The Open University of Sri Lanka
B.Sc. Degree Programme – Level 03
Department of Mathematics & Computer Science
No Book Test II – 2016/2017
CPU1140 : Fundamentals of Computers

Registration No:

Duration: **One hour only (1 hour)**

Date: **20.05.2017**   Time: **10.30 a.m. – 11.30 a.m.**

Instructions

Answer all questions.

Provide your answers **on this question paper** itself.

MCQ - Underline the most suitable answer for each question.

1. Hardware is worthless without _____, the real controller of a computer.

   a) software
   b) ports
   c) expansion cards
   d) a user
   e) hard disk

2. A DBMS does not include

   a) Modeling language
   b) Data structures
   c) Database query language
   d) A transaction mechanism
   e) Storage management

3. Which of the following functions is performed by a compiler?

   a) formatting program output
   b) evaluating the data passed to program modules
   c) connecting multiple object programs
   d) translating a source program into object code
   e) editing the source code

4. Which of the following is NOT an operating system?

    a) Linux
    b) Microsoft Vista
    c) Microsoft Word
    d) Mac Os X
    e) Android

5. Which binary number comes right after the binary number 101001?

    a) 101002
    b) 101011
    c) 101010
    d) 101100
    e) 111000

6. The list of coded instructions is called as

    a) Computer Program
    b) Algorithm
    c) Flowchart
    d) Utility Program
    e) None of the above

7. Find out a task **not** relevant to an operating system

    a) Memory management
    b) Processor management
    c) Graphics management
    d) Storage management
    e) Device management

8. IDE consists of:

    a) Source code editor
    b) Automation tool builder
    c) Interpreter or debugger or both
    d) None of these
    e) All of this

9. GUI stands for

   a) Graphical User Interface
   b) Graph Under Instruction
   c) Graphical input Unit
   d) Graphical Usage Instruction
   e) None

10. Execution of two or more programs by a single CPU is known as

   a) Multiprogramming
   b) Multiprocessing
   c) Timesharing
   d) None
   e) All

11. Which type of port transmits both digital audio and digital video with a single connector?

   a) S-Video
   b) HDMI
   c) DVI
   d) VGA
   e) RCA jacks

12. Using binary arithmetic, a number y is computed by taking the n-bit two's complement of $x - c$. If n is eleven, $x = 10100001001_2$ and $c = 10101_2$ then $y =$

   a) 01100001111_2
   b) 01100001100_2
   c) 01100011100_2
   d) 01000111100_2
   e) 01100000000_2

13. In binary, the sixteen-bit two's complement of the hexadecimal number $DEAF_{16}$ is

   a) 0010000101010111_2
   b) 1101111010101111_2
   c) 0010000101010011_2
   d) 0010000101010001_2
   e) 0010000101000001_2

14. In octal, the twelve-bit two's complement of the hexadecimal number $2AF_{16}$ is

    a) 6522_8
    b) 6251_8
    c) 5261_8
    d) 6512_8
    e) 6521_8

15. An example for Utility Software is:

    a) System profilers.
    b) Loading Program.
    c) Device Drivers.
    d) GUI

True/False - Indicate whether the statement is true or false.

_____   16.   Notepad is a text editor.

_____   17.   A DVI port transmits a video signal and is also called a DB-15 port.

_____   18.   A drawback of Ones' complement is that there are two representations for zero.

_____   19.   Every installed device requires a device driver to control the device.

_____   20.   A 32-bit driver can be used in a 64-bit Windows operating system.

Short Answer - For each category on the left in the table below, provide <u>three</u> examples on the right.

Question No	Category	Examples
21	Application software	
22	Programming software	

Question No	Category	Examples
23	System Software	
24	1. Bit 2. Byte 3. Nibble	1. 2. 3.
25	Radix Systems	
26	Character Representations	
27	Basic Boolean Operators	
28	Video Port and Connector Types	
29	DC Connector Types	
30	Applications of Computer Simulators	