GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–I & II (NEW) EXAMINATION – WINTER 2015
Subject Code: 2110003  Date: 30/12/2015
Subject Name: Computer Programming and Utilization
Time: 10:30am to 01:00pm  Total Marks: 70

Instructions:
1. Question No. 1 is compulsory. Attempt any four out of remaining Six questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1  Objective Question (MCQ)

(a)  Mark

1. Which protocol is used to transfer files on internet
   A) HTTP  B) FTP  C) SMPT  D) Telnet
2. Which one is input device?
   A) Monitor  B) Keyboard  C) CPU  D) Printer
3. In Microsoft Excel you can use the horizontal and vertical scroll bar to
   A) Split a worksheet to two panes  B) Edit the contents of a cell
   C) View different rows and columns  D) View different worksheet
4. A Pointer is?
   A) A keyword used to create variables.
   B) A variable that stores address of an instruction.
   C) A variable that stores address of other variable.
   D) All of above.
5. Full Form of RAM?
   A) Random Access Memory  B) Ready Application Module
   C) Remote Access Machine  D) Read Access Memory
6. What type of memory is volatile?
   A) Cache  B) RAM  C) ROM  D) Hard Drive
7. C is a ___ language
   A) High Level  B) Low Level  C) Middle Level  D) Machine Level

(b)  Mark

1. Which of the following is used as a string termination character?
   A) 0  B) ‘\0’  C) /\0  D) None of these
2. Which part of CPU perform calculations and make decision
   A) Alternate Logic Unit  B) Arithmetic Local Unit
   C) Arithmetic Logic Unit  D) Alternate Local Unit
3. Which of the following is a symbol for logical AND operator?
   A) II  B) &  C) &&  D) $$
4. BIOS is an abbreviation of
   A) Basic Input Output System  B) Best Input Output System
   C) Basic Input Output Symbol  D) Base Input Output System
5. The system unit of a personal Computers typically contains all of the following except:
   A) Microprocessors  B) Disk controller  C) Serial interface  D) Modem
6. With regards to Email Addresses:
   A) They must always contain an @ symbol
   B) They are case sensitive
   C) They can never contain space
   D) All of above
7. What will be a meaning of 1KB of memory
   A) 1 Kit Bit  B) 1 Kilo Byte  C) 1 Kernel Boot  D) 1 Key Block
Q.2 (a) Define algorithm and explain different symbols used in flowchart. 03
(b) Write a program to select and print the largest of the three nos. 04
    using nested-if-else statement.
(c) Draw a flow chart to do the sum of 10 elements read from the user. 07

Q.3 (a) What is Software and Hardware? Explain different types of 03
    Software.
(b) Write an algorithm and draw a flowchart to print first N Fibonacci 04
    numbers.
(c) Explain different type of operators used in c language with their 07
    precedence and associativity.

Q.4 (a) Describe file management? Recall various file modes. 03
(b) Write a program in c for multiplication of two matrix. 04
(c) Discuss about various operators used in C language. 07

Q.5 (a) Write an algorithm for finding odd and even number from given 03
    two numbers.
(b) List the header files used in c Programing with their properties. 04
(c) Write a program to print the following pattern. 07
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Q.6 (a) Distinguish between Structure and Union. 03
(b) List out the categories of functions of C. Explain any one category 04
    with example.
(c) Write a program to find the sum of first N odd numbers. 07

Q.7 (a) Write a program to reverse the input string. 03
(b) Explain various types of loop available in C with example. 04
(c) What is pointer? Give its benefits. Write a program to do swapping 07
    of two elements using function with two pointers as arguments.

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