First Year B.C.A. (Semester - II) Examination
Paper - 15BCA111
Relational DBMS

Time : Three hours] [Full Marks - 60

N.B. : i) All questions carry equal marks
   ii) Question No. 1 is compulsory
   iii) Due credit will be given to neatness & adequate dimensions.
   iv) Assume suitable data wherever necessary.
   v) Use Blue/Black ink/refill only for writing the answer book.

Q. 1 Choose correct alternatives. 6

   a) Using which language user can request information from a database.
   i) Query ii) Relational
   iii) Structural iv) Compiler

   b) A _____ in a table represents a relationship among a set of values.
   i) Column ii) Key
   iii) Row iv) Entry

   c) Which of the following language is used to specify database schema.
   i) Data management language
   ii) Data manupulation language
   iii) Data development language
   iv) Data definition language

   d) All aggregate function except _____ ignore null values in their input collection.
   i) Count (Column Name) ii) Count (*)
   iii) Avg iv) Sum

e) Which of the following is not true about the exception handling section of a PL/SQL Block.
   i) This section start with the exception keyword
   ii) It is a mandatory section
   iii) It contain exception
   iv) It handle errors of program

Q.2 a) Explain the Traditional file based system in detail.   5
    b) Explain Network model in database model with its advantages and disadvantages.   6

OR

Q.3 a) What do you understand by DBA? Explain its role. 6
    b) Explain various components of DBMS.   5

Q.4 a) Explain Relational Algebra in detail.   6
    b) Explain BCNF Normalization in detail.   5

OR

Q.5 a) Explain entity relationship model in detail.   5
    b) Explain the following terms.   6
       i)   1NF   ii) 2NF   iii) 3NF

Q.6 a) Explain the basic structure of SQL Query.   5
    b) Explain view with various types of operation on view.   6

OR

Q.7 a) Explain LIKE, BETWEEN operators in SQL.   5
    b) Explain group by clause and having claus in detail with proper example.   6

Q.8 a) Explain the following Numeric function with meaning, syntax, example and result   5
       i)   FLOOR   ii) MOD
       iii) SQRT   iv) ABS
       v)   COS
    b) What do you understand by conversion function? Explain with meaning, syntax, example and result.   6

OR

Q.9 a) Explain the following group function with meaning, syntax, example and result.   5
       i) MAX   ii) MIN   iii) COUNT
       iv) AVG   v) SUM
    b) Explain any six charater function. With meaning, syntax, example, result.   6

Q.10 a) Explain constant and variables in PL/SQL.   6
     b) Explain the Block structure of PL/SQL.   5

OR

Q.11 a) Explain the control structure of PL/SQL.   5
     b) What is Cursor? Explain types of cursor.   6

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