

Roll No.

97607

B.C.A. Ist Semester (Regular)

Examination-December, 2012

Computer Fundamental & Programming

Paper-BCA-101

Time : 3 hours

Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt any **five** questions in all. All questions carry equal marks.

1. How does digital computers differ from analog computer ? What are the major components of a digital computer ? Explain the interrelationship between these and their working.
2. (a) Differentiate between primary and secondary memories with their relative merits and demerits.

(b) Compare and contrast 'Magnetic tape' and 'Magnetic Disc'.

3. Convert the following :

(a) $(10110101)_2 = (?)_{10}$

(b) $(A5E9)_{16} = (?)_{10}$

(c) $(16.425)_{10} = (?)_{16}$

(d) $(F329)_{16} = (?)_2$

4. What is merging ? Develop an algorithm for merging of ordered list and explain the same briefly.

5. Differentiate between the following :

(a) do-while and while loop

(b) array and structure

(c) if-else and switch construct.

6. Discuss briefly any two parametres passing mechanism with their relative merits and demerits.

7. Write a program in C to generate all prime numbers, all even numbers and all odd numbers between 1 and 20.
 8. What makes C a system programming language ? Justify your answer.
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