

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA/ IMCA Winter 2019 – 20 Examination

Semester: 1**Date: 25/11/2019****Subject Code: 05101101 / 05301101****Time: 02:00 pm to 04:30 pm****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. Answer / Define the following in short. (05)**

1. What is Supercomputer?
2. Define storage?
3. List out network topologies.
4. Write Down full form for : ROM,PROM,EPROM
5. Convert Binary code 101011 to BCD Code.

B. Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks) (10)

1. Computer hardware refers to the _____ parts of computer.
a) Logical b) Physical c) Data d) None of Above
2. OCR stands for
a) Optical Character Recognition
b) Opac Character Reader
c) Optical Character Reader
d) None of above
3. The smallest unit of data in Computer is _____
a) Byte b) Nibble c) Bit d) KB
4. Formula in excel starts with
a) = b) + c) - d) %
5. Compiler, Interpreter and Assembler are an example of _____
a) Application Software
b) System Software
c) Hardware
d) Firmware
6. Which electronic components are used in second generation of computer?
a) Transistor
b) Vacuum Tube
c) Integrated Circuits
d) Microprocessor
7. Impact printer produce printed output as pattern generated by laser beam? [True/False]
8. What is an extension file of MS PowerPoint?
a) .ppt b) .pptx c) both a and b d) None
9. CACHE memories are accessed much faster than conventional RAM.[True/False]
10. Full adder forms sum Of
a) 2 bits b) 3 bits c) 4 bits d) 5bits

Q.2 Answer the followings. (3 Marks Questions.) (Any Five) (15)

1. Write a difference between RAM and ROM
2. Draw diagram of NAND gate as Universal gate.
3. List and Explain Functionalities of Computer.
4. Explain Types of Network Topology.
5. Explain SR Flip Flop.
6. Write a Short Note on MICR

- Q.3 Answer the following. (5 Marks Questions)(Any three) (15)**
1. Write Short note on MS-Excel.
 2. Convert the following to equivalent binary, octal and hexadecimal.
1) 127 2) 225 3) 128 4) 1252
 3. Perform the following operations.
 - 1) $1001 + 1110$
 - 2) $10001 - 11101$
 - 3) $11101 * 101$
 - 4) $1000/100$
 4. Write a difference between Impact Printer and Non-Impact Printer.

Q.4 Answer the following with all details and diagrams

- A.** Draw Block diagram of computer and explain all its Functional Units. **(05)**
- B.(1)** What is a Logic gate? Explain Logic gates with symbols, functions and truth tables. **(05)**
- B.(2)** Explain the Half Adder and Full Adder in detail. **(05)**

OR

- B.(1)** Write Short note on mail-merge in MS-Word. **(05)**
- B.(2)** What is Flip-flop? Explain the JK Flip-Flop in Detail. **(05)**