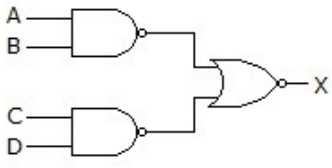
Benha University
Faculty of Engineering (at Shoubra)
Electrical Engineering Department
Preparatory year

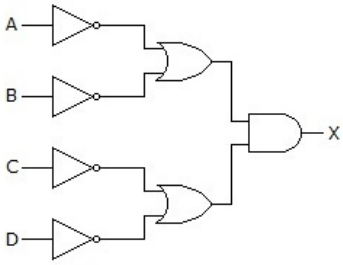
Midterm Exam
Subject: Computer-ECE001
Date: 29 March 2017
Duration: 1 Hour

1 You should attempt all requested parts	• No of Questions 1 in 2 page(s)
2 You should mark your answer clearly	• **Exam Model: ECE201799912** (Total Mark: 10)
2 **Calculator is Not Allowed**	• Examiner: Dr.Ahmed Bayoumi-Dr.Shady Elmashad

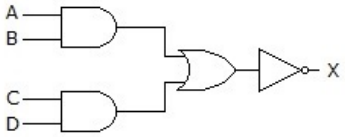
1. Identify the choice that best completes the statement or answers the question.



(a) Figure A



(b) Figure B



(c) Figure C

(1) A ... is an electrostatic digital printer. It produces high-quality text and graphics
A. Inkjet printer B. Plotter **C. Laser Printer** D. Scanner

(2) .... is a memory management scheme
A. Booting B. Interrupting C. Decode **D. Paging**

(3) Data is stored temporary at A. USB B. Hard Disk C. Tape **D. RAM**

(4) A barcode reader is an example of a(n) ...
A. processing device B. output device C. storage device **D. input device**

(5) The value $(1101111)_2$ in a octal system is A. 151 **B. 157** C. 69 D. 51

(6) .... is the number of distinct pixels in each dimension that can be displayed in screen
A. Dot pitch B. Screen size **C. Resolution** D. LCD

(7) Logic circuit (b) can be represented by expression
A. $(A.B)' + (C.D)'$ B. $A'.B' + C'.D'$ C. $A.B.C.D$ **D.** $(A' + B')(C' + D')$

(8) Which of the following is assumed to be a computer connector
A. CPU B. Memory C. Motherboard **D. USB**

(9) Which of the logic circuits in the figure are equivalent?
A. a and b B. a and c **C. b and c** D. None of the above

(10) The Boolean expression $(AB)'.(A' + B)$ can be simplified to
A. Zero B. One C. B **D.** A'

(11) The value $(5C)_{16}$ in a decimal system is **A. 92** B. 75 C. 4A D. A4

(12) for logic circuit (c) if A = 0, B = 0, C = 0 and D = 0 the output will be **A. One** B. Zero

(13) for logic circuit (b) if A = 0, B = 0, C = 0 and D = 0 the output will be **A. One** B. Zero

(14) .... Is one operation executed by a processor **A. Instruction** B. CPU cycle C. Machine cycle D. Main cycle

(15) CPU perform the .... operation(s)
A. Virtual **B. Fetch** C. Printing operation D. All of the above

(16) .... Is the operating system core software
A. Memory management B. Backup C. Multitasking **D. Kernel**

(17) The logic gate that will have HIGH or 1. at its output when all of its inputs is LOW is:
A. AND gate B. OR gate C. XOR gate **D. None of the above**

(18) The OS uses .... memory as an extension of RAM.
A. DMA B. Primary C. Secondary **D. None of the above**

(19) The value $(101011)_2$ in a decimal system is **A. 43** B. 42 C. 44 D. A4

(20) The sum and carry values of $(0011)_2 + (1001)_2$ are

A. Sum = 0 and Carry = 0
B. Sum = 1 and Carry = 0
C. Sum = 0 and Carry = 1
D. **None of the above**

(21) How many truth table entries are necessary for a five-input circuit? A. 4 B. 8 C. 16 **D. 32**

(22) The value of $(1001)_2 + (0011)_2$ equal **A. 1100** B. 1101 C. 1000 D. 1

(23) The first step in the machine cycle is ... **A. fetch** B. execute C. decode D. store

(24) The value $(56)_{10}$ in an octal system is A. 101 B. 101100101 **C. 70** D. A5

(25) .... is a command line operating system **A. Dos** B. Windows C. Android D. Linux

(26) A tab drive is an example of a(n) .... access A. Optical B. Random **C. Sequential** D. Magnetic

(27) The value$(3B)_{16}$ in a octal system is A. 52 **B. 73** C. 42 D. 32

(28) The full adder circuit implemented to add two digits
A. FALSE B. TRUE

(29) .... operating systems have the ability to run more than one application program at a time.
A. Multitasking B. Single-tasking C. Extra D. Hyper

(30) for logic circuit (a) if A = 1, B = 1, C = 1 and D = 1 the output will be **A. One** B. Zero

Name:_____ **ID Number:** _____ **Points...../30**

1. A B C D	11. A B C D	21. A B C D
2. A B C D	12. A B C D	22. A B C D
3. A B C D	13. A B C D	23. A B C D
4. A B C D	14. A B C D	24. A B C D
5. A B C D	15. A B C D	25. A B C D
6. A B C D	16. A B C D	26. A B C D
7. A B C D	17. A B C D	27. A B C D
8. A B C D	18. A B C D	28. A B C D
9. A B C D	19. A B C D	29. A B C D
10. A B C D	20. A B C D	30. A B C D