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First/Second Semester B.E. Degree Examination, December 2011
Computer Concepts and C Programming

Time: 3 hrs.

Max. Marks:100

- Note:** 1. Answer FIVE full questions choosing at least two from each part.
 2. Answer all objective type questions only in OMR sheet page 5 of the answer booklet.
 3. Answer to objective type questions on sheets other than OMR will not be valued.

PART - A

1. a. Select the correct answer : (04 Marks)
- The general name given to the physical parts of a computer is ____
 A) Software B) Hardware C) Firmware D) Computer ware
 - A byte contains ____ number of bits.
 A) 12 B) 8 C) 16 D) 32
 - Which of these is not an example of software?
 A) Utilities B) Operating system
 C) Floppy disk D) Device drivers
 - Which of these is not a part of information processing cycle?
 A) Data sharing B) Data collection
 C) Data storage D) Data output
- b. Mention the various steps associated with the information processing cycle and explain them. (08 Marks)
- c. What is a data scanning device? Mention any four such devices. (04 Marks)
- d. i) Convert the binary number 1 1 1 0 0 1 1 1 to decimal number. (04 Marks)
 ii) Convert the decimal number 55 to binary number. (04 Marks)
2. a. Select the correct answer : (04 Marks)
- A translator which reads a high level program line by line and converts its into machine language code is ____
 A) Translator B) Interpreter C) Compiler D) Assembler
 - The size of most commonly used floppy these days is
 A) 8 inch B) 3.5 inch C) 5.25 inch D) 2.5 inch
 - Which of these is not a network topology?
 A) Bus B) Ring C) Star D) Square
 - Which of these is not a type of translator
 A) Assembler B) Interpreter C) Compiler D) Integrator
- b. Mention the various functions of an operating system. Explain any two of them. (08 Marks)
- c. List and explain the basic components of a computer network. (04 Marks)
- d. Mention the different storage devices and explain one of them. (04 Marks)
3. a. Select the correct answer : (04 Marks)
- Which of the following is associated with software changes / modification / evolution of software?
 A) Design B) Coding C) Testing D) Maintenance

- iii) The value of switch expression must be of type _____
 A) Real B) int C) double D) All of these
- iv) The least number of times the do – while loop will be executed is _____
 A) 0 B) 1 C) 2 D) Both A and B
- b. Distinguish between while and do-while statement. (08 Marks)
- c. Write a C program to read a positive number and reverse the given number. (08 Marks)
7. a. Select the correct answer : (04 Marks)
- i) Number of elements in an array defined by a [3] [4] is
 A) 8 B) 12 C) 16 D) None of these
- ii) If $\chi[4]$ is a declaration, then the first and last array index will be
 A) 1, 4 B) 0, 3 C) 3, 0 D) None of these
- iii) Given int a [3] [2] = {1, 2, 3, 4, 5, 6} ; the element in the 3rd row and 2nd column is _____
 A) 3 B) 6 C) 52 D) 4
- iv) A function that is used to join two strings is _____
 A) StrepY B) Strlen C) Streat D) StremP
- b. Explain the declaration and initialization of one dimensional array with examples. (06 Marks)
- c. Write a C program to input N integers into a single dimensional array and sort them in descending order using bubble sort method. Print both given array and sorted array with suitable headings. (10 Marks)
8. a. Select the correct answer : (04 Marks)
- i) _____ execution of instructions in a computer system is referred to as parallel computing.
 A) Serial B) Sequential C) Accurate D) Simultaneous
- ii) Which of the following can be used as a resource in parallel computing?
 A) A single computer with multiple processors.
 B) An arbitrary number of computers connected by a network.
 C) A combination of the above.
 D) All of these.
- iii) Open Mp stands for _____
 A) Open multi – parallelism B) Organised multi – programming
 C) Open multi – processing D) Organised multi – parallelism.
- iv) An example of environment variable in OPEN MP is
 A) Omp – thread – limit B) Omp – init – lock
 C) Omp – test – lock D) Omp – get – dynamic.
- b. Define concurrent processing. What is the motivation for concurrent processing? (10 Marks)
- c. What are threads? Give the advantages and disadvantages of multiple threads. (06 Marks)
