

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA Summer 2017 – 18 Examination

Semester: 1**Subject Code: 05101101****Subject Name: Fundamentals of Computer & PC Software****Date: 04/06/2018****Time: 10.30 am to 1.00 pm****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 Computer?
2. Write a truth table of AND gate.
3. What is cell address in MS-Excel ? list out different types of cell address.
4. Which storage media is sequentially accessed and process?
5. Convert Hexadecimal code $8B_{16}$ to Binary

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

1. cache memory is implemented using
(a) DRAM (b) SRAM (c) PROM (d) EPROM
2. Formula in excel start with _____
(a) + (b) - (c) = (d) %
3. Impact printer produce printed output as pattern generated by laser beam [true/false]
4. 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
5. Tiny droplets of coloured ink and nozzle is associated with ?
(a) Dot matrix
(b) Laser Printer
(c) Inkjet printer
(d) Daisy wheel printer
6. The computer size was very large in
(a) First Generation
(b) Second Generation
(c) Third Generation
(d) Fourth Generation
7. What is the default file extension for all Word documents?
(a) .txts
(b) .word
(c) .docs
(d) .docx
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. Octal to binary conversion: $(24)_8 = (?)_2$

- (a) $(111101)_2$
- (b) $(010100)_2$
- (c) $(111100)_2$
- (d) $(101010)_2$

Q.2 Answer the followings. (Any Five)

1. Write a short note on chain printer
2. Explain different Types of Networks LAN, MAN and WAN.
3. using 2's complements method do subtraction of $(10110)_2 - (11010)_2$ (15)
4. Write features of third generation of computers.
5. Explain Master Slave J K flip flop.
6. Write differences between EPROM, PROM.

Q.3 Answer the following. (Any Three) (15)

1. Write a difference between RAM and ROM.
2. Write a short note on Cache Memory.
3. Draw Block diagram of computer and explain all its functional units.
4. Write a difference between impact printer and non-impact printer

Q.4 Answer the following.

A. Write a short note on Characteristics of Computer. (05)

B. Do as directed

1. $(111101)_2 * (1101)_2$
2. $(1100101)_2 / (101)_2$
3. $(545.125)_{10} = (?)_2$ (10)
4. $(6853)_{10} = (?)_8$
5. $(11010)_2 + (1100)_2$

OR

B. Explain Basic gates with circuit diagram and truth table (10)