DBMS

1. A constraint showing the maximum number of entities that can occur on a side of a relationship is called the _____
   a)Degree b) Maximum Cardinality c) Instance d) None of the above

2. The number of entities participating in the relationship is known as the _____
   a)Maximum Cardinality b) Composite Identifiers
   c)Degree d) None of the above

3. A relationship among entities of the same class is called a _____
   a)Binary Relationship b) Weak Relationship
   c)Recursive Relationship d) None of the above

4. An M:N relationship is decomposed into
   a)two 1:1 relationships b) a 1:1 relationship and a 1:M relationship
   c) two 1:N relationships d) None of the above

5. Descriptive attributes are used to
   a. Record information about participating entities
   b. Record information about relationships
   c. Record information about data
   d. Record information about attributes

6. The relation ship between owner entity set and the weak entity set
   a. many to many relationships b) recursive relationships
   b. Ternary relationships d) None of the above

7. Cardinality ratios are used in
   a) Unary relationships b) Binary relationship
   c) Ternary relationship d) None of the above

8. E-R model is used in
   a) Logical design b) Binary relationships
   c) Ternary relationship d) None of the above

9. A minimum cardinality of Zero specifies
   a)No participation b) Partial participation
   c) Ternary relationship d) None of the above

10. What is not true about weak entity
    a) They do not have key attributes
    b) They are the examples of existence dependency
    c) Every existence dependency results in a weak entity
    d) Weak entity will have always discriminator attributes.
11. Relation R = ABCD with AB as primary key. Mention FD so that R in 1NF but not in 2NF
    a)AB-> C b) AB-> D c) A-> C d) AB-> CD

12. R = ABC with FD B-> C; if A is a candidate key for R, under what conditions R to be in BCNF?
    a) B is not a key for R b) B is a key for R c) C is a key for R d) BC is a key

13. Decomposition rule is
    a) XZ-> YZ |= X->Y b) X->Y, Y->Z |= X->YZ
    c) X-> YZ |= X->Y, X->Y d) X-> Y, WY->Z |=W X->Z e) none

14. A Relation R is having five attributes (ABCDE), with the following instance {(a,2,3,4,5), (2,a,3,4,5), (a,2,3,6,5),(a,2,3,6,6)}. Which of the following FDs or MVDs cannot be inferred from the above instance.
    a)A->BC b) BC-> -> D c) C-> DE d) CD-> -> E

15. Every binary relation is in _____ normal form.
    a) BCNF b) 3NF c) 4NF d) PJNF e) none

16. Consider the set of Fractioned Dependency
    F = { PQ-> R, P->Q, S->PQ, S-> T}
    G ={ P->QR, S->PT} Which of the following is true.
    a) F covers G b) G covers F c) F&G are equivalent
    b) Cannot say e) none

17. R (ABCD) is a relation. Which of the following doesn't have either loss less join or dependency preserving BCNF decompositions.
    a) A->B, B->CD b) AB->C, C->D
    c) A->BC, C->D d) AB->CD, C->A

18. The following four tuples in a relation R with three attributes ABC : (1,2,3), (4,2,3),(5,3,3),(5,3,4). Which of the following functional and multi valued dependencies can you infer does not hold over relation R.
    a) A-> -> B b) BC -> -> A c) B->C d) B-> -> C e) none

19. A relation R (ABCDEF) with Fd set F = {ABC->DE, BC->D, E->F} and is decomposed into BCNF. Then find the no. of foreign keys in decomposed relations.

    a) 3 b) 4 c) 2 d) 1 e) none

20. What is the normal form of above relation?
    a) 1NF b) 2NF c) 3NF d) BNF e) none