

- Q.2^k **Shot answer (Attempt any six questions)** [12]
- i. Write the advantages of algorithm.
 - ii. What is a translator?
 - iii. Define variable. Explain the declaration of variables.
 - iv. Explain break and continue statements in C.
 - v. Define an array. Write the syntax to declare 1D array in C.
 - vi. Define a function. List the various components of a function.
 - vii. What is a string? List the various operations which can be performed on a string.
 - viii. Write the difference between exit controlled loop and entry controlled loop.
- Q.3 [A] Write an algorithm: To print N terms of Fibonacci series. [04]
[B] Draw the flowchart for the following: To check whether inputted number is prime number or not. [04]
- OR
- Q.3 [A] Define a flow chart. Explain the rules to draw flowchart. [04]
[B] Explain the symbols used to draw flowchart. [04]
- Q.4 [A] Explain Machine level language. [04]
[B] Differentiate between compiler and interpreter. [04]
- OR
- Q.4 [A] Explain High-level language. [04]
[B] Explain Editor. Write down the characteristics of editor. [04]
- Q.5 [A] Define an operator. Explain Arithmetic and Relational operator. [05]
[B] Write the basic structure of a C program. [03]
- OR
- Q.5 [A] Define a constant. Explain the types of constant. [05]
[B] Describe the printf() function. [03]
- Q.6 [A] Explain the switch statement by giving an example. [04]
[B] Explain the for loop and while loop by giving an example. [04]
- OR
- Q.6 [A] Explain the methods of structured programming. [04]
[B] Explain the if...else and nested if statement. [04]

[17]

SARDAR PATEL UNIVERSITY
S. Y. B. Sc. (III-Semester) (CBCS) Examination
US03CCSC02: Computer Organization
12th November, Saturday, 2011

Time: 10:30 am to 1:30pm

Total Marks: 70

Q-1 Select the appropriate option.

10

- 1 Computer hardware refers to the _____ parts of a computer.
(a) Logical (b) Physical (c) Data (d) None of above
- 2 OCR stands for
(a) Optical Character Recognition (b) Opac Character Reader
(c) Optical Character Reader (d) None of above
- 3 In Hexadecimal Number system, F is stands for ____
(a) 09 (b) 10 (c) 15 (d) None of above
- 4 In Signed and Magnitude method '0' represents ____
(a) +ve (b) -ve (c) both a & b (d) None of above
- 5 _____ performs operations such as mathematical and Boolean, to carry out the instruction.
(a) ALU (b) Control Unit (c) ALB (d) None of above
- 6 _____ points to the next instruction to be executed after finishing the current instruction.
(a) Program counter (b) Program counting
(c) Instruction register (d) None of above
- 7 _____ holds the address of the active memory location.
(a) MAR (b) MBR (c) IR (d) I/O
- 8 DDR is a type of
(a) Pen drive (b) Hard disk (c) RAM (d) Processor
- 9 TFT stands for _____
(a) Thin Film Transistor (b) Thin Film Translator
(c) Thin Film Transmission (d) None of above
- 10 Full form of LCD is _____
(a) Liquid Crystal Display (b) Liquid Clear Display
(c) Light Clear Display (d) None of above

Q-2 Answer the following questions. (Any SIX)

12

- 1 Define the terms 'Hardware' and 'Software'.
- 2 List out the limitations of Primary Storage.
- 3 List the base and radix of Binary, Octal and Hexadecimal number systems.
- 4 What is signed and magnitude method?
- 5 What do you know about 'Registers'?
- 6 Write the full form of RAM, ROM, PROM, EPROM, EEPROM.
- 7 Give at least three names of electronic devices where 'Flash memory card' is used.
- 8 What do you know about Scanner?

- Q-3
 (a) Draw a block diagram of Basic Organization of a Computer System and explain the functions of the various units 4
 (b) Write a brief note on 'Applications of the Computer Systems'. 4
 OR
- Q-3
 (a) Differentiate between Hardware and Software. 4
 (b) Write a brief note on Input Unit. 4
- Q-4
 (a) Explain the conversion of Binary number to Decimal number with example. 4
 (b) What is 4-bits Hexadecimal number to Binary number method? Explain. 4
 OR
- Q-4
 (a) Explain the conversion of Octal number to Decimal number with example. 4
 (b) Explain the addition and subtraction of Binary number with examples. 4
- Q-5
 (a) Explain the Excess notation? Explain it with suitable example. 4
 (b) What is Hamming Code? Explain it with suitable example. 4
 OR
- Q-5
 (a) Explain the storage representation of integers in 2's complement method. 4
 (b) Explain the error detection and correction of one-bit parity method. 4
- Q-6
 (a) Write short note on Instruction Execution Cycle. 4
 (b) Write short note on 'Array processor'. 4
 OR
- Q-6
 (a) Write short note on 'Pipeline machine'. 4
 (b) Write short note on 'Multifunctional units'. 4
- Q-7
 (a) List the advantages and disadvantages of CD. 4
 (b) Write short note on 'Hard Disk'. 4
 OR
- Q-7
 (a) List the advantages and disadvantages of 'Memory stick'. 4
 (b) Write short note on 'Indirect Addressing'. 4
- Q-8
 (a) List the advantages as well as disadvantages of LCD monitor. 4
 (b) Write short note on Laser Printer. 4
 OR
- Q-8
 (a) Explain the inkjet Printer with advantages. 4
 (b) Write short note on Plotter. 4