Seat No:_____   Enrollment No:_____

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
IMCA, Winter 2017 – 18 Examination

Semester: 1   Date: 21-12-2017
Subject Code: 05301101   Time: 10:30AM to 01:00PM
Subject Name: Fundamentals of Computer & PC Software   Total Marks: 60

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1   Answer the followings.

A. Write short notes.   **(05)**
   1. What is the extension of file in MS-Excel 2003?
   2. Write a truth table of AND gate.
   3. Which storage media is sequentially accessed and process?
   4. EEPROM stand for.
   5. Convert binary code 101011 to gray code.

B. Multiple choice type questions/ Give the sentence true or false.(Each of 01 marks)   **(10)**
   1. The _____logic gate that will have HIGH or "1" at its output when any one of its inputs is HIGH.
       (a) AND (b) OR (c) NOT (d) NOR
   2. The difference between half adder and full adder is
       (a) Half adder has two inputs while full adder has four inputs
       (b) Half adder has one output while full adder has two outputs
       (c) Half adder has two inputs while full adder has three inputs
       (d) All of the Mentioned
   3. Impact printer produce printed output as pattern generated by laser beam [true/false]
   4. MS office is application software [true/false]
   5. cache memory is implemented using
        (a) DRAM (b) SRAM (c) PROM (d) EPROM
   6. The excess-3 code for 597 is given by
       (a) 100011001010
       (b) 100010100111
       (c) 010110010111
       (d) 010110101101
   7. Formula in excel start with _____
        (a) + (b) – (c) = (d) %
   8. What feature will you use to apply motion effects in between a slide exits and another enters?
        (a) Slide Transition
        (b) Slide Design
        (c) Animation Objects
        (d) Animation Scheme
   9. Reflected binary code is also known as
       (a) BCD code
       (b) Binary code
       (c) ASCII code
       (d) Gray Code
   10. Tiny droplets of coloured ink and nozzle is associated with?
        (a) Dot matrix printer
        (b) Laser Printer
        (c) Inkjet printer
        (d) Daisy wheel printer

Q.2   Answer the followings.(Any Five)   **(15)**
    1. Write a differences between RAM and ROM
    2. Write a short note on MICR
    3. Explain 2nd Generation of computer with its features.
    4. Draw Diagram of NAND gate as Universal Gate.
    5. Explain SR flip flops.
    6. Explain different Types of Networks LAN,MAN and WAN.

Q.3   Answer the following. (Any Three)   **(15)**
    1. Write a differences between Impact printer and Non-Impact printer.
    2. Write a short note on Hard Disk.
    3. Draw Block diagram of computer and explain all its functional units.
    4. Write a short note on Multiplexer and De-Multiplexer.

Q.4   Answer the following.
   A. Write a short note on Characteristics of Computer.   **(05)**
   B. Do as directed   **(10)**
       1. $(2AB)_{16} = (?)_2$
       2.   Add Binary number $(100111)_2$ and $(11011)_2$
       3.   Binary subtraction of $(10101)_2 - (01110)_2$
       4. $(545.125)_{10} = (?)_2$
       5. $(1110101)_2 = (?)_{10}$

                                OR

   B. Explain 1's complement and 2's complement method in Binary Number system. Write the steps of   **(10)**
   binary subtraction using 1's complement and 2's complement method.