Subject: **SWR302 - SOFTWARE REQUIREMENTS**

Number of questions: 20

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| QN=1 | Which of the following is not a correct statement about database? |
| a. | A database is a collection of information that exists over a long period of time. |
| b. | A database is a collection of related data. |
| c. | A database should be managed by a database management system. |
| d. | A database must be a set of papers or text files. |
| e. |  |
| f. |  |
| ANSWER: | D |
| MARK: | 1 |
| UNIT: | 1 |
| LO: | 1 |
| MIX CHOICES: | yes |

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| QN=2 | Who are database users? Select three. |
| a. | Database administrators |
| b. | Database designers |
| c. | Database end users |
| d. | Application end users |
| e. |  |
| f. |  |
| ANSWER: | ABC |
| MARK: | 1 |
| UNIT: | 1 |
| LO: | 1 |
| MIX CHOICES: | yes |

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| QN=3 | What are the three parts of a data model? Select three. |
| a. | Structure of the data |
| b. | Operations on the data |
| c. | Constraints on the data |
| d. | Characteristics of the data |
| e. |  |
| f. |  |
| ANSWER: | ABC |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | 2 |
| MIX CHOICES: | yes |

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| QN=4 | Given relation R:  [file: image1.png]    and relation S:  [file: image2.png]    What is R ⋈ S? |
| a. | [file: image3.png] |
| b. | [file: image4.png] |
| c. | [file: image5.png] |
| d. |  |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | 2 |
| MIX CHOICES: | yes |

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| QN=5 | Use relational algebra to answer this question:  What are the titles and years of movies made by Universal that are at least 90 minutes long?  Select two. |
| a. | πtitle,year(σlength≥90 (Movies) ∩ σstudioName=‘Universal’ (Movies)) |
| b. | πtitle,year(σlength≥90 AND studioName=‘ Universal’ (Movies)) |
| c. | σtitle,year(πlength≥90 AND studioName=‘ Universal’ (Movies)) |
| d. | σlength≥90 AND studioName=‘ Universal’ (πtitle,year (Movies)) |
| e. |  |
| f. |  |
| ANSWER: | AB |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | 2 |
| MIX CHOICES: | yes |

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| QN=6 | Suppose relation R(A,B,C,D,E) has the following functional dependencies:  A -> B  B -> C  BC -> A  A -> D  E -> A  D -> E  Which of the following is not a key of R? |
| a. | A |
| b. | E |
| c. | B, C |
| d. | D |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | 3 |
| MIX CHOICES: | yes |

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| QN=7 | Suppose relation R(A,B,C,D,E) has the following functional dependencies:  {A -> B, A -> C, CD -> E, B -> D, E -> A}  Which of the following functional dependencies is not implied by the above set? |
| a. | CD -> AC |
| b. | BD -> CD |
| c. | BC -> CD |
| d. | AC -> BC |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | 3 |
| MIX CHOICES: | yes |

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| QN=8 | Suppose relation R(A,B,C,D) has the following functional dependencies:  AB -> C  BC -> D  What is the highest normal form of R? |
| a. | 1NF |
| b. | 2NF |
| c. | 3NF |
| d. | BCNF |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | 3 |
| MIX CHOICES: | yes |

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| QN=9 | In an ERD, diamond shape is symbol for |
| a. | Entity |
| b. | Relationship |
| c. | Cardinality |
| d. | Attribute |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 4 |
| LO: | 4 |
| MIX CHOICES: | yes |

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| QN=10 | How to represent a many-many relationship in relational model? |
| a. | By creating a new table, called a join table |
| b. | By using a foreign key |
| c. | By creating a new attribute in one of the two existing tables |
| d. | By creating two new tables |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 4 |
| LO: | 4 |
| MIX CHOICES: | yes |

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| QN=11 | Which SQL statement is used to insert new data in a database? |
| a. | ADD RECORD |
| b. | INSERT NEW |
| c. | INSERT INTO |
| d. | ADD NEW |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 5 |
| LO: | 5 |
| MIX CHOICES: | yes |

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| QN=12 | All aggregate functions except \_\_\_\_\_ ignore null values in their input collection. |
| a. | Count(attribute) |
| b. | Count(\*) |
| c. | Avg |
| d. | Sum |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 5 |
| LO: | 5 |
| MIX CHOICES: | yes |

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| QN=13 | Which of the following should be used to find all the courses taught in the Fall 2009 semester but not in the Spring 2010 semester? |
| a. | SELECT DISTINCT course id  FROM SECTION  WHERE semester = ’Fall’ AND YEAR= 2009 AND  course id NOT IN (SELECT course id  FROM SECTION  WHERE semester = ’Spring’ AND YEAR= 2010); |
| b. | SELECT DISTINCT course\_id  FROM instructor  WHERE name NOT IN (’Fall’, ’Spring’); |
| c. | (SELECT course id  FROM SECTION  WHERE semester = ’Spring’ AND YEAR= 2010) |
| d. | SELECT COUNT (DISTINCT ID)  FROM takes  WHERE (course id, sec id, semester, YEAR) IN (SELECT course id, sec id, semester, YEAR  FROM teaches  WHERE teaches.ID= 10101); |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 5 |
| LO: | 5 |
| MIX CHOICES: | yes |

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| QN=14 | The variables in the triggers are declared using |
| a. | - |
| b. | @ |
| c. | / |
| d. | /@ |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | 6 |
| MIX CHOICES: | yes |

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| QN=15 | What is the statement to remove a procedure from a database? |
| a. | ALTER PROCEDURE |
| b. | DELETE PROCEDURE |
| c. | DROP PROCEDURE |
| d. | TRUNCATE PROCEDURE |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | 6 |
| MIX CHOICES: | yes |

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| QN=16 | Updating the value of the view |
| a. | Will affect the relation from which it is defined |
| b. | Will not change the view definition |
| c. | Will not affect the relation from which it is defined |
| d. | Cannot determine |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | 6 |
| MIX CHOICES: | yes |

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| QN=17 | Which of the following is true about clustered index? |
| a. | Clustered index is not associated with table |
| b. | Clustered index is built by default on unique key columns |
| c. | Clustered index is not built on unique key columns |
| d. |  |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 7 |
| LO: | 7 |
| MIX CHOICES: | yes |

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| QN=18 | The database system must take special actions to ensure that transactions operate properly without interference from concurrently executing database statements. This property is referred to as |
| a. | atomicity |
| b. | durability |
| c. | isolation |
| d. |  |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 7 |
| LO: | 7 |
| MIX CHOICES: | yes |

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| QN=19 | Which of the following join operations does not preserve non matched tuples? |
| a. | Left outer join |
| b. | Right outer join |
| c. | Inner join |
| d. |  |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 5 |
| LO: | 5 |
| MIX CHOICES: | yes |

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| QN=20 | Which one of the following cannot be taken as a primary key? |
| a. | Id |
| b. | Register number |
| c. | Dept\_id |
| d. | Street |
| e. |  |
| f. |  |
| ANSWER: | D |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | 2 |
| MIX CHOICES: | yes |