

PROVISIONAL ANSWER KEY

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Question1:-The buffer overflow attack is caused by

- A:-Vulnerability in the design of a networking protocol
 - B:-Vulnerability in the implementation of a networking protocol
 - C:-Vulnerability in human behaviour
 - D:-Vulnerability in software
- Correct Answer:- Option-D

Question2:-Which of the following is not valid IPv4 addresses ?

- A:-192.10.14.3
 - B:-201.172.275.33
 - C:-65.90.11.00
 - D:-193.20.250.10
- Correct Answer:- Option-B

Question3:-Address resource records are associated with

- A:-Routing tables in Internet routers
 - B:-ARP aches in LAN workstations
 - C:-DNS servers
 - D:-None of the above
- Correct Answer:- Option-C

Question4:-Which of the following protocols is used in accessing web mail ?

- A:-HTTP
 - B:-SMTP
 - C:-POP3
 - D:-IMAP
- Correct Answer:- Option-A

Question5:-If $\gcd(a, b) = x$ and $\gcd(b, c) = y$, then $\gcd(a, c)$ is

- A:- xy
 - B:- $\gcd(x, y)$
 - C:- $xy/\gcd(x, y)$
 - D:-None of these
- Correct Answer:- Option-D

Question6:-Assuming the same key is used, two occurrences of the same plaintext characters are encrypted as identical output symbols in which of the following

- A:-Caesar cipher
 - B:-Vigenere cipher
 - C:-Hill cipher
 - D:-One time pad
- Correct Answer:- Option-A

Question7:-A product cipher is constructed using a combination of

- A:-Symmetric and asymmetric ciphers
 - B:-Substitution and transposition ciphers
 - C:-Monoalphabetic and polyalphabetic ciphers
 - D:-Stream and block ciphers
- Correct Answer:- Option-B

Question8:-Which of the following characteristics is most widely used in fingerprint recognition ?

- A:-Number and coordinates of arch patterns
 - B:-Number and coordinates of loop patterns
 - C:-Coordinates and orientations of fingerprint minutiae
 - D:-Number and coordinates of whorl patterns
- Correct Answer:- Option-C

Question9:-During the initial stages of an attack by a new internet scanning worm, the number of infected machines increases

- A:-Exponentially with time
- B:-Logarithmically with time
- C:-Polynomially with time
- D:-At a constant rate

Correct Answer:- Option-A

Question10:-Use privileges in windows are stored in

- A:-DACL
- B:-ACE
- C:-Access token
- D:-SID

Correct Answer:- Option-C

Question11:-Probabilistic packet marking is technique used in support of

- A:-DDoS prevention
- B:-IP traceback
- C:-DDoS detection
- D:-Worm detection

Correct Answer:- Option-B

Question12:-The role of the payment gateway is

- A:-A proxy to the merchant
- B:-A financial service provider
- C:-A government regulator
- D:-A proxy to the bankcard network

Correct Answer:- Option-D

Question13:-What type of parameters are used in transcendental functions in Java ?

- A:-double
- B:-long
- C:-byte
- D:-int

Correct Answer:- Option-A

Question14:-In what format is Java's character set represented ?

- A:-16 bits ASCII
- B:-16 bits unicode
- C:-16 bits EBC
- D:-None of the above

Correct Answer:- Option-B

Question15:-Basic futures of structured programming

- A:-Sequence
- B:-Looping
- C:-Branching
- D:-All of the above

Correct Answer:- Option-D

Question16:-In which year Java was developed ?

- A:-1989
- B:-1990
- C:-1991
- D:-1992

Correct Answer:- Option-C

Question17:-What feature of C++ was dropped in Java ?

- A:-Virtual function
- B:-Abstract class
- C:-Inheritance
- D:-Pointers

Correct Answer:- Option-D

Question18:-What type of storage class is involved when we pass by value in function ?

- A:-External
- B:-Automatic
- C:-Static

D:-Register

Correct Answer:- Option-B

Question19:-What is Java equivalent of const in C++ ?

A:-const

B:-#define

C:-final

D:-All of the above

Correct Answer:- Option-C

Question20:-What is another name for semantic errors ?

A:-Runtime errors

B:-Compile time errors

C:-Syntax errors

D:-None of the above

Correct Answer:- Option-A

Question21:-What are units of width and height specified in HTML tag ?

A:-Pixels

B:-Bytes

C:-Bits

D:-All of the above

Correct Answer:- Option-A

Question22:-What will be the values of x, m and n after execution of the following statements ?

```
int x, m, n;
```

```
m = 10;
```

```
n = 15;
```

```
x = ++m + n++;
```

A:-x = 25, m = 10, n = 15

B:-x = 27, m = 10, n = 15

C:-x = 26, m = 11, n = 16

D:-x = 27, m = 11, n = 16

Correct Answer:- Option-C

Question23:-What will be the result of the expression 13 and 25 ?

A:-38

B:-9

C:-25

D:-12

Correct Answer:- Option-B

Question24:-Which of the following will produce a value of 22 if x = 22.9 ?

A:-ceil(x)

B:-log(x)

C:-abs(x)

D:-floor(x)

Correct Answer:- Option-D

Question25:-Which is the legal ways to access a class data member using this pointer ?

A:-this.x

B:-*this.x

C:-*(this.x)

D:-(*this).x

Correct Answer:- Option-D

Question26:-Which one of the following is an associative container ?

A:-list

B:-queue

C:-map

D:-string

Correct Answer:- Option-C

Question27:-Which one of the following is a sequence container ?

A:-stack

B:-deque

C:-queue

D:-set

Correct Answer:- Option-B

Question28:-What does the acronym BCPL stands for ?

- A:-Basic Combined Programming Language
- B:-Basic Compiler Programming Language
- C:-Beginners Combined Programming Language
- D:-None of the above

Correct Answer:- Option-A

Question29:-What was Ken Thompson's version of C called ?

- A:-C++
- B:-B
- C:-P
- D:-None of the above

Correct Answer:- Option-B

Question30:-What does the fopen() function return ?

- A:-address
- B:-pointer
- C:-file pointer
- D:-all of the above

Correct Answer:- Option-C

Question31:-Recursive algorithms are based on

- A:-Divide and conquer approach
- B:-Top-down approach
- C:-Bottom-up approach
- D:-Hierarchical approach

Correct Answer:- Option-C

Question32:-The Sorting method which is used for external sort is

- A:-Bubble sort
- B:-Quick sort
- C:-Merge sort
- D:-Radix sort

Correct Answer:- Option-D

Question33:-Worst case efficiency of binary search is

- A:- $\log_2 n + 1$
- B:-n
- C:- 2^n
- D:-log n

Correct Answer:- Option-A

Question34:-What is the type of the algorithm used in solving the 8 Queens problem ?

- A:-Dynamic
- B:-Backtracking
- C:-Branch and Bound
- D:-None of the above

Correct Answer:- Option-B

Question35:-The time taken by NP-class sorting algorithm is

- A:- $O(1)$
- B:- $O(\log n)$
- C:- $O(n^2)$
- D:- $O(n)$

Correct Answer:- Option-D

Question36:-How many nodes are there in a full state space tree with $n = 6$?

- A:-65
- B:-64
- C:-63
- D:-32

Correct Answer:- Option-C

Question37:-Prims algorithm is based on _____ method.

- A:-Divide and conquer method
- B:-Greedy method
- C:-Dynamic programming
- D:-Branch and bound

Correct Answer:- Option-B

Question38:-Graph Colouring is which type of algorithm design strategy

- A:-Backtracking
- B:-Greedy
- C:-Branch and Bound
- D:-Dynamic programming

Correct Answer:- Option-A

Question39:-The asymptotic notation for defining the average time complexity is

- A:-Equivalence
- B:-Symmetric
- C:-Reflexive
- D:-All of the above

Correct Answer:- Option-A

Question40:-The complexity of merge sort algorithm is

- A:- $O(n)$
- B:- $O(n^2)$
- C:- $O(\log n)$
- D:- $O(n \log n)$

Correct Answer:- Option-D

Question41:-Dijkstra's banking algorithm in an operating system, solves the problem of

- A:-Deadlock recovery
- B:-Mutual exclusion
- C:-Deadlock avoidance
- D:-None of these

Correct Answer:- Option-C

Question42:-Interval between the time of submission and completion of the job is called

- A:-Waiting time
- B:-Response time
- C:-Throughput
- D:-Turnaround time

Correct Answer:- Option-D

Question43:-The example of non-preemptive scheduling is

- A:-First-Come-First-Served
- B:-Round Robin
- C:-Last-In-First-Out
- D:-Shortest-Job-First

Correct Answer:- Option-A

Question44:-_____ is a process-to-process protocol that adds only port addresses, checksum, error control and length information to the data from the upper layer.

- A:-TCP
- B:-UDP
- C:-IP
- D:-None of the above

Correct Answer:- Option-B

Question45:-The RSA algorithm uses a _____ cryptography method.

- A:-Public Key
- B:-Private Key
- C:-Symmetric Key
- D:-All the above

Correct Answer:- Option-A

Question46:-The _____ attack is related to confidentiality.

- A:-Fabrication
- B:-Interception
- C:-Modification
- D:-Interruption

Correct Answer:- Option-B

Question47:-The cryptography method in which the plaintext BBBB becomes the ciphertext BCDE. This is probably

- A:-Transposition cipher
- B:-Monoalphabetic substitution cipher

C:-Polyalphabetic substitution cipher

D:-None of the above

Correct Answer:- Option-C

Question48:-The following service is not provided by digital signature

A:-Integrity

B:-Authentication

C:-Nonrepudiation

D:-Confidentiality

Correct Answer:- Option-D

Question49:-_____ is a technique of temporarily removing inactive programs from the memory of computer system.

A:-Swapping

B:-Spooling

C:-Semaphore

D:-Scheduling

Correct Answer:- Option-A

Question50:-Fence register is used for

A:-CPU protection

B:-Memory protection

C:-File protection

D:-Processor protection

Correct Answer:- Option-B

Question51:-The _____ clause is used to list the attributes desired in the result of a query.

A:-where

B:-from

C:-select

D:-having

Correct Answer:- Option-C

Question52:-We express queries in QBE by

A:-Datalog

B:-Skeleton tables

C:-Entity sets

D:-SQL

Correct Answer:- Option-B

Question53:-_____ is a set of permitted values for each attribute.

A:-Domain

B:-Entity

C:-Constraints

D:-Relationship

Correct Answer:- Option-A

Question54:-Minimal super keys are called

A:-Primary key

B:-Foreign key

C:-Candidate key

D:-Unique

Correct Answer:- Option-C

Question55:-A relation is in _____, every non-key attribute is irreducibly dependent on the primary key.

A:-1NF

B:-2NF

C:-3NF

D:-4NF

Correct Answer:- Option-B

Question56:-A statement that the system executes automatically when a database related event occurs.

A:-View

B:-Alter

C:-Assertion

D:-Trigger

Correct Answer:- Option-D

Question57:-An index record appears for every Search key value in the file

A:-Dense index

- B:-Sparse index
- C:-Hash index
- D:-Single-key index

Correct Answer:- Option-A

Question58:-In hashing, we use the term to denote a unit of storage that can store one or more records.

- A:-Field
- B:-Hash function
- C:-Index
- D:-Bucket

Correct Answer:- Option-D

Question59:-The number of transactions executed in a given amount of time is called

- A:-Response time
- B:-Waiting time
- C:-Throughput
- D:-Performance

Correct Answer:- Option-C

Question60:-_____ is a predicate expressing a condition that we wish the database always to satisfy.

- A:-Authorization
- B:-Deadlock
- C:-QBE
- D:-Assertion

Correct Answer:- Option-D

Question61:-A variation in the representation of the waterfall model is called

- A:-Classic life cycle
- B:-V-model
- C:-Incremental process model
- D:-Spiral model

Correct Answer:- Option-B

Question62:-The most common manifestation of separation of software into separately named and addressable components is called

- A:-Concern
- B:-Pattern
- C:-Modularity
- D:-Independence

Correct Answer:- Option-C

Question63:-_____ is an indication of the relative interdependence among modules.

- A:-Coupling
- B:-Cohesion
- C:-Hiding
- D:-Refactoring

Correct Answer:- Option-A

Question64:-The diagram which help you to determine the functionality and features of the software from the user's perspective.

- A:-Class diagram
- B:-Deployment diagram
- C:-Sequence diagram
- D:-Use-case diagram

Correct Answer:- Option-D

Question65:-_____ testing is focuses on the functional requirements of the software.

- A:-White-box testing
- B:-Black-box testing
- C:-Condition testing
- D:-Unit testing

Correct Answer:- Option-B

Question66:-The software metric that provides a quantitative measure of the logical complexity of a program.

- A:-Cylcomatic complexity
- B:-Defect removal efficiency
- C:-Object-oriented metrics
- D:-LOC

Correct Answer:- Option-A

Question67:- _____ is the most widely used strategy for statistical quality assurance in industry.

- A:-Pareto principle
- B:-CMM
- C:-Six Sigma
- D:-IEEE

Correct Answer:- Option-C

Question68:- _____ is an agile software development approach.

- A:-Extreme programming
- B:-Quality function deployment
- C:-PSPEC
- D:-Unified process

Correct Answer:- Option-A

Question69:- _____ provide a notation that translates actions and conditions described in a use case into a tabular form.

- A:-Decision tree
- B:-Pattern
- C:-Linear structures
- D:-Decision tables

Correct Answer:- Option-D

Question70:- _____ is a project scheduling method.

- A:-PERT
- B:-Scrum model
- C:-UML
- D:-RAD

Correct Answer:- Option-A

Question71:-The bus carries bits between

- A:-Microprocessor and Memory
- B:-Microprocessor and I/Os
- C:-Memory and I/Os
- D:-Microprocessor, Memory and I/Os

Correct Answer:- Option-D

Question72:-The Gray code for the binary number $(101110)_2$ is

- A:-111101
- B:-111001
- C:-111011
- D:-111010

Correct Answer:- Option-B

Question73:-Simplify the expression $AB + A(B + C) + B(B + C)$ using Boolean algebra techniques is

- A:- $C + AC$
- B:- $A + AC$
- C:- $B + AC$
- D:- $B + AB$

Correct Answer:- Option-C

Question74:-How many 74154 4-line-to-16-line decoders are necessary to decode a six-bit binary number ?

- A:-One
- B:-Two
- C:-Three
- D:-Four

Correct Answer:- Option-B

Question75:-The binary equivalent for the BCD number 1000101 is

- A:- $(1010100)_2$
- B:- $(1000100)_2$
- C:- $(1110100)_2$
- D:- $(1010101)_2$

Correct Answer:- Option-D

Question76:-How many states are there in an eight-bit Johnson counter sequence ?

- A:-4
- B:-8
- C:-16

D:-32

Correct Answer:- Option-C

Question77:-How many clock pulses are required to serially enter a byte of data into an eight-bit shift register ?

A:-8

B:-16

C:-32

D:-64

Correct Answer:- Option-A

Question78:-How many address bits are required for a 2048-bit memory ?

A:-10 bits

B:-11 bits

C:-12 bits

D:-13 bits

Correct Answer:- Option-B

Question79:-How many tracks are there on a typical 5 1/2` inch floppy disk ?

A:-64

B:-67

C:-77

D:-87

Correct Answer:- Option-C

Question80:-Visual cryptography is mainly used for

A:-Text encryption

B:-Video encryption

C:-Audio encryption

D:-Image encryption

Correct Answer:- Option-D

Question81:-Whose words are these "No Caste, No Religion, No God for Human being" ?

A:-Shree Narayana Guru

B:-K. Ayyappan

C:-Swami Vivekananda

D:-Pandit Karuppan

Correct Answer:- Option-B

Question82:-Which Article of Constitution provide uniform civil code for the citizens ?

A:-Article 47

B:-Article 39

C:-Article 44

D:-Article 48

Correct Answer:- Option-C

Question83:-Which agitation in Kerala is known as the "Maru Marakkal Samaram" ?

A:-Channar Revolt

B:-Attingal Revolt

C:-Revolt of 1857

D:-Kurichiyar Revolt

Correct Answer:- Option-A

Question84:-Who is known as 'Kalidasa of Kerala' ?

A:-Kerala Varma Valiya Koil Thampuran

B:-Kumaranasan

C:-Azuthachan

D:-Ulloor S. Parameswaran Ayyar

Correct Answer:- Option-A

Question85:-Who acted the role of Shree Narayana Guru in the film "Yugapurusham" ?

A:-Mammooty

B:-Thalaivasal Vijay

C:-R. Sukumaran

D:-Mohanlal

Correct Answer:- Option-B

Question86:-Which among the following `8^(th)` Schedule languages of the Constitution are spoken by minority polulation ?

A:-Konkani

B:-Dogri

C:-Sanskrit

D:-Manipuri

Correct Answer:- Option-C

Question87:-The birth place of Chattampi Swamikal

A:-Kannammoola

B:-Venganoor

C:-Sasthamkovil

D:-Chempazani

Correct Answer:- Option-A

Question88:-How many numbers of days lasted the Vaikom Satyagraha ?

A:-603 days

B:-618 days

C:-630 days

D:-512 days

Correct Answer:- Option-A

Question89:-Which social reformer is known as the "Lincoln of Kerala" ?

A:-Chattampi Swamikal

B:-Pandit Karuppan

C:-K. Ayyappan

D:-Shree Narayana Guru

Correct Answer:- Option-B

Question90:-The Jnanapit Award recipient of 2015 Raghuveer Chaudhari is famous for his writings in _____ language.

A:-Bengali

B:-Kannada

C:-Hindi

D:-Gujarati

Correct Answer:- Option-D

Question91:-In which year the European Union was awarded the Nobel Prize for peace ?

A:-2014

B:-2013

C:-2012

D:-2015

Correct Answer:- Option-C

Question92:-Which movie won the best picture award for the 2016 Oscar ?

A:-The Revenant

B:-Bridge of Species

C:-Spot Light

D:-Brooklyn

Correct Answer:- Option-B

Question93:-Which Iranian film maker who won the "Palme d' or' passed away recently ?

A:-Majid Majidi

B:-Abbas Kiarostami

C:-Mohsen Makhmalbaf

D:-Jafar Panali

Correct Answer:- Option-B

Question94:-Which country is the last member State of UNO ?

A:-Bahamas

B:-Azerbaijan

C:-South Sudan

D:-Zimbabwe

Correct Answer:- Option-C

Question95:-Whose work is "Keralam Malayalikalude Mathrubhumi" ?

A:-George Varghese

B:-B. Rajeevan

C:-Dr. D. Babu Paul

D:-E.M.S.

Correct Answer:- Option-D

Question96:-Which literary work received the Vayalar Award of 2015 ?

A:-Manushyanu Oru Aamukham

B:-Archaar
C:-Shyama Madhavam
D:-Anthimahakalam
Correct Answer:- Option-A

Question97:-Who is the Human Resource Development Minister of Union Cabinet ?

A:-Smriti Irani
B:-Prakash Javadekar
C:-Kabilsibel
D:-M. Venkaiah Naidu

Correct Answer:- Option-B

Question98:-Which Article of the Constitution was names by Dr. B. R. Ambedkar as the Jewel Part ?

A:-Article 32
B:-Article 19
C:-Article 29
D:-Article 31

Correct Answer:- Option-A

Question99:-Who won the 2016 COPA America ?

A:-Argenteena
B:-USA
C:-Chili
D:-Columbia

Correct Answer:- Option-C

Question100:-Full form of NSG

A:-Nuclear Suppliers Group
B:-National Security Group
C:-National Savings Group
D:-Nuclear Sanctioned Group

Correct Answer:- Option-A