

HSST COMPUTER SCIENCE (SR FOR SC/ST)(ONLINE EXAM)

EXAM DATE:29-12-2016

1.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 behavior
- D.Vulnerability in software*

Ans:D

2.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

Ans:B

3.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

Ans:C

4.Which of the following protocols is used in accessing web

mail?

A.HTTP*

B.SMTP

C.POP3

D.IMAP

Ans:A

5.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*

Ans:D

6.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

Ans:A

7.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

Ans:B

8.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

Ans:C

9.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

Ans:A

10.Use privileges in windows are stored in

- A.DACL

B.ACE

C.Access token*

D.SID

Ans:C

11.Probabilistic packet marking is technique used in support of

A.DDOS prevention

B.IP traceback*

C.DDoS detection

D.Worm detection

Ans:B

12.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*

Ans:D

13.What type of parameters are used in transcendental functions in Java?

A.Double*

B.Long

C.Byte

D.Int

Ans:A

14.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

Ans:B

15.Basic futures of structured programming

A.Sequence

B.Looping

C.Branching

D.All of the above*

Ans:D

16.In which year Java was developed?

A.1989

B.1990

C.1991*

D.1992

Ans:C

17.What feature of C++ was dropped in Java?

- A.Virtual function
- B.Abstract class
- C.Inheritance
- D.Pointers*

Ans:D

18.What type of storage class is involved when we pass by value in function?

- A.External
- BAutomatic*
- C.Static
- D.Register

Ans:B

19.What is Java equivalent of const in C++?

- A.Const
- B.Define
- C.Final*
- D.All of the above

Ans:C

20.What is another name for semantic errors?

- A.Runtime errors*

B.Compile time errors

C.Syntax errors

D.None of the above

Ans:A

21.What are units of width and height specified in HTML tag?

A.Pixels*

B.Bytes

C.Bits

D.All of the above

Ans:A

22.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

Ans:C

23.What will be the result of the expression 13 and 25?

A.38

B.9*

C.25

D.12

Ans:B

24.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)*

Ans:D

25.Which is the legal ways to access a class data member using the pointer?

A.this.x

B.*this.x

C.*(this.x)

D.(*this).x*

Ans:D

26.Which is the legal ways to access a class data member using this pointer?

- A.list
- B.queue
- C.map*
- D.string

Ans:C

27.Which one of the following is a sequence container?

- A.stack
- B.deque*
- C.queue
- D.set

Ans:B

28.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

Ans:A

29.What was Ken Thompson's version of C called?

- A.C++
- B.B*
- C.P

D.None of the above

Ans:B

30.What does the fopen()function return?

A.Address

B.Pointer

C.File pointer*

D.All of the above

Ans:C

31.Recursive algorithms are based on

A.Divide and conquer approach

B.Top-down approach

C.Bottom-up approach*

D.Hierarchial approach

Ans:C

32.The Sorting method which is used for external sort is

A.Bubble sort

B.Quick sort

C.Merge sort

D.Radix sort*

Ans:D

33.Worst case efficiency of binary search is

A. $\log_2 n + r^*$

B. n

C. 2^n

D. $\log n$

Ans:A

34.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

Ans:B

35.The time taken by NP-class sorting algorithm is

A. $O(1)$

B. $O(\log n)$

C. $O(n^2)$

D. $O(n)^*$

Ans:D

36.How many nodes are there in a full state space tree with $n=6$?

A. 65

B.64

C.63*

D.32

Ans:C

37.Prims algorithm is based on -----method

A.Divide and conquer method

B.Greedy method*

C.Dynamic programming

D.Branch and bound

Ans:B

38.Graph Colouring is which type of algorithm design strategy

A.Backtracking*

B.Greedy

C.Branch and Bound

D.Dynamic programming

Ans:A

39.The asymptotic notation for defining the average time complexity is

A.Equivalence*

B.Symmetric

C.Reflexive

D.All of the above

Ans:A

40.The complexity of merge sort algorithm is

A.O(n)

B.'O(n²)'

C.O(log n)

D.O(n log n)*

Ans:D

41.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

Ans:C

42.Interval between the time of submission and completion of the job is called

A.Waiting time

B.Response time

C.Throughput

D.Turnaround time*

Ans:D

43.The example of non-pre emptive scheduling is

- A.First-Come-First-Served*
- B.Round Robin
- C.Last-in-First-Out
- D.Shortest-Job-First

Ans:A

44.-----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

Ans:B

45.The RSA algorithm uses a -----cryptography method

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

Ans:A

46.The -----attack is related to confidentiality

- A.Fabrication
- B.Interception*
- C.Modification
- D.Interruption

Ans:B

47.The cryptography method in which the plaintext BBBB become the ciphertext BCDE.This is probably

- A.Transposition cipher
- B.Monoalphabetic substitution cipher
- C.Polyalphabetic substitution cipher*
- D.None of the above

Ans:C

48.The following service is not provided by digital signature

- A.Integrity
- B.Authentication
- C.Non reputation
- D.Confidentially*

Ans:D

49.-----is a technique of temporarily removing inactive programs from the memory of computer system

- A.Swapping*
- B.Spooling
- C.Semaphore
- D.Scheduling

Ans:A

50.Fence register is used for

- A.CPU protection
- B.Memory protection*
- C.File protection
- D.Processor protection

Ans:B

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

- A.Where
- B.From
- C.Select*
- D.Having

Ans:C

52.We express queries in QBE by

- A.Datalog
- B.Skeleton tables*

C.Entitysets

D.SQL

Ans:B

53.-----is a set of permitted values for each attribute

A.Domain*

B.Entity

C.Constraints

D.Relationship

Ans:A

54.Minimal super keys are called

A.Primary key

B.Foreign key

C.Candidate key*

D.Unique

Ans:C

55.A relation is in-----every non-key attribute is irreducibly dependent on the primary key

A.1NF

B.2NF*

C.3NF

D.4NF

Ans:B

56.A statement that the system executes automatically when a database related event occurs

A.View

B.Alter

C.Assertion

D.Trigger*

Ans:D

57.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

Ans:A

58.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*

Ans:D

59.The number of transactions executed in a given amount of time is called

- A.Response time
- B.Waiting time
- C.Throughput*
- D.Performance

Ans:C

60.-----is a predicate expressing a condition that we wish the database always to satisfy

- A.Autherization
- B.Deadlock
- C.QBE
- D.Assertion*

Ans:D

61.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

Ans:B

62.The most common manifestation of separation of software

into separately named and addressable components is called

- A.Concern
- B.Pattern
- C.Modularity*
- D.Independence

Ans:C

63.-----is an indication of the relative interdependence among modules

- A.Coupling*
- B.Cohesion
- C.Hiding
- D.Refactoring

Ans:A

64.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*

Ans:D

65.-----testing is focuses on the functional requirements of

the software.

- A.White-box testing
- B.Black-box testing*
- C.Condition testing
- D.Unit testing

Ans:B

66.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

Ans:A

67.----is the most widely used strategy for statistical quality assurance in industry

- A.Pareto principle
- B.CMM
- C.Six Sigma*
- D.IEEE

Ans:C

68.-----is an agile software development approach

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

Ans:A

69.-----provides 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*

Ans:D

70.-----is a project scheduling method

- A.PERT*
- B.Scrum model
- C.UML
- D.RAD

Ans:A

71.The bus carries bits between

- A.Microprocess and Memory
- B.Microprocessor and I/Os

C.Memory and I/Os

D.Microprocessor,Memory and I/Os*

Ans:D

72.The Gray code for the binary number'(101110)-(2)'is

A.111101

B.111001*

C.111011

D.111010

Ans:B

73.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

Ans:C

74.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

Ans:B

75.The binary equivalent for the BCD number 1000101 is

A.'(1010100) $-(2)'$

B.'(1000100) $-(2)'$

C.'(1110100) $-(2)'$

D.'(1010101) $-(2)'$ *

Ans:D

76.How many states are there in an eight-bit Johnson counter sequence?

A.4

B.8

C.16*

D.32

Ans:C

77.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

Ans:A

78.How many address bits are required for a 2048-bit memory?

A.10 bits

B.11 bits*

C.12 bits

D.13 bits

Ans:B

79.How many tracks are there on a typical 5Square root of 2'inch floppy disk?

A.64

B.67

C.77*

D.87

Ans:C

80.Visual cryptography is mainly used for

A.Text encryption

B.Video encryption

C.Audio encryption

D.Image encryption*

Ans:D

81.Whose words are these”No Caste.No Religio.No God for

Human being'?

A.Shree Narayana Guru

B.K.Ayyappan*

C.Swami Vivekananda

D.Pandit Karuppan

Ans:B

82.Which Article of Constitution provide uniform civil code for the citizens?

A.Article 47

B.Article 39

C.Article 44*

D.Article 48

Ans:C

83.Which agitation in Kerala is known as the 'Maru Marakkal Samaram'?

A.Channar Revolt*

B.Attingal Revolt

C.Revolt of 1857

D.Kurichiyar Revolt

Ans:A

84.Who is known as 'Kalidasa of Kerala'?

A.Kerala Varma Valiya Koil Thampuran*

B.KUmaranasan

C.Azuthachan

D.Ulloor S Parameswaran Ayyar

Ans:A

85.Who acted the role of Shree Narayana Guru in the film'Yugapurusham'?

A.Mammooty

B.Thalaivasal Vijay*

C.R.Sukumaran

D.Mohanlal

Ans:B

86.Which among the following '8^(th)'Schedule languages of the Constitution are spoken by minority polulation?

A.Konkani

B.Dogri

C.Sanskrit*

D.Manipuri

Ans:C

87.The birth place of Chattampi Swamikal

A.Kannammoola*

B.Venganoor

C.Sasthamkovil

D.Chempazani

Ans:A

88.How many numbers of days lasted the Vaikom Satyagraha?

A.603 days*

B.618 days

C.630 days

D.512 days

Ans:A

89.Which social reformer is known as the ‘Lincoln of Kerala’?

A.Chattampi Swamikal

B.Pandit Karuppan*

C.K.Ayyappan

D.Shree Narayana Guru

Ans:B

90.The Jnanapit Award recipient of 2015 Raghuvver Chaudhari is famous for his writings in----language

A.Bengali

B.Kannada

C.Hindi

D.Gujarati*

Ans:D

91.In which year the European Union was awarded the Nobel Prize for peace?

A.2014

B.2013

C.2012*

D.2015

Ans:C

92.Which movie won the best picture award for the 2016 Oscar?

A.The Revenant

B.Bridge of Species*

C.Spot Light

D.Brooklyn

Ans:B

93.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

Ans:B

94.Which country is the last member State of UNO?

- A.Bahamas
- B.Azerbaijan
- C.South Sudan*
- D.Zimbabwe

Ans:C

95.Whose work is “Keralam Malayalikalude Mathrubhumi”?

- A.George Varghese
- B.B.Rajeevan
- C.Dr.D.Babu Paul
- D.E.M.S*

Ans:D

96.Which literary work received the Vayalor Award of 2015?

- A.Manushyanu Oru Aamukham*
- B.Arachaar
- C.Shyama Madhavam
- D.Anthimahakalam

Ans:A

97.Who is the Human Resource Development Minister of Union Cabinet?

- A.Smriti Irani

B.Prakash Javadekar*

C.Kabilsibel

D.M.Venkaiah Naidu

Ans:B

98.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

Ans:A

99.Who won the 2016 COPA America?

A.Argenteena

B.USA

C.Chili*

D.Columbia

Ans:C

100.Full form of NSG

A.Nuclear Suppliers Group*

B.National Security Group

C.National Savings Group

D.Nuclear Sanctioned Group

Ans:A