Ph.D Entrance Examination Model Question Paper

COMPUTER SCIENCE AND ENGINEERING

Duration: 2.00 Hours.   **Total Marks = 100**

Note:

1) The question paper is in **TWO** parts, viz: Part-I and Part-II.

2) **Part-I** consists 50 questions of objective type carrying 1 mark each (50 x 1 = 50 marks)

3) **Part-II** consists of 25 questions of objective type carrying 2 marks each (25 x 2 = 50 marks)

4) All questions are compulsory.

PART –I   **(50 x 1 = 50)**

1) Which of the following expressions is in the sum-of-products (SOP) form?
   A. (A + B) (C + D)
   B. (A) B (CD)
   C. AB (CD)
   D. AB + CD

2) The DBMS acts as an interface between what two components of an enterprise-class database system?
   A. Database application and the database
   B. Data and the database
   C. The user and the database application
   D. Database application and SQL

1. Let F (w, x, y, z) =$\sum$ (0, 4, 5, 7, 8, 9, 13, 15). Which of the following expressions are not equivalent to F?

    a. X'Y'Z' + W'XY' + WY'Z + XZ
    b. W'Y'Z'+WX'Y'+XZ
    c. W'Y'Z'+WX'Y'+XYZ+XY'Z
    d. X'Y'Z'+WX'Y'+W'Y

2. $(1217)_8$ is equivalent to

    a. $(1217)_{16}$
    b. $(028F)_{16}$
    c. $(2297)_{10}$
    d. $(0B17)_{16}$