

## Database Systems - Section 1

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A report generator is used to

- A. update files
  - B. print files on paper
  - C. data entry
  - D. All of the above
  - E. None of the above
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2. Which of the following is not a logical data-base structure?

- A. tree
  - B. relational
  - C. network
  - D. chain
  - E. All of the above
- 

3. Which of the following is a database administrator's function?

- A. database design
  - B. backing up the database
  - C. performance monitoring
  - D. user coordination
  - E. All of the above
- 

4. Primitive operations common to all record management systems include

- A. Print
  - B. Sort
  - C. Look-up
  - D. All of the above
  - E. None of the above
- 

5. Each of data files has a \_\_\_\_\_ that describe the way the data is stored in the file.

- A. File structure
- B. Records

- C. Fields
- D. Database
- E. None of the above

### Management Information Systems - Section 1

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1. Which of the following is(are) true of the EDP auditors?
  - A. they should have computer expertise
  - B. they will be replaced by traditional auditors in the near future
  - C. two of the above
  - D. currently, there is a very high demand for them, particularly from firms that use personal computers
  - E. None of the above

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2. Controls of data communication deal with
  - A. the communication channel
  - B. the computer
  - C. terminals
  - D. All of the above
  - E. None of the above

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3. A lockbox service is used for
  - A. depositing cash when bank is closed
  - B. paying bank customer bills automatically
  - C. storing papers in a bank vault
  - D. depositing payments to bank customers
  - E. None of the above

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4. Critical path of the PERT chart is:
  - A. path which takes the longest time to complete the project
  - B. the shortest path
  - C. both of the above
  - D. path which takes the shortest time to complete the project
  - E. None of the above

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5. Inventory is also referred to as:

- A. stock
- B. warehouse capacity
- C. materials
- D. materials in hand
- E. None of the above

### System Analysis and Design - Section 1

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1. System Study involves

- A. study of an existing system
- B. documenting the existing system.
- C. identifying current deficiencies and establishing new goals
- D. All of the above
- E. None of the above

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2. The primary tool used in structured design is a:

- A. structure chart
- B. data-flow diagram
- C. program flowchart
- D. module
- E. None of the above

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3. In a \_\_\_\_\_ one module of the new information system is activated at a time.

- A. System Development Life Cycle
- B. CASE tool
- C. Phased Conversion
- D. Success factors
- E. None of the above.

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4. In Prototyping

- A. BASIC is used
- B. COBOL is used

- C. 4GLs are used
  - D. system is documented
  - E. None of the above
- 

5. The step-by-step instructions that solve a problem are called \_\_\_\_\_.

- A. An algorithm
- B. A list
- C. A plan
- D. A sequential structure
- E. None of the above

### Automation System - Section 1

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1. A program language:

- A. defines the form of the instruction
  - B. is always machine dependent
  - C. is never machine dependent
  - D. All of the above
  - E. None of the above
- 

2. Which of the following symbol modes are used to input of graphics to General CAD system?

- A. Live and Rectangle mode
  - B. Arc and Circle mode
  - C. Dimension and Alphanumeric mode
  - D. All of the above
  - E. None of the above
- 

3. Which technique enables the designer to mold and shape, rather than construct on object using a series of lines?

- A. Solid modeling
- B. Wire-frame modeling
- C. Surface modeling
- D. FEM (Finite Element Modeling)
- E. None of the above

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4. Computer-based controllers:
- [A.](#) should be built in a modular fashion wherever possible
  - [B.](#) are very difficult to change
  - [C.](#) are very flexible
  - [D.](#) (a) and (c) above
  - [E.](#) None of the above
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5. Flood guns bombard the phosphor surface of the tube in which one of the following types of CRT technology?
- [A.](#) Direct view storage tube
  - [B.](#) Raster scan CRT
  - [C.](#) Refresh-vector CRT
  - [D.](#) Stroke CRT
  - [E.](#) None of the above

### Digital Computer Electronics - Section 1

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1. Conversion of decimal number  $61_{10}$  to its binary number equivalent is
- [A.](#)  $110011_2$
  - [B.](#)  $11001110_2$
  - [C.](#)  $111101_2$
  - [D.](#)  $11111_2$
  - [E.](#) None of the above
- 
2. An OR gate can be imagined as
- [A.](#) switches connected in series
  - [B.](#) switches connected in parallel
  - [C.](#) MOS transistors connected in series
  - [D.](#) All of the above
  - [E.](#) None of the above
- 
3. Address 200H contains the byte 3FH. What is the decimal equivalent of 3FH
- [A.](#) 63

- [B.](#) 32
  - [C.](#) 16
  - [D.](#) 38
  - [E.](#) None of the above
- 

4. Conversion of an octal number  $112_8$  to hexadecimal number is

- [A.](#)  $4A_{16}$
  - [B.](#)  $5A_{16}$
  - [C.](#)  $15_{16}$
  - [D.](#)  $20_{16}$
  - [E.](#) None of the above
- 

5. The functional difference between SR flip-flop and JK flip-flop is that

- [A.](#) JK flip-flop is faster than SR flip-flop
- [B.](#) JK flip-flop has a feed back path
- [C.](#) JK flip-flop accepts both inputs 1
- [D.](#) JK flip-flop does not require external clock
- [E.](#) None of the above

### Electronic Principles - Section 1

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In an intrinsic semiconductor, the number of free electrons

- [A.](#) Equals the number of holes
  - [B.](#) Is less than the number of holes
  - [C.](#) Is greater than the number of holes
  - [D.](#) Impossible to say
  - [E.](#) None of the above
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2. A device that converts mechanical into electrical energy is?

- [A.](#) solar cell
- [B.](#) thermocouple
- [C.](#) chemical cell
- [D.](#) generator



E. None of the above

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3. Which one of the following kinds of materials has the lowest permeability?

- A. A diamagnetic material
  - B. A paramagnetic material
  - C. A ferromagnetic material
  - D. All of the above
  - E. None of the above
- 

4. The total impedance of a parallel RLC circuit:

- A. always increases as the applied frequency increases
  - B. is equal to the sum of the values of resistance, inductive reactance and capacitive reactance
  - C. always decreases as the applied frequency increases
  - D. is maximum at the resonant frequency
  - E. None of the above
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5. The rise time of a pulse waveform is the time required for the voltage to rise:

- A. from zero to its rms value
- B. from zero to its peak value
- C. from 10% of the peak value to 70.7% of the peak value
- D. from 10% of the peak value to 90% of the peak value
- E. None of the above

### Language Processors - Section 1

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Which of the following functions is/ are performed by the loader?

- A. Allocate space in memory for the programs and resolve symbolic references between object decks
  - B. Physically place the machine instructions and data into memory
  - C. Adjust all address dependent locations, such as address constants, to correspond to the allocated space
  - D. All of the above
-

2. Convert the 11014B machine language instructions into assembly language, assuming that they were not generated by pseudo-ops:

- A. ASRA
  - B. LOADA h#0D4E, i
  - C. STOREA h#014B, d
  - D. ADDA h#01FE, i
- 

3. The advantage(s) of incorporating the macro processor into pass 1 is/ are:

- A. many functions do not have to be implemented twice
  - B. Functions are combined and it is not necessary to create intermediate files as output from the macro processor and input to the assembler
  - C. more flexibility is available to the programmer in which he/she may use all the features of the assembler in conjunction with macros
  - D. All of the above
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4. In which addressing mode, the effective address of the operand is generated by adding a constant value to the contents of register?

- A. absolute mode
  - B. indirect mode
  - C. immediate mode
  - D. index mode
- 

5. A self-relocating program is one which

- A. cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation
- B. consists of a program and relevant information for its relocation
- C. can itself perform the relocation of its address-sensitive portions
- D. All of the above

### Object Oriented Programming Using C++ - Section 1

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You can use C++ as a procedural, as well as an object-oriented, language

- A. True
  - B. False
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2. A default catch block catches

- A. all thrown objects



- B. no thrown objects
  - C. any thrown object that has not been caught by an earlier catch block
  - D. all thrown objects that have been caught by an earlier catch block
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3. Adding a derived class to a base class requires fundamental changes to the base class

- A. True
  - B. False
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4. Format flags may be combined using

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5. The use of the break statement in a switch statement is

- A. optional
- B. compulsory
- C. not allowed. It gives an error message
- D. to check an error
- E. None of the above