

Figure 1

45. MOV BYTE PTR [1000H],11H

MOV BYTE PTR [1001H],88H

MOV DX,[1000H]

- DH = not changed and DL = 11H
- DH = 11H and DL = not changed
- DH = 11H and DL = 88H
- DH = 88H and DL = 11H

46. MOV AL,[300H]

- AL=contents of memory location whose physical address is $(CS \times 10H + 300H)$
- AL=contents of memory location whose physical address is $(DS \times 10H + 300H)$
- AL=contents of memory location whose physical address is $(DS + 3000H)$
- AL=300H

47. Paging virtual memory systems incur fragmentation

- In each page of the process pages.
- In the process page table.
- In the last page of the process pages.
- None of the above.

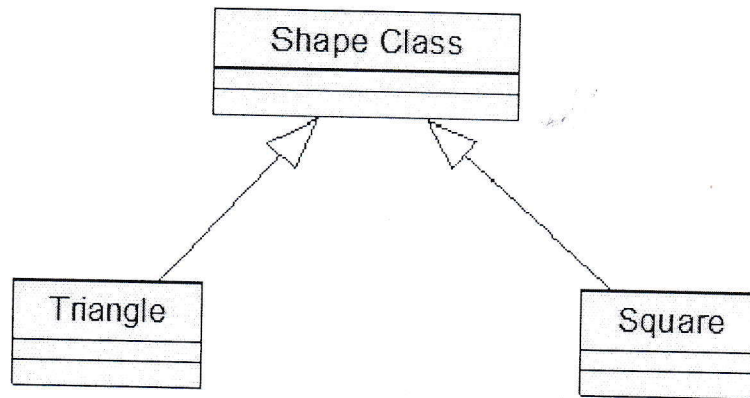
41. What is the register value after an arithmetic shift right if the initial value is 10011100?
- a. 11011001
 - b. 11001110
 - c. 10110101
 - d. 10111010
42. Computer with _____, all operations are done between AC register and memory operand
- a. one address instruction
 - b. two address instruction
 - c. three address instruction
 - d. zero address instruction
43. For figure 1, the address range of memory device number 8 is:
- a. FF000 – FFFFF
 - b. FE000 – FFFFF
 - c. FC000 – FFFFF
 - d. F8000 – FFFFF
 - e. None of the above
44. For figure 1, the total size of the memory interfaced is:
- a. 128 KB
 - b. 64 KB
 - c. 32 KB
 - d. 16 KB

34. What does the term 'web browser' usually mean?
- a. A person
 - b. A file
 - c. A program
 - d. An operating system
35. What is the name given to a computer which sends HTML and other files to users' PCs?
- a. PC
 - b. Network
 - c. workstation
 - d. web server
36. HTTP client request is performed by establishing a _____ connection to a particular port on the server
- a. user datagram protocol.
 - b. transmission control protocol.
 - c. broader gateway protocol.
 - d. none of the mentioned.
37. In which mode FTP, the client initiates both the control and data connections
- a. passive mode
 - b. active mode
 - c. both (a) and (b)
 - d. none of the mentioned
38. The memory module built of integrated capacitors and therefore its contents must be completely refreshed periodically is:
- a. SRAM devices
 - b. EPROM devices
 - c. DRAM devices
 - d. Flash memory devices
39. In 16-bit microprocessor memory interface the signals used in separate bank write strobes are:
- a. Lower address pin
 - b. Write control signal to memory controller
 - c. Bank High Enable
 - d. All the above three signals
40. The category of BSA instruction is?
- a. Arithmetic
 - b. Moving information
 - c. Program control
 - d. Shift

- d. they are fast filter.
27. White noise has ____ effect than colored noise on communication systems.
- a. more
 - b. same.
 - c. less
 - d. dual
28. Which layer of the OSI model is concerned with end-to-end message delivery over the network?
- a. Network
 - b. Transport
 - c. Data link
 - d. Application
29. Which of the following are true about TCP and IP? (Choose two)
- a. TCP is connectionless and IP is connection oriented.
 - b. TCP is reliable and IP is unreliable.
 - c. IP is connectionless and TCP is connection oriented.
 - d. TCP is unreliable and IP is reliable.
30. A network administrator needs to create a new network that has 14 computers and two router interfaces. What subnet mask will provide the appropriate number of IPv4 addresses for this network with minimal wasted addresses?
- a. 255.255.255.128
 - b. 255.255.255.192
 - c. 255.255.255.224
 - d. 255.255.255.240
31. Why are higher-speed Ethernet implementation more susceptible to noise?
- a. More collision.
 - b. Shorter bit times.
 - c. Full-duplex operation.
 - d. UTP cables are required instead of fiber.
32. Which of the following describes a connection to a switch port?
- a. Isolates broadcast.
 - b. Is a separate collision domain.
 - c. Use the MAC address of the switch port as the destination.
 - d. Regenerates every bit that arrives out every port on the switch.
33. Which one of the following protocols that the http and ftp protocols are used
- a. V.90
 - b. TCP/IP
 - c. Linux
 - d. DSV

- c. Class
- d. Component

22. What type of relationship is represented by Shape class and Square ?



- a. Realization
 - b. Generalization
 - c. Aggregation
 - d. Dependency
23. Which one of the following is a functional requirement?
- a. Maintainability
 - b. Portability
 - c. Robustness
 - d. Testability
 - e. None of the mentioned
24. "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing ?
- a. Functional
 - b. Non-Functional
 - c. Known Requirement
25. Bi stable multivibrator have:
- a. No stable state
 - b. two stable states
 - c. three stable states
 - d. one stable state
26. FIR filters characterized by the one of the following
- a. they are not stable filter.
 - b. they have infinite response.
 - c. they are stable and have linear phase response.

Q2:

16. The access time of memory is the time required for performing any single operation.

- a. Longer than
- b. Shorter than
- c. Negligible than
- d. Same as

17. A pipeline is like

- a. an automobile assembly line
- b. house pipeline
- c. both a and b
- d. a gas line

18. SIMD stands for

- a. Single Instruction Stream Over Multiple Data Streams
- b. Single Instruction Stream Over Minimum Data Streams
- c. Single Instruction Stream Over Media Data Streams
- d. Multiple Instruction Streams and Single Data Stream

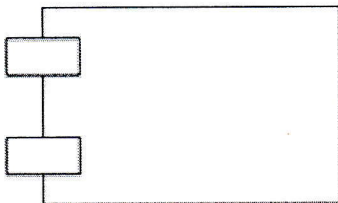
19. A CPU has 8 cores, with HT. As such, there are.... logical cores

- a. 1
- b. 2
- c. 64
- d. 8
- e. 32
- f. 16

20. CISC stands for

- a. Common Instruction Set Computers
- b. Complex Instruction Set Compilers
- c. Complex Instruction Set Computers
- d. Compound Instruction Set Computers

21. Which element of UML is being shown in the figure?



- a. Node
- b. Interface

University of Baghdad
College of Engineering
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M.Sc. Admission Test
Year: 2015-2016
Time: 3 Hours

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العام الدراسي: 2015-2016
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Note: Attempt All Questions

Q1: State whether the following statements are true or false: (All questions have equal marks)

1. Communication between the keyboard and the system is in Asynchronous mode.
2. Stream is one of the Mouse modes of operation.
3. SCSI devices are classified as initiators and targets.
4. Magnetic media records data on a single, continuous spiral track and not on concentric tracks as in CDs.
5. During the read process, a head generates exactly the same signal that was written in the magnetic media.
6. The directory sector consists of the first sector (sector 0) on the volume or disk.
7. The important components on the motherboard are the microprocessor, the chipset comprising the system controller (South Bridge) and the peripheral controller (North Bridge), super I/O Chip, memory slots, flash BIOS, expansion bus slots and different types of connectors.
8. The super I/O chip is connected to the PCI bus.
9. The floppy disks and hard disk in a PC are the primary storage devices and use magnetic principles to store and retrieve the binary information.
10. The memory space is logically classified into conventional, extended and expanded memory.
11. A stable system is a dynamic system with a bounded output response for any input.
12. The Routh-Hurwitz criterion is a necessary and sufficient criterion for determining the stability of linear systems.
13. A digital control system uses digital signals and a digital computer to control a process.
14. The sampled signal is available only with limited precision.
15. The root locus always starts at the zeros and ends at the poles of $G(s)$.

48. Suppose each of two processes that share a variable needs to update that shared variable at some point during the process execution. If the processes are not made to mutually exclude each other from updating the shared variable simultaneously, then on any concurrent execution of the two processes the system

- a. Will work correctly.
- b. Will not work correctly.
- c. Will occasionally work correctly.
- d. Will deadlock.

49. FIFO scheduling is

- a. Preemptive Scheduling.
- b. Non Preemptive Scheduling.
- c. Deadline Scheduling.
- d. Fair share scheduling.

50. The state of a process after it encounters an I/O instruction is

- a. Ready.
- b. Blocked.
- c. Ready suspend.
- d. Running.

Good Luck