

IBPS Specialist IT Officer Previous Paper 2012

1. A special type gateway that can keep external users from accessing resources on the LAN users access the external info is called:
 - A. Repeater
 - B. **Firewall**
 - C. Encryption
 - D. Hub
 - E. None of these
2. What is the name given to the exchange of control signals which is necessary for establishing a connection between a modem and a computer at one end of a line and another modem and computer at the other end?
 - A. **Handshaking**
 - B. Modem options
 - C. Protocol
 - D. All of these
 - E. None of these
3. In SQL, which command is used to changes data in a data table?
 - A. **UPDATE**
 - B. INSERT
 - C. BROWSE
 - D. APPEND
 - E. None of these
4. In SQL, which of the following is not a data definition language command?
 - A. RENAME
 - B. REVOKE
 - C. GRANT
 - D. **UPDATE**
 - E. None of these
5. Which command(s) is (are) used to redefine a column of the table in SQL ?
 - A. **ALTER TABLE**
 - B. DEFINE TABLE
 - C. MODIFY TABLE
 - D. ALL of the these
 - E. None of these
6. In a relational schema, each tuple is divided into fields called

- A. Relations
 - B. **Domains**
 - C. Queries
 - D. All of the these
 - E. None of these
7. An indexing operation
- A. Sorts a file using a single key
 - B. Sorts file using two keys
 - C. **Establishes an index for a file**
 - D. Both (1) and (3)
 - E. None of these
8. Data security threats include
- A. Hardware failure
 - B. **Privacy invasion**
 - C. Fraudulent manipulation of data
 - D. All of these
 - E. None of these
9. The language used in application programs to request data from the DBMS is referred to as the
- A. **DML**
 - B. DDL
 - C. Query language
 - D. DCL
 - E. None of these
10. A ___ contains the smallest unit of meaningful data, so you might call it the basic building block for a data file.
- A. File structures
 - B. Records
 - C. **Fields**
 - D. Database
 - E. None of these
11. A ___ means that one record in a particular record type is related to only one record of another record type.
- A. **One to one relationship**
 - B. One to many relationship
 - C. Many to one relationship
 - D. Many to many relationship
 - E. None of these
12. Through linked list one can implement
- A. Stack
 - B. Graph

- C. Queue
 - D. **All of these**
 - E. None of these
13. A heap allows a very efficient implementation of a
- A. Doubled ended queue
 - B. **Priority queue**
 - C. Stack
 - D. Trees
 - E. None of these
14. In files, there is a key associated with each record which is used to differentiate among different records. For every file there is at least one set of keys that is unique. Such a Key is called
- A. Unique key
 - B. Prime attribute
 - C. Index key
 - D. **Primary Key**
 - E. Null key
15. _____ is primarily used for mapping host names and email destinations to IP address but can also be used for other purposes.
- A. TCP(transfer control protocol)
 - B. **DNS(Domain Name System)**
 - C. SHA (Secure Hash Algorithm)
 - D. Simple Network Management Protocol (SNMP)
 - E. None of these
16. Override is a method
- A. **For an operation that replaces an inherited method for the same operation**
 - B. For a data that replaces an inherited method for the same operation
 - C. For an operation that takes arguments form library function
 - D. All of these
 - E. None of these
17. Local variables
- A. Are created outside a block
 - B. **Are known only to that block**
 - C. Continue to exist when their block ends
 - D. Are illegal in C++
 - E. None of these
18. _____ is virus that inserts itself into a system's memory. Then it take number of actions when an infected file is executed.
- A. Web scripting virus

- B. Polymorphic virus
 - C. Macro virus
 - D. Boot sector virus
 - E. **Resident virus**
19. This ___ data mining technique derives rules from real world case examples.
- A. Waterfall model
 - B. RAD
 - C. White Box
 - D. Spiral model
 - E. **Case based reasoning**
20. The ___ remains operative until the software is required.
- 1. Waterfall model
 - 2. Incremental model
 - 3. **Spiral model**
 - 4. Prototyping model
 - 5. Incremental model

Data mining evolve as a mechanism to cater the limitations of ___ systems to deal massive data sets with high dimensionality, new data type, multiple heterogeneous data resource etc.

. **OLTP**

- A. OLAP
- B. DSS
- C. DWH
- D. None of these

An important application of cryptography, used in computerized commercial and financial transaction

. Data mining

- A. Data warehousing
- B. **Digital signature**
- C. Media convergence
- D. None of these

Rows of a relation are called:

. Relation

- A. **Tuples**
- B. Data structure
- C. An entity
- D. None of these

The drawbacks of the binary tree sort are remedied by the

. Linear sort

- A. Quick Sort

- B. **Heap Sort**
- C. Insertion Sort
- D. None of these

Which layer of OSI determines the interface of the system with the user?

- . Network
 - A. **Application**
 - B. Data link
 - C. Session
 - D. None of these
26. The tracks on a disk which can be accessed without repositioning the R/W heads is
- A. Surface
 - B. **Cylinder**
 - C. Cluster
 - D. All of these
 - E. None of these
27. Which of the following is true about GUIs?
- A. They make computers easier to use for nonprofessionals
 - B. They use icons and menus that users can select with a mouse
 - C. **Both (1) and (2)**
 - D. All of the these
 - E. None of these
28. A computer system consisting of its processor, memory and I/O devices accepts data, processes it and produces the output results .Can you tell in which component is the raw data fed?
- A. Mass Memory
 - B. **Main Memory**
 - C. Logic Unit
 - D. Arithmetic unit
 - E. None of these
29. The mechanical diskette drive in which you insert your diskette is connected to the computer's—bus
- A. Data
 - B. **Communication**
 - C. Address
 - D. Parallel
 - E. None of these

30. A set of programs that handle firm's database responsibilities is called a
- A. Data base Management System (DBMS)
 - B. Data Base Processing System (DBPS)
 - C. Data Management System (DMS)
 - D. **All of these**
 - E. None of these
31. You are in the process of analyzing a problem that requires you to collect and store TCP/ IP Packets. Which of the following utilities is best suited for this purpose?
- A. NBTSTAT
 - B. Performance Monitor
 - C. NETSTAT
 - D. **Network Monitor**
 - E. DHCP Management Console
32. A top to bottom relationship among the items in a database is established by a
- A. **Hierarchical Schema**
 - B. Network Schema
 - C. Relational Schema
 - D. All of the above
 - E. None of these
33. The process of transferring data intended for a peripheral device into a disk (or intermediate store) so that it can be transferred to peripheral at a more convenient time or in bulk is known as
- A. Multiprogramming
 - B. **Spooling**
 - C. Caching
 - D. Virtual programming
 - E. None of these
34. Which of the following system program forgoes the production of object code to generate absolute machine code and load it into the physical main storage location from which it will be executed immediately upon completion of the assembly?
- A. Two pass assembler
 - B. **Load and go assembler**
 - C. Macro processor
 - D. Compiler

- E. None of these
35. Relocation bits used by relocating loader are specifically (generated) by:
- A. Relocating loader itself
 - B. **Linker**
 - C. Assembler or translator
 - D. Macro processor
 - E. None of these
36. From what location are the 1st computer instructions available on boot up ?
- A. **ROM BIOS**
 - B. CPU
 - C. Boot.ini
 - D. CONFIG.SYS
 - E. None of these
37. Abstraction is
- A. **The act of representing the essential features of something without including much detail.**
 - B. The act of representing the features of something much detail
 - C. A tree structure
 - D. All of these
 - E. None of these
38. Aggregation is a special for of
- A. Generalization
 - B. Specialization
 - C. **Association**
 - D. Object
 - E. None of these
39. Consider an operation of addition. For two numbers, the operating will generate a sum. If the operand are strings, and the same operation would produce a third string by concatenation. This features is called _____.
- A. Inheritance
 - B. Encapsulation
 - C. **Polymorphism**
 - D. Binding
 - E. None of these

40. In ER diagrams, the term cardinality is a synonym for the term—
A. Attribute
B. **Degree**
C. Entities
D. Cartesian
E. None of these
41. An oracle server index—
A. Is a schema object
B. Is used to speed up the retrieval of rows by using a pointer
C. Is independent of the table it indexes
D. **All of these**
E. None of these
42. Which of the following is not a context free grammar components?
A. Terminal symbols
B. Nonterminal symbol
C. Production line
D. **List**
E. None of these
43. Which of the following is a phase of RAD model?
A. Business modeling
B. Data modeling
C. Application generation
D. **All of the above**
E. None of these
44. _____ is a set design steps that allows a DFD with transform flow characteristics to be mapped into a predefined template for program structure.
A. Transaction flow
B. Contributor
C. **Transform mapping**
D. Design evaluation
E. None of these
45. A combinational logic circuit which is used to send data coming from a single source to two or more separate destinations is called as
A. Decoder
B. Encoder
C. Multiplexer

- D. **Demultiplexer**
E. None of these
46. Which of the following is a universal gate?
A. AND
B. OR
C. EXOR
D. **NAND**
E. None of these
47. The two's complement of binary number 010111.1100 is
A. 101001.1100
B. **101000.0100**
C. 010111.0011
D. 101000.0011
E. None of these
48. In 8086 the overflow flag is set when
A. The sum is more than 16 bits
B. **Signed numbers go out their range after an arithmetic operation**
C. Carry and sign flags are set
D. During subtraction
E. None of these
49. What does microprocessor speed depends on?
A. Clock
B. Data bus width
C. **Address bus width**
D. All of these
E. None of these
50. The TRAP is one of the interrupts available its INTEL 8085. Which one statement is true of TRAP?
A. It is level triggered
B. It is negative edge triggered It is positive edge triggered
C. It is positive edge triggered
D. **It is both positive edge triggered and level triggered**
E. None of these

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1. Which of the following microprocessors is not 8 bit microprocessor?
 1. 8085
 2. 6502
 3. Z80
 4. **68000**
 5. None of these
2. Microprocessor 8085 is the enhanced version of which essentially the same construction set
 1. 6800
 2. **8080**
 3. 6800A
 4. 8000
 5. All of these
3. Which of the following interrupts has the lowest priority?
 1. RST 5.5
 2. RST 7.5
 3. TRAP
 4. **INTR**
 5. None of these
4. The Data control language (DCL).
 1. **is used to manage user access to data bases**
 2. is used to manipulate the contents of a database in some form
 3. Both (1) and (2)
 4. Used for inserting, deleting and updating data in a database
 5. None of these
5. A collection of fields is called a record with respect of DBMS, a record corresponds to
 1. **Tuple**
 2. Relation
 3. File
 4. Attribute
 5. None of these.
6. Multiplexer means
 1. One into many
 2. **Many into one**
 3. Many into many
 4. All of these
 5. None of these
7. Which gate is known as universal gate ?

1. NOT gate
 2. **NAND gate**
 3. AND gate
 4. XOR gate
 5. None of the above
8. Which of the following is the first integrated logic family?
1. TTL
 2. T1L
 3. DTL
 4. MOS
 5. **RTL**
9. A top to bottom relationship among the items in a database is established by a
1. **Hierarchical schema**
 2. Network Schema
 3. Relational Schema
 4. Both (1) and (2)
 5. Both (2) and (3)
10. In the relational schema, each tuple is divided into fields called.
1. Relations
 2. **Domains**
 3. Queries
 4. Both (1) and (2)
 5. Both (1) and (3)
11. The modify operation is likely to be done after.
1. Delete
 2. Insert
 3. **Look up**
 4. All of the above
 5. None of these
12. The way a particular application views the data from the database that the application uses is a :
1. Module
 2. Relational model
 3. Schema
 4. **Subschema**
 5. None of these
13. Which two files are used during operation of the DMBS?
1. Query language and utilities
 2. Data manipulation language and query language:
 3. **Data dictionary and transaction log**

4. Data dictionary and query language
 5. None of these
14. Which normal form is considered adequate for relational database design?
1. 2 NF
 2. **3 NF**
 3. 4 NF
 4. BCNF
 5. None of these
15. An attribute of one matching the primary key another table, is called as
1. **Foreign key**
 2. Secondary key
 3. Candidate key
 4. Composite key
 5. None of these
16. Which of the following SQL commands can be used modify existing data in a database table?
1. MODIFY
 2. **UPDATE**
 3. CHANGE
 4. NEW
 5. None of these
17. Each node in a linked list must contain at least:
1. Three fields
 2. Five fields
 3. Four fields
 4. One fields
 5. **Two fields**
18. The average number of key comparisons done in a successful sequential search in a list of length "n" is
1. Log n
 2. $(n-1)/2$
 3. $n/2$
 4. **$(n+1)/2$**
 5. None of these
19. The order of the binary search algorithm is
1. n
 2. n^2
 3. $n\log(n)$
 4. **$\log(n)$**

5. None of these
20. Which of the following is useful in implementing quick sort?
1. Stack
 2. Set
 3. **List**
 4. Queue
 5. None of these
21. OSI model consists of ____ layers
1. Three
 2. Five
 3. Six
 4. Eight
 5. **Seven**
22. Which data communication method is used to transmit the data over a serial communication link.
1. Simplex
 2. **Full duplex**
 3. Half duplex
 4. Both (1) and (2)
 5. Both (2) and (3)
23. Encryption and decryption are functions of the ____ layer.
1. Transport
 2. Session
 3. Application
 4. Physical
 5. **Presentation**
24. Which of the following is not a connecting device?
1. Bridge
 2. **Trans receiver**
 3. Router
 4. Repeater
 5. None of these
25. Repeaters function in the ____ layer
1. **Physical**
 2. Data link
 3. Network
 4. Both (1) and (2)
 5. None of these
26. How many hosts are attached to each of the local area network at your site?

1. 128
 2. 256
 3. **254**
 4. 64
 5. None of these
27. Which of the following types of software should we use if we often need to create, edit and print documents?
1. **Word processing**
 2. Spread sheet
 3. Object program
 4. UNIX
 5. None of these
28. Thrashing
1. Can always be avoided by swapping
 2. **Is a natural consequence of virtual memory system Always occurs on large computers**
 3. Can be caused by poor paging algorithms
 4. None of these
29. _____ is present in spiral model
1. Code generator
 2. **Risk analysis**
 3. Code optimizer
 4. Reengineering
 5. None of these
30. The approach used in top down analysis and design is :
1. To identify the top level functions by combining many smaller components into a single entity
 2. **To identify a top level function and then create hierarchy of lower level modules and components**
 3. To prepare flowcharts after programming has been completed
 4. All of these
 5. None of these
31. B2C ecommerce focuses on customer ____.
1. Respond to customer
 2. Obtain customer feedback
 3. Establish buyerseller transaction
 4. **All of the above**

5. None of these
32. OLAP stands for
1. Online Analytical project
 2. Online Analytical problem
 3. Online Application process
 4. Online Application Problem
 5. **Online Analytical processing**
33. Data mining is
1. Storing data when in need
 2. **Automatic extraction of patterns of information**
 3. Searching data on Internet
 4. All of these
 5. None of these
34. Decision support systems are based on _____ analysis
1. Query and reporting
 2. Data mining
 3. OLAP
 4. **All of the above**
 5. None of these
35. The term push and pop is related to the
1. Array
 2. Lists
 3. **Stacks**
 4. All of the above
 5. None of these
36. The break statement causes an exit.
1. From the innermost loop only
 2. Only from the innermost switch
 3. **From the loops and switches**
 4. From the innermost loop or switch
 5. None of these
37. Backup procedure helps in
1. Restoring the operation whenever there is a disk failure
 2. Restoring both application and system software whenever there is disk corruption
 3. Restoring the data sites whenever there is a system crash

4. **All of the above**
 5. None of these
38. Software testing is
1. The process of demonstrating that error are not present
 2. One process of establishing confidence that a program does what it is supposed to do
 3. The process of executing a program to show that it is working as per specifications
 4. **The process of executing a program with the intent of finding errors**
 5. None of these
39. Regression testing is primarily related to
1. **Functional testing**
 2. Data flow testing
 3. Development testing
 4. Maintenance testing
 5. None of these
40. Which of the following is easiest software development process model?
1. **Waterfall Model**
 2. Prototyping
 3. Interactive enhancement
 4. Spiral model
 5. All of these
41. Banker's algorithm for resource allocation deals with
1. Deadlock prevention
 2. **Deadlock avoidance**
 3. Deadlock recovery
 4. Mutual exclusion
 5. All of these
42. In Queues, the items deleted at one end is called.
1. Rear
 2. **Front**
 3. Top
 4. Base
 5. None of these

43. Pointer is used in
1. Direct Addressing
 2. **Indirect Addressing**
 3. Indexed mode
 4. Immediate Addressing
 5. None of these
44. An array can be passed in a functions in C language through
1. 'Call by value' only
 2. **'Call by reference' only**
 3. Both (1) & (2)
 4. Call by preference
 5. None of these
45. HTTP refers to
1. Hyper Text Transmission Protocol
 2. **Hyper Text Transfer Protocol**
 3. Hyper Text Tie Protocol
 4. Hyper Text Total Protocol
 5. None of these
46. An email account includes a storage area, often called a (n)
1. **Attachment**
 2. Hyperlink
 3. Mailbox
 4. Ip address
 5. None of these
47. A(n) _____ is a collection of information that determines which files you can access and which setting you use.
1. Network
 2. **User account**
 3. Operating system
 4. File system
 5. None of these
48. To print a document
1. **Select the print command and then select OK**
 2. Select the Ready printer and then select OK
 3. Type PRINT and then press Enter
 4. Close the document, select the print command then select OK
 5. None of these

49. Which part of the computer provides only temporary storage of files?
1. ROM memory
 2. Processor
 3. Hard drive
 4. Mother board
 5. **RAM memory**

50. What will be the output of “a” in following code?

```
#include  
int main()  
int a=20;  
{  
int a=10;  
printf(“%d”,a);  
printf(“%d”,a); return 0;  
}
```

Answer choices

1. 20 20
2. 10 20
3. 20 10
4. 10 10
5. **Compilation Error**

I will provide detailed pdf later. :)