

Kerala State Co-operative Service Examination Board

Final Answerkey For the Post of System Administrator

Notification No : 4/2024 Exam Date : 21-07-2024

1) Fill in the blank with appropriate word:

The _____ of the police man has been lost as he was unnecessarily scolded by the superior officer.

- (A)moral (B)morale (C)discipline (D)strength

Correct Answer : (B)

2) Pick up the incorrect part in the given sentence:

The school authorities adopted /various measure /to enhance the educational standards/of the students.

- (A)The school authorities adopted (B)various measure (C)to enhance the educational standards (D)of the students

Correct Answer : (B)

3) Choose the appropriate synonym for: **SPURIOUS**

- (A)Counterfeit (B)Unaffected (C)Natural (D)Realistic

Correct Answer : (A)

4) Choose the appropriate antonym for: **SHAGGY**

- (A)Bushy (B)Fleecy (C)Sleek (D)Thick

Correct Answer : (C)

5) Complete the following sentence by using appropriate word:

Anusha has been learning English _____ six months.

- (A)since (B)for (C)after (D)before

Correct Answer : (B)

6) Fill in the blank with suitable word:

How many languages ____ in India?

- (A) speaking (B) speak (C) are spoken (D) is speaking

Correct Answer : **(C)**

7) Identify the wrongly spelt word:

- (A) Sierra (B) Quarentine (C) Offshore (D) Frontier

Correct Answer : **(B)**

8) Choose the correctly spelt word:

- (A) Honararium (B) Kalidoscope (C) Bourgeois (D) Procecute

Correct Answer : **(C)**

9) Choose the correct preposition:

Ramu fell down when he was climbing ____ the tree.

- (A) up (B) into (C) in (D) on

Correct Answer : **(A)**

10) Choose the correct form of verb given in bracket:

Arjun seldom (visit) his relatives.

- (A) will visit (B) shall visit (C) would visit (D) visits

Correct Answer : **(D)**

11) In a certain code, **DELICIOUS** is written as **CUOICILET**. Then how is **DIRECTION** written in that code?

- (A) CNSOCTIRE (B) COITCERIO (C) CRITERIAO (D) COCTERIOS

Correct Answer : **(B)**

12)An auto driver starts his journey from a bus station and drives 5km towards south, takes right turn and drives for 7 km before taking a left turn and drives for 3 km and takes a left turn again and drives for 4km. He then travels in the north direction for 2km and then takes a right turn and drives for 3km. How far and towards which direction should he drive to reach the bus station again?

- (A)6km North (B)7km East (C)5km South (D)8km North

Correct Answer : **(A)**

13)Kiran introduced Sukanya by saying that her father is my grandfather's only son. Then what is Kiran's relationship with Sukanya?

- (A)Brother (B)Husband (C)Father-in-law (D)Uncle

Correct Answer : **(A)**

14)If 'BUCKET' = 31 and 'TABLE' = 20, then 'GLASS' = _____.

- (A)58 (B)32 (C)40 (D)29

Correct Answer : **(D)**

15)What is the angle between the hands of the clock when the time is 04.30?

- (A)90° (B)45° (C)60° (D)50°

Correct Answer : **(B)**

16)Read the following character sequence and answer the question:

9 + Z * # 4 B W @ = \$ K 8 Q - 3 % M E R 6 ? J & F

If all the symbols are dropped in the above series, then which element will be at the 9th position from left end?

- (A)8 (B)K (C)3 (D)M

Correct Answer : **(C)**

17)Find out the missing number in the following series:

21, 43, 85, 167, 329, _____, 1293, 2575.

- (A)964 (B)651 (C)828 (D)732

Correct Answer : **(B)**

18) Find out the wrong number from the given following series:

8, 17, 30, 47, 72, 93, 122, 155

(A) 93

(B) 72

(C) 30

(D) 122

Correct Answer : **(B)**

19) In a class there are 39 students altogether. In the annual examination Lawrence's rank is 23 from the top. Then what is his rank from the bottom?

(A) 17

(B) 15

(C) 16

(D) 14

Correct Answer : **(A)**

20) Find out what stands out among the following:

(A) KOUZ

(B) CGMR

(C) LPVY

(D) FJPU

Correct Answer : **(C)**

21) Who is the Central Minister for Rural Development?

(A) Manohar Lal Khattar

(B) Virendra Kumar

(C) Shivraj Singh
Chouhan

(D) Rajiv Revjan
Singh

Correct Answer : **(C)**

22) "Man is born free and everywhere he is in chains" – who said it?

(A) Montesquieu

(B) Jean-Jacques Rousseau

(C) Voltaire

(D) John Locke

Correct Answer : **(B)**

23) India's National Flag was designed by whom?

(A) Shyamji Krishna Varma

(B) Surayya Tyabji

(C) Pingali Venkayya

(D) Sister Nivedita

Correct Answer : **(C)**

24) The first Indian product to get a GI tag?

(A) Alphonso Mango

(B) Darjeeling Tea

(C) Mysore Betel Leaf

(D) Kashmir Saffron

Correct Answer : **(B)**

25)Who invented the World Wide Web?

- (A)Steve Jobs (B)Bill Gates (C)Zucker Berg (D)Tim Bernes-Lee

Correct Answer : **(D)**

26)In which schedule of Indian Constitution Co-operation is included?

- (A)Vth (B)VIth (C)VIIth (D)IXth

Correct Answer : **(C)**

27)'Operation Flood' program is related to organizing _____ throughout the country.

- (A)Agriculture Co-operatives (B)Fisheries Co-operatives (C)Sericulture Co-operatives (D)Dairy Co-operatives

Correct Answer : **(D)**

28)Which is the capital of Fiji?

- (A)Accra (B)Quito (C)Abuja (D)Suva

Correct Answer : **(D)**

29)What is the currency of Hungary?

- (A)Euro (B)Peso (C)Forint (D)Lari

Correct Answer : **(C)**

30)Who is known as Kerala Ibsen?

- (A)Thoppil Bhasi (B)N. Krishna Pillai (C)N.N. Pillai (D)Kambisseri Karunakaran

Correct Answer : **(B)**

31)With which classical dance form is Leela Samson related?

- (A)Bharata Natyam (B)Odissi (C)Kathak (D)Kuchipudi

Correct Answer : **(A)**

32)Who is the new President of the Professional Golf Tour of India (PGTI)?

(A)Ravi Shastri (B)H. Srinivasan (C)Kapildev (D)Sunil Gavaskar

Correct Answer : **(C)**

33)Who is the first Indian women cricketer to score consecutive centuries in ODIs?

(A)Mithali Raj (B)Smriti Mandhana (C)Deepti Sharma (D)Harmanpreet Kaur

Correct Answer : **(B)**

34)Which is the largest producing sector in India?

(A)Primary sector (B)Secondary sector (C)Tertiary sector (D)None of these

Correct Answer : **(C)**

35)Economic Planning comes under which list?

(A)Union List (B)State List (C)Concurrent List (D)Special List

Correct Answer : **(C)**

36)The first development bank of India is ____.

(A)SBI (B)IFCI (C)IDBI (D)ICICI

Correct Answer : **(B)**

37)Which is the fabric developed from the flax plant by Indian Scientists?

(A)Cotton (B)Rayon (C)Nylon (D)Linen

Correct Answer : **(D)**

38)What is Karyology?

(A)Study of Cells (B)Study of Nucleus (C)Study of Cytoplasm (D)Study of Tissues

Correct Answer : **(B)**

39) Which monument is known as the "Dream in Stone"?

- (A) Taj Mahal (B) Panch Mahal (C) Red Fort (D) Humayun Tomb

Correct Answer : **(B)**

40) Pushkar Fair is one of the world's largest shows of -----.

- (A) Flowers (B) Dogs (C) Horses (D) Camels

Correct Answer : **(D)**

41) Which of the following is not an aim or objective of a Co-operative?

- (A) Supply of quality branded inputs (B) Act as an agent of Government (C) Ensure reasonably good return on capital invested by the members (D) Outreach of their services to all the members

Correct Answer : **(B)**

42) The economic Participation of members in the activities of a Co-operative bank is/are in the form of:

- (A) users (B) as owners (C) Users and owners (D) Stake Holders

Correct Answer : **(C)**

43) Internal audit, concurrent audit and external audit are related to the governance practice of:

- (A) Board of Directors (B) Internal Auditors (C) Audit Structure and Financial reporting (D) General body

Correct Answer : **(C)**

44) The short-term credit structure functions as -----.

- (A) Union of primaries (B) A Federal structure (C) Mixed structure (D) None of the above

Correct Answer : **(B)**

45) Which of the following is not a member's rights?

- | | | | |
|--|---|---|---|
| (A) Obtain relevant information of the bank on a regular basis | (B) Elect and remove members of the Board | (C) Effectively participate in the general body | (D) Elect and remove the president of the society |
|--|---|---|---|

Correct Answer : (D)

46) Revised Kisan Credit Card (KCC) scheme was introduced based on the recommendation of a working group headed by:

- | | | | |
|-------------------|------------------|------------------------|------------------|
| (A) B. Shivaraman | (B) T. M. Bhasin | (C) Dr. Raghuram Rajan | (D) Vaidyanathan |
|-------------------|------------------|------------------------|------------------|

Correct Answer : (B)

47) Who made the statement that customer is an important visitor in our premises?

- | | | | |
|-----------------------------|--------------------|------------------|----------------------|
| (A) Pandit Jawaharlal Nehru | (B) Mahatma Gandhi | (C) RBI Governor | (D) Finance Minister |
|-----------------------------|--------------------|------------------|----------------------|

Correct Answer : (B)

48) The Kerala Co-operative Ombudsman Scheme shall not be applicable to:

- | | | | |
|------------------------------------|-----------------------------|-------------------------------|-------------------------|
| (A) Kerala State Co-operative Bank | (B) Urban Co-operative Bank | (C) Service Co-operative Bank | (D) Regional Rural Bank |
|------------------------------------|-----------------------------|-------------------------------|-------------------------|

Correct Answer : (D)

49) Who among the following are the 'A' class members in the Kerala Bank?

- | | | | |
|--|--|--|----------------------|
| (A) State Government and Local Self Government | (B) Primary Agricultural Co-operative Societies and Urban Co-operative Banks | (C) State Government and Primary Agricultural Co-operative Societies | (D) All of the above |
|--|--|--|----------------------|

Correct Answer : (B)

50) Kerala Bank's main borrowings are from -----.

- | | | | |
|------------------|------------------------|----------------------|------------|
| (A) Reserve Bank | (B) Nationalized Banks | (C) State Government | (D) NABARD |
|------------------|------------------------|----------------------|------------|

Correct Answer : (D)

51) From the Banker's point of view, the riskiest charge is:

- (A) Hypothecation (B) Pledge (C) Lien (D) Mortgage

Correct Answer : **(A)**

52) Mortgage is defined under:

- (A) Contract Act (B) Transfer of Property Act (C) Sale of goods Act (D) The Banking Regulation Act

Correct Answer : **(B)**

53) Which of the following is/are covered under pledge?

- (A) Actual delivery of the goods (B) Factory type pledge (C) Constructive delivery of the goods (D) All of the above

Correct Answer : **(D)**

54) Short duration crop loans given to farmers are generally for a maximum period of ____.

- (A) 3 months (B) 6 months (C) 9 months (D) 12 months

Correct Answer : **(D)**

55) Which of the following is a document of the title to the goods?

- (A) Bill of Entry (B) Letter of credit (C) Bill of Lading (D) Certificate of origin

Correct Answer : **(C)**

56) Which bank is known as Banker's Bank?

- (A) NABARD (B) SBI (C) RBI (D) IDBI

Correct Answer : **(C)**

57) When did the National Bank for Agriculture and Rural Development was established?

- (A) July 1982 (B) July 1969 (C) June 1951 (D) June 1961

Correct Answer : **(A)**

58)'Scheduled Bank' in India means a bank _____.

- | | | | |
|---------------------------------|---|---------------------------------------|---|
| (A) Governed by the BR Act 1949 | (B) Included in the second schedule of the RBI Act 1934 | (C) Authorized to do banking business | (D) Incorporated under the companies Act 1956 |
|---------------------------------|---|---------------------------------------|---|

Correct Answer : **(B)**

59)Headquarters of National Housing Bank is located at _____.

- | | | | |
|---------------|------------|---------------|------------|
| (A) Hyderabad | (B) Mumbai | (C) New Delhi | (D) Nagpur |
|---------------|------------|---------------|------------|

Correct Answer : **(C)**

60)Which of the following is not a regulatory institution in Indian financial system?

- | | | | |
|---------|----------|----------|-----------|
| (A) RBI | (B) IRDA | (C) SEBI | (D) CIBIL |
|---------|----------|----------|-----------|

Correct Answer : **(D)**

61)What is the primary purpose of the Control Unit in a CPU?

- | | | | |
|-----------------------------------|------------------------------|--|-------------------------------------|
| (A) Perform arithmetic operations | (B) Manage memory operations | (C) Control and coordinate the activities of other units | (D) Execute input/output operations |
|-----------------------------------|------------------------------|--|-------------------------------------|

Correct Answer : **(C)**

62)Which of the following is a characteristic of Reduced Instruction Set Computing (RISC) architecture?

- | | | | |
|---|---|--|----------------------------------|
| (A) Large instruction set with a single clock cycle execution | (B) Complex instruction with a multiple clock cycle execution | (C) Fewer instructions with a single clock cycle execution | (D) Emphasis on microprogramming |
|---|---|--|----------------------------------|

Correct Answer : **(C)**

63)Which memory type in computer organization is volatile and used for temporary storage of data during program execution?

- | | | | |
|--------------------------------|----------------------------|------------------|---------------|
| (A) RAM (Random Access Memory) | (B) ROM (Read Only Memory) | (C) Cache Memory | (D) Hard Disk |
|--------------------------------|----------------------------|------------------|---------------|

Correct Answer : **(A)**

64)What does the term 'ALU' stand for in computer organization?

(A)Arithmetic Logic Unit

(B)Arithmetic Large Unit

(C)Algorithmic Logic Unit

(D)Azimuthal Logic Unit

Correct Answer : **(A)**

65)What is the binary number equivalent to the decimal number 13?

(A)1011

(B)1101

(C)1110

(D)1001

Correct Answer : **(B)**

66)Which of the following is NOT a type of operating system?

(A)Batch processing operating system

(B)Real-time operating system

(C)Multitasking operating system

(D)Compiler operating system

Correct Answer : **(D)**

67)What is the purpose of virtual memory?

(A)To improve memory access speed

(B)To allow processes to use more memory than physically available

(C)To isolate processes from each other

(D)All of the above

Correct Answer : **(D)**

68)What is the function of a semaphore in process synchronization?

(A)To signal the completion of a critical section

(B)To prevent multiple processes from accessing shared resources simultaneously

(C)To prioritize process execution

(D)All of the above

Correct Answer : **(B)**

69)What is the primary function of an operating system?

(A)To run application programs

(B)To manage hardware resources

(C)To provide a user interface

(D)All of the above

Correct Answer : **(D)**

70) Which architecture uses a memory hierarchy to enhance computer performance?

(A) Harvard Architecture

(B) Von Neumann Architecture

(C) RIS Architecture

(D) CISC Architecture

Correct Answer : **(B)**

71) What is the role of the Memory Address Register (MAR) in computer architecture?

(A) Stores data temporarily

(B) Holds the address of the next instruction to be fetched

(C) Performs arithmetic and logic operations

(D) Controls the flow of data within the CPU

Correct Answer : **(B)**

72) What is the purpose of the clock signal in a computer system?

(A) To synchronize the operations of different components

(B) To store data permanently

(C) To perform arithmetic operations

(D) To manage input/output operations

Correct Answer : **(A)**

73) In a CPU, what does the term "Pipeline" refer to?

(A) A storage unit for frequently accessed data

(B) A sequence of stages where instruction execution occurs

(C) A type of memory used for caching

(D) A peripheral device for input/output operations

Correct Answer : **(B)**

74) Which of the following is responsible for temporarily storing data in a CPU?

(A) Cache Memory

(B) RAM (Random Access Memory)

(C) Hard Disk

(D) ROM (Read Only Memory)

Correct Answer : **(A)**

75) What is the role of a page table in memory management?

(A) To translate virtual memory addresses to physical memory addresses

(B) To allocate and manage page frames in physical memory

(C) To handle memory protection and access control

(D) All of the above

Correct Answer : **(A)**

76) In the context of file system which statement is the MOST accurate description of hard links and symbolic links?

(A) A hard link represents a distinct copy of a file, whereas symbolic link functions as a shortcut to the original file

(B) Hard links are restricted to the same file system, while symbolic links can operate across different file systems

(C) Deleting a hard link removes the original file, while deleting a symbolic link has no impact on the original file

(D) Hard links have the capability to reference directories, while symbolic links are limited to referencing files

Correct Answer : **(B)**

77) What is the primary advantage of using a hash approach in operating system design?

(A) It improves the efficiency of the operating system

(B) It simplifies the development and maintenance of the operating system

(C) It enhances the security of the operating system

(D) All of the above

Correct Answer : **(D)**

78) What is the purpose of a hash function in a hash table?

(A) To efficiently sort elements

(B) To store elements in a specific order

(C) To map key values to unique indices in the table

(D) To dynamically allocate memory for data

Correct Answer : **(C)**

79) What is the difference between a singly linked list and a doubly linked list?

(A) Both have the same time complexity for accessing the last elements

(B) Singly allows access from both ends, doubly only allows one-way traversal

(C) Singly has nodes with one pointer to the next node, doubly has two to next and previous

(D) Singly is more efficient for memory usage, doubly for frequent insertion/deletions

Correct Answer : **(C)**

80) What is the time complexity of searching for an element in an unsorted array?

(A) $O(1)$

(B) $O(\log n)$

(C) $O(n^2)$

(D) $O(n!)$

Correct Answer : **(C)**

81)What data structure is best suited for implementing a queue (FIFO – First In First Out)?

- (A)Array (B)Linked List (C)Stack (D)Graph

Correct Answer : **(B)**

82)What is the Kruskal's algorithm primarily used for?

- (A)Sorting an array of elements (B)Searching for a specific value in a data structure (C)Finding the minimum spanning tree of a graph (D)Converting a graph from directed to undirected

Correct Answer : **(C)**

83)What is the primary advantage of using a stack data structure?

- (A)Efficient random access to any element (B)Implementing complex sorting algorithms (C)Implementing Last In First Out operations (D)Representing hierarchical relationships between elements

Correct Answer : **(C)**

84)What is the difference between a complete binary tree and full binary tree?

- (A)Both have the same number of levels (B)A complete binary tree has all levels filled except possibly the last, while a full binary tree has all levels completely filled (C)Complete binary tree has efficient searching, full binary tree has efficient insertion/deletion (D)There is no difference between them

Correct Answer : **(B)**

85)What is the main job of a device driver in your computer?

- (A)To provide an interface between the operating system and hardware devices (B)To translate user commands into machine instructions (C)To manage memory allocation for user applications (D)To provide a graphical user interface for the user

Correct Answer : **(A)**

86)In a distributed file system, the role of a consistency protocol is to:

- (A)To handle file replication across multiple servers (B)To ensure that all replicas of a file are always identical (C)To improve read performance by allowing access to any replica (D)All of the above

Correct Answer : **(D)**

87)In networking, what does the term "DNS" stand for?

(A)Data Network Service

(B)Domain Name System

(C)Dynamic Network Security

(D)Digital Network Standards

Correct Answer : **(B)**

88)What does HTML stand for?

(A)Hyper Text Markup Language

(B)High-Level Text Manipulation Language

(C)Hyperlink and Text Management Language

(D)High-Level Text Markup Language

Correct Answer : **(A)**

89)What does the acronym API stand for?

(A)Application Programming Interface

(B)Automated Programming Interface

(C)Advanced Programming Interface

(D)Accounted Program Instruction

Correct Answer : **(A)**

90)What is the primary function of the Transport Layer in the OSI model?

(A>Error detection and correction

(B)Data link between devices

(C)End-to-end communication

(D)Physical connection establishment

Correct Answer : **(C)**

91)What is the difference between a complete binary tree and a full binary tree?

(A)Both have the same number of levels

(B)Complete binary tree has all levels filled except possibly the last, full binary tree has all levels completely filled

(C)Complete binary tree has efficient searching, full binary tree has efficient insertion/deletion

(D)There is no difference between them

Correct Answer : **(B)**

92)Which of the following statements about recursion is TRUE?

(A)It always leads to faster program execution compared to iterative solutions

(B)It requires less memory compared to iterative solutions

(C)It can be difficult to debug and trace program flow

(D)All of the above are true

Correct Answer : **(C)**

93)What is the output of the following C code?

```
int x=5;
printf("%d\n",x--);
```

- (A)5 (B)4 (C)Compilation error (D)Undefined behaviour

Correct Answer : **(A)**

94)What is the purpose of the #include directive in C?

- (A)To define user-defined functions (B)To declare variables (C)To include header files containing function prototypes and declarations (D)To allocate memory dynamically

Correct Answer : **(C)**

95)What is the functionality of a loop in C programming?

- (A)To assign values to variables (B)To define functions (C)To execute a block of code repeatedly based on a specific condition (D)To read input from the user

Correct Answer : **(C)**

96)What is the correct way to declare a pointer variable in C?

- (A)int pointer x; (B)int x* (C)pointer int x; (D)int *x;

Correct Answer : **(D)**

97)What is the difference between a void function and a function returning a value in C?

- (A)Both are the same (B)void functions cannot take arguments (C)void functions do not return any value, while others return specific data types (D)void functions are always faster to execute

Correct Answer : **(C)**

98)What is the purpose of the return statement in a C function?

- (A)To declare local variables within the function (B)To call other functions (C)To optionally return a value from the function to the calling code (D)To terminate the program execution

Correct Answer : **(C)**

99)What is the use case of the break statement within a loop?

- (A)To initialize the loop counter (B)To check a condition before each iteration (C)To immediately exit the loop prematurely (D)To increment the loop counter

Correct Answer : **(C)**

100)Which of the following operators has the highest precedence in C expressions?

- (A)+ and – (B)* and / (C)&& and || (D)!

Correct Answer : **(D)**

101)What are the four pillars of object-oriented programming?

- (A)Inheritance, polymorphism, encapsulation, data abstraction (B)Abstraction, polymorphism, iteration, recursion (C)Functions, loops, conditional statements, variables (D)Classes, objects, methods, attributes

Correct Answer : **(A)**

102)What is the primary difference between a class and an object in OOP?

- (A)Both are the same, just different representations (B)Class is a blueprint, object is an instance of that blueprint (C)Class defines behavior, object defines data (D)Objects can inherit, classes cannot

Correct Answer : **(B)**

103)What is the benefit of encapsulation in OOP?

- (A)Improves code readability and maintainability (B)Enables efficient memory management (C)Simplifies data access and manipulation (D)All of the above

Correct Answer : **(D)**

104)What is the purpose of the public, private and protected access specifiers in C++ and Java?

- (A)To define data types for variables (B)To control access to class members (C)To specify function return types (D)To define loops and conditional statements

Correct Answer : **(B)**

105)What is polymorphism in Object Oriented Programming?

(A)Ability of Objects to perform different actions based on their type

(B)Hiding implementation details from the user

(C)Reusing existing code through inheritance

(D)Dynamic memory allocation for objects

Correct Answer : **(A)**

106)What is the difference between a constructor and a destructor in C++?

(A)Both perform the same function of initializing objects

(B)Constructor initializes an object; destructor deallocates memory when the object goes out of scope

(C)Constructor can have arguments, destructors cannot

(D)Constructors are static, destructors are non-static

Correct Answer : **(B)**

107)What is the purpose of the friend keyword in C++?

(A)To define static methods within a class

(B)To grant non-member functions access to private or protected members of a class

(C)To define operator overloading for custom classes

(D)To implement virtual functions and polymorphism

Correct Answer : **(B)**

108)What is the syntax for declaring a virtual function in C++?

(A)virtual void functionName();

(B)protected void functionName();

(C)static void functionName();

(D)public final void functionName();

Correct Answer : **(A)**

109)What is the use of operator keyword in C++ for overloading operators?

(A)To define new operators for custom data types

(B)To redefine the behavior of existing operators for custom data types

(C)To perform arithmetic operations on objects

(D)To access private members of a class from outside

Correct Answer : **(B)**

110)What is the difference between a copy constructor and a move constructor in C++?

- | | | | |
|--|--|---|--|
| (A)Both perform the same action of copying object data | (B)Copy constructor creates a new object with a copy of the existing object's data, move constructor transfers ownership of resources from the source object to the new object | (C)Copy constructor can have arguments, move constructor cannot | (D)Copy constructor is called implicitly, move constructor needs to be explicitly called |
|--|--|---|--|

Correct Answer : **(B)**

111)What is the full form of DBMS?

- | | | | |
|-----------------------------------|------------------------------------|--------------------------------|-----------------------------------|
| (A)Data Banking Management System | (B)Data Building Management System | (C)Data Base Management system | (D)Data Binding Management System |
|-----------------------------------|------------------------------------|--------------------------------|-----------------------------------|

Correct Answer : **(C)**

112)Which of the following is NOT a component of a DBMS?

- | | | | |
|-------------|-------------|------------|---------|
| (A)Hardware | (B)Software | (C)Network | (D)Data |
|-------------|-------------|------------|---------|

Correct Answer : **(C)**

113)What is the purpose of Data Definition Language (DDL) in a DBMS?

- | | | | |
|---------------------------------------|--|---|--|
| (A)To retrieve data from the database | (B)To manipulate existing data in the database | (C)To define the structure of the database, including tables, columns and constraints | (D)To control access and permissions for users and roles |
|---------------------------------------|--|---|--|

Correct Answer : **(C)**

114)What is the difference between a primary key and a foreign key in a relational database?

- | | | | |
|--|--|---|--|
| (A)Both are unique identifiers for a row, but a foreign key references another table | (B)A primary key can have duplicate values, a foreign key cannot | (C)A primary key can have multiple columns, a foreign key must be a single column | (D)A primary key uniquely identifies a row within a table, a foreign key references the primary key of another table |
|--|--|---|--|

Correct Answer : **(D)**

115)What is the purpose of normalization in a relational database?

- | | | | |
|--|---|---|--|
| (A)To improve the performance of queries | (B)To reduce the storage space required by the database | (C)To eliminate data redundancy and inconsistencies | (D)To simplify the process of user interaction with the database |
|--|---|---|--|

Correct Answer : (C)

116)What is the difference between a SELECT and an UPDATE statement in SQL?

- | | | | |
|---|--|---|---|
| (A)Both modify data in the database, but UPDATE only affects specific rows based on a condition | (B)SELECT retrieves data from the database, UPDATE creates new records | (C)SELECT requires specifying a table name, UPDATE requires specifying individual columns | (D)SELECT retrieves data from the database, UPDATE modifies existing data in the database |
|---|--|---|---|

Correct Answer : (D)

117)What is the purpose of indexing in a relational database?

- | | | | |
|---|--|---|---|
| (A)To enforce data integrity and prevent duplicate values | (B)To improve the performance of queries by enabling faster data retrieval | (C)To compress data and reduce storage space requirements | (D)To control access and grant permissions to users |
|---|--|---|---|

Correct Answer : (B)

118)What is the difference between a relational database and NoSQL database?

- | | | | |
|---|---|---|------------------------------|
| (A)Relational databases are more complex and require stricter schema definition, NoSQL databases are flexible and schema-less | (B)Relational databases are better suited for large, structured datasets, NoSQL databases are better for unstructured or semi-structured data | (C)Relational databases are typically slower than NoSQL database for large datasets | (D)All of the above are true |
|---|---|---|------------------------------|

Correct Answer : (D)

119)What is the purpose of a join operation in SQL?

- | | | | |
|--------------------------------|---|--|--|
| (A)To delete rows from a table | (B)To update the values of specific columns | (C)To combine data from multiple tables based on a shared relationship | (D)To create a new table with a subset of columns from another table |
|--------------------------------|---|--|--|

Correct Answer : (C)

120)What does SQL stand for in the context of databases?

(A)Structured Query Language

(B)Simple Question Language

(C)System Query Language

(D)Sequential Query Language

Correct Answer : **(A)**

121)In a relational database, what is a foreign key used for?

(A)It uniquely identifies each record in a table

(B)It ensures data integrity by linking tables

(C)It is the primary key of the database

(D)It indexes the columns for faster retrieval

Correct Answer : **(B)**

122)What feature of C++ was dropped in Java?

(A)Virtual function

(B)Abstract class

(C)Inheritance

(D)Pointers

Correct Answer : **(D)**

123)Which normal form ensures that non-prime attributes are fully functionally dependent on the primary key?

(A)First Normal Form(1NF)

(B)Second Normal Form(2NF)

(C)Third Normal Form(3NF)

(D)Boyce-Codd Normal Form (BCNF)

Correct Answer : **(B)**

124)Which SQL clause is used to filter the results of a SELECT query?

(A)GROUP BY

(B)HAVING

(C)WHERE

(D)ORDER BY

Correct Answer : **(C)**

125)What type of relationship exists between two tables when a record in one table can have multiple related records in another table?

(A)One-to-One

(B)Many-to-Many

(C)Single-to-double

(D)One-to-Many

Correct Answer : **(D)**

126) Which of the following is an example of DDL (Data Definition Language) statement in SQL?

(A) SELECT

(B) INSERT

(C) CREATE

(D) UPDATE

Correct Answer : **(C)**

127) What is the purpose of the COMMIT statement in database transactions?

(A) Roll back the changes made during the transaction

(B) Save the changes made during the transaction

(C) Delete the changes made during the transaction

(D) Update the changes made during the transaction

Correct Answer : **(B)**

128) Which index type speeds up data retrieval but slows down data modification operations?

(A) Clustered Index

(B) Non-Clustered Index

(C) Unique Index

(D) Bitmap Index

Correct Answer : **(B)**

129) What is the purpose of the GROUP BY clause in SQL?

(A) Filter the results based on a condition

(B) Arrange the results in ascending order

(C) Group rows that have the same values in specified columns

(D) Join Multiple tables

Correct Answer : **(C)**

130) Which of the following is an example of a NoSQL database?

(A) MySQL

(B) MongoDB

(C) Oracle

(D) PostgreSQL

Correct Answer : **(B)**

131) Which of the following is a function of the SQL SELECT statement?

(A) Add new records to the database

(B) Update existing records in the database

(C) Retrieve data from one or more tables

(D) Delete records from the database

Correct Answer : **(C)**

132)What does TRUNCATE statement do in SQL?

- | | | | |
|---|---|------------------------------|------------------------------------|
| (A>Delete specific records from a table | (B)Remove all records from table but retain the table structure | (C)Update records in a table | (D)Insert new records into a table |
|---|---|------------------------------|------------------------------------|

Correct Answer : **(B)**

133)Which SQL command is used to remove a table from a database?

- | | | | |
|-----------------|-----------------|---------------|----------------|
| (A)DELETE TABLE | (B)REMOVE TABLE | (C)DROP TABLE | (D)ERASE TABLE |
|-----------------|-----------------|---------------|----------------|

Correct Answer : **(C)**

134)What is the Primary purpose of Client–Server Architecture?

- | | | | |
|-------------------|------------------------|-------------------------|---------------------------------|
| (A)Load balancing | (B)Centralized control | (C)Real–time processing | (D)Efficient data communication |
|-------------------|------------------------|-------------------------|---------------------------------|

Correct Answer : **(D)**

135)Which component is responsible for managing resources and providing services in a Client–Server Architecture?

- | | | | |
|-----------|-----------|-------------|---------------|
| (A)Server | (B)Client | (C)Database | (D)Middleware |
|-----------|-----------|-------------|---------------|

Correct Answer : **(A)**

136)In a two–tier Client–Server Architecture, what are the two main components?

- | | | | |
|------------------------|---|----------------------|------------------------|
| (A)Client and Database | (B)Presentation layer and Application Layer | (C)Client and Server | (D)Server and Database |
|------------------------|---|----------------------|------------------------|

Correct Answer : **(C)**

137)What role does the middleware play in a Client–Server Architecture?

- | | | | |
|----------------------------------|--|--------------------------------|-------------------------------|
| (A)Manages database transactions | (B)Facilitates communication between client and server | (C)Handles user authentication | (D)Executes application logic |
|----------------------------------|--|--------------------------------|-------------------------------|

Correct Answer : **(B)**

138)What is the primary advantage of three-tier Client-Server architecture over a two-tier architecture?

(A)Improved scalability

(B)Simplified maintenance

(C)Reduced latency

(D)Enhanced security

Correct Answer : **(A)**

139)In the context of Client-Server Architecture, what is a "stateless" protocol?

(A)The server retains information about the client's state

(B)Each request from client is independent and does not rely on past requests

(C)The client manages the server's state

(D)The communication is encrypted to maintain security

Correct Answer : **(B)**

140)Which of the following is an example of a presentation layer task in a Client-Server Architecture?

(A)Query processing

(B)Data encryption/decryption

(C)User authentication

(D)Load balancing

Correct Answer : **(B)**

141)What is the purpose of load balancing in a Client-Server Architecture?

(A)Ensures fair distribution of resources among clients

(B)Enhances security by encryption data

(C)Manages database transactions

(D)Facilitates communication between clients

Correct Answer : **(A)**

142)Which security mechanism is commonly used to secure data transmission in a Client-Server Architecture?

(A)SSL/TLS

(B)IPsec

(C)PGP

(D)SSH

Correct Answer : **(A)**

143)In a Client-Server architecture, what is the purpose of a DNS Server?

(A)Manages database transactions

(B)Resolves domain names to IP addresses

(C)Ensures fair distribution to resources among clients

(D)Authenticates users

Correct Answer : **(B)**

144) Which type of Client–Server Architecture allows clients to communicate directly with each other?

- (A) Centralized (B) Distributed (C) Decentralized (D) Hybrid

Correct Answer : **(A)**

145) What is the function of a firewall in a Client–Server Architecture?

- (A) Manages database transactions (B) Filters network traffic based on predefined rules (C) Resolves domain names to IP addresses (D) Ensures fair distribution of resources among clients

Correct Answer : **(B)**

146) Which design principle emphasizes the separation of concerns in a three–tier Client–Server Architecture?

- (A) Abstraction (B) Encapsulation (C) Modularity (D) Cohesion

Correct Answer : **(C)**

147) In a Client–Server Architecture, the client primarily does which of the following?

- (A) Manage and store data (B) Initiate requests for resources and process responses (C) Handle complex calculations and computations (D) Provide an interface for user interaction with the system

Correct Answer : **(B)**

148) What is the main advantage of using a Client–Server Architecture compared to a Peer–to–Peer (P2P) network?

- (A) Lower cost of hardware and software (B) Increased security and centralized management (C) Simpler network configuration and administration (D) Enhanced performance for real–time applications

Correct Answer : **(B)**

149) What is the role of a web server in a Client–Server environment?

- (A) Manage and store user files and documents (B) Process HTTP requests from clients and deliver web content (C) Perform complex mathematical calculations for scientific applications (D) Provide a platform for users to directly connect and share resources

Correct Answer : **(B)**

150)What is the common communication protocol used in Client–Server Architecture?

(A)Bluetooth

(B)TCP/IP

(C)USB

(D)Infrared (IR)

Correct Answer : **(B)**

151)What is the concept of a "stateless" server in Client–Server Architecture?

(A)The server cannot store any data between client requests

(B)The server cannot distinguish between different clients

(C)The server maintains no information about previous client interactions, requiring each request to carry all necessary context

(D)The server is incapable of handling concurrent client requests

Correct Answer : **(C)**

152)Which Protocol is commonly used for communication between web browser and web servers in a Client–Server architecture?

(A)FTP

(B)HTTP

(C)TCP

(D)UDP

Correct Answer : **(B)**

153)Which software development model involves the iterative and incremental approach to software design?

(A)Waterfall model

(B)Spiral model

(C)V–Model

(D)Agile model

Correct Answer : **(D)**

154)Which of the following is not a valid HTML tag?

(A)\<header>\

(B)\<section>\

(C)\<paragraph>\

(D)\<footer>\

Correct Answer : **(C)**

155)What does CSS stand for?

(A)Counter Style Sheets

(B)Cascading Style Sheets

(C)Computer Style sheets

(D)Creative style Selector

Correct Answer : **(B)**

156)What does AJAX stand for in the context of web development?

- | | | | |
|---------------------------------------|--|---------------------------------------|---|
| (A)Asynchronous
JavaScript and XML | (B)Advanced
JavaScript and
XHTML | (C)Automated
JavaScript and
XML | (D)Asynchronous
JavaScript and XHTML |
|---------------------------------------|--|---------------------------------------|---|

Correct Answer : **(A)**

157)In the OSI model, which layer is responsible for data packet formatting and addressing?

- | | | | |
|-------------------|--------------------|------------------|--------------------|
| (A)Physical layer | (B)Data Link layer | (C)Network layer | (D)Transport layer |
|-------------------|--------------------|------------------|--------------------|

Correct Answer : **(C)**

158)What is the function of a subnet mask in IP addressing?

- | | | | |
|---|--|---|---|
| (A)Assigns a unique
identifier to a
specific device | (B)Defines the
network and host
portions of an IP
address | (C)Routes data
packets between
different networks | (D)Provides security for
network communication |
|---|--|---|---|

Correct Answer : **(B)**

159)What does SDLC stand for in the context of software engineering?

- | | | | |
|--|--|---|--------------------------------------|
| (A)Software Design
and Learning Cycle | (B)System
Development Life
Cycle | (C)Structured Design
and Logic Compilation | (D)Service Delivery
and Lifecycle |
|--|--|---|--------------------------------------|

Correct Answer : **(B)**

160)What is the purpose of the "CRC" (Cyclic Redundancy Check) in networking?

- | | | | |
|--|--------------------------------|-------------------------------------|---------------------------|
| (A)Error detection in
data transmission | (B)Routing table
management | (C)Dynamic IP
address assignment | (D)Security
encryption |
|--|--------------------------------|-------------------------------------|---------------------------|

Correct Answer : **(A)**

NB:Question No: 91 has been cancelled as it was repeated.

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Date : 05-08-2024

Deputy Registrar / Secretary

Place : TVM

Co-Operative Service Examination Board