (b). |
|  | In a schema with attributes A, B, C, D and E following set of functional dependencies are given A --> B A -->C CD —>E B --> D E —> A              Which of the following functional dependencies is the implied by the above set. | |  |  | | --- | --- | | [A.](javascript:void(0);) | CD —> AC | | [B.](javascript:void(0);) | BD --> CD | | [C.](javascript:void(0);) | BC —> CD | | [D.](javascript:void(0);) | AC —> BC | | Option: B  Explanation :  CD—>A     {CD —>E;E —> A; E —>C} CD —> C BC —> CD B—>D; CD—>E; E—>A; A—>C AC—>BC: A—>B: A—>C |
|  | For a relation R (A, B, C, D), we assume that the key is (A, B), a composite key. With this information, we would say which of the following is TRUE for R. | |  |  | | --- | --- | | (a) *R may be in 2NF* |  | | (b) R may be in BCNF  © R may be in 3NF  (d) Not enough information |  | | Option: A  Explanation : The only information given is the primary key of the table. .And primary is a composite key. Hence, we need the set of functional dependencies for deciding further. |
|  | Empdt1(empcode, name, street, city, state,pincode). For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in | 1. [A.](javascript:%20void(0)) 1 NF only 2. [B.](javascript:%20void(0)) 2 NF and hence also in 1 NF 3. [C.](javascript:%20void(0)) 3NF and hence also in 2NF and 1NF 4. [D.](javascript:%20void(0)) BCNF and hence also in 3NF, 2NF and 1NF View Answer | Answer: Option B  Explanation:  The relation in second normal form is also in first normal form and no partial dependencies on any column in primary key. |
|  | The rule that a value of a foreign key must appear as a value of some specific table is  called a \_\_\_\_\_\_ | a) Tables b) Fields c) Records d) Keys | Answer: Option A  Explanation:  For referential integrity to hold in a relational database, any field in a table that is declared a foreign key can contain either a null value, or only values from a parent table’s referenced columns (primary key or candidate keys). In other words, when a foreign key value is used it must reference a valid, existing primary key in the parent table. |
|  | A relational database consists of a collection of | a) Tables b) Fields c) Records d) Keys | Answer: a Explanation: Fields are the column of the relation or tables. Records are each row in a relation. Keys are the constraints in a relation. |