Brain International School

Computer Science Assignment **Class-XI** **April, 2018**

Ch-1. Computer Overview

Answer the following questions:-

a) Name at least four early calculating devices.

b) Name the first operational general purpose computer.

c) Who first proposed the concept of 'Stored Program Computer'?

d) Define the IPO cycle.

e) Differentiate between data and information.

f) Explain the Von Neumann Computer.

g) Compare the salient features of first and second generation computers.

h) Why is Charles Babbage known as the Father of Modern Computers?

i) Explain the functional components of a computer with the help of a block diagram.

j) What are the functions of the control unit?

k) Where are the instructions needed to start a computer stored?

l) Explain booting process and its types.

m) Differentiate between :

i) Digital computers and analog computers.

ii) Microcomputers and Mini Computers

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Ch-3. Data Representation

a) What does ASCII stand for?

b) What does the base of a Number system mean?

c) What is the base of Decimal, Binary, Octal and Hexadecimal number systems?

d) How many digits are there in a Binary number system?

e) Which digits are used in Hexadecimal number system?

f) What is Unicode? How is it useful?

g) Distinguish between ASCII and ISCII.

h) Do as directed :

i. Convert the Decimal number 781 to its Binary equivalent.
ii. Convert Binary number 101101.001 to its decimal equivalent
iii. Convert Octal number 321.7 into its Binary equivalent
iv. Convert the Hexadecimal number 3BC into its Binary equivalent
v. Convert the Binary number 10011010.010101 to its Hexadecimal equivalent
vi. Convert the Decimal number 345 into Octal number.
vii. Convert the Decimal number 736 into Hexadecimal number.
viii. Convert the Octal number 246.45 into Hexadecimal number.
ix. Convert the Hexadecimal number ABF.C into Octal number.
x. Convert the Octal number 576 to Decimal.
xi. Convert the Hexadecimal number A5C1 to Decimal.

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COMPUTER SCIENCE ASSIGNMENT CLASS-XI MAY, 2018

Ch-14. Programming Methodology

1. Define Algorithm.
2. Define Flowchart.
3. Write an algorithm to find whether given number is odd or even.
4. Write an algorithm to find the sum of all even number up to given number.
5. Draw a flowchart to find the area of a circle.
6. Draw a flowchart to find the smallest number among n numbers.
7. What is a good program?
8. What is an identifier?
9. How to write comments in a program?
10. What is the purpose of expression? Explain with an example.
11. Write and explain all steps of programming methodology.
12. Differentiate between runtime errors and logical errors.
13. Define documentation.
14. What is program maintenance?
15. Define modular programming.
16. Differentiate between top down and bottom up methods of modular programming.
11. Explain types of errors with examples.
12. How to maintain programs?
13. Write all steps of program methodology?
14. What do you mean by clarity and simplicity of expression?
15. What do you mean by flexibility?
16. Explain all steps of problem solving process.
17. What is indentation? Explain with an example.
18. What do you mean by debugging?
19. What is the use of self documenting code in programming?
20. What is the purpose of giving meaningful name for identifiers?

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Computer Science Assignment **Class-XI** **MAY, 2018**

Ch-6. Getting started with C++

1. What is the name of the function that should be present in all c++ program?
2. What are C++ comments?
3. What is indentation of a program?
4. What is #include directives?
5. What is role of main ( ) in c++ program?
6. What is a header file?
7. What is the purpose of comments and indentation?
8. What are console input /output functions?
9. Write an appropriate statement for each of the following:
   a) Write the values for a&b in one unseparated by blanks and value of after two blanks lines.
   b) Read the values for a,b and c.
   c) Write the values for a and b in one line, followed by value of c after two blank lines.
10. What type of errors occurs while programming?