PROVISIONAL ANSWER KEY

Question1:-Which among the following is not a fundamental right?

    A:-Right to equality

    B:-Right against exploitation

    C:-Right to freedom of religion

    D:-Right to acquire wealth

    Correct Answer:- Option-D

Question2:-The union list given in _____ schedule of Indian Constitution.

    A:-5th schedule

    B:-6th schedule

    C:-7th schedule

    D:-8th schedule

    Correct Answer:- Option-C

Question3:-The objective of Pradhan Mantri Kaushal Vikas Yojana is _____

    A:-Skill training to youth

    B:-Eradication of urban unemployment

    C:-Basic education to rural children

    D:-Employment guarantee to women

    Correct Answer:- Option-A

Question4:-Who among the following is not related to 'Mappilapattu'?

    A:-Moyinkutty Vaidyar

    B:-Edarikkode Alikutty Kurikkal

    C:-O.M. Karuvarakundu

    D:-Chakkeeri Moideenkutty

    Correct Answer:- Option-B

Question5:-Who won the 'Man Booker Prize 2018'?

    A:-Anna Burns

    B:-Richard Powers

    C:-Daisy Johnson

    D:-Chethan Bagath

    Correct Answer:- Option-A

Question6:-Who was the Indian flag bearer of 2018 common wealth games closing ceremony?

    A:-P.V. Sindhu

    B:-Abhinav Bindra

    C:-Jeenson Joseph

    D:-Mary Kom

    Correct Answer:- Option-D

Question7:-Who is the author of 'Aarachaar'?

    A:-Sara Joseph

    B:-Subash Chandran

    C:-K.R. Meera

    D:-M. Mukundan

    Correct Answer:- Option-C

Question8:-Who is the author of 'Muslim Janavum Vidyabhyasavum' (Muslims and Education)

    A:-Vakkom Moulavi

    B:-Makthi Thangal

    C:-K.M. Moulavi

    D:-E.K. Aboobacker Musliyar

    Correct Answer:- Option-B

Question9:-Name the Malayali woman congress leader imprisoned along with her two month old baby during civil disobedience movement
    A:-Kuttimalu Amma
    B:-Akkama Cheriyan
    C:-Arya Pallam
    D:-Lalitha Prabhu
    Correct Answer:- Option-A
Question10:-How many people signed in Ezhava memorial?
    A:-11218
    B:-12178
    C:-13276
    D:-13176
    Correct Answer:- Option-D
Question11:-Who started the daily 'Paschimodayam'?
    A:-Benjamine Baily
    B:-Hermen Gundert
    C:-K.P. Kesava Menon
    D:-Mamman Mappila
    Correct Answer:- Option-B
Question12:-Who is the founder of 'Samatwa Samajam'?
    A:-Sri Narayana Guru
    B:-Ayyankali
    C:-Vaikunda Swamikal
    D:-Sahodaran Ayyappan
    Correct Answer:- Option-C
Question13:-Who was the first signatory of 'Malayali Memorial'?
    A:-K.P. Sankara Menon
    B:-G.P. Pillai
    C:-Dr. Palpu
    D:-C. Kesavan
    Correct Answer:- Option-A
Question14:-Mampuram Thangal came to India from _____
    A:-Saudi Arabia
    B:-Yemen
    C:-Iraq
    D:-Egypt
    Correct Answer:- Option-B
Question15:-Who is the lone dissenter of Sabarimala temple women entry verdict of supreme court?
    A:-Dipak Misra
    B:-R.F. Nariman
    C:-A.M. Khawilkar
    D:-Indu Malhothra
    Correct Answer:- Option-D
Question16:-Who issued temple entry proclamation?
    A:-Swathi Thirunal
    B:-Sri Moolam Thirunal
    C:-Sri Chithira Thirunal
    D:-Ayilyam Thirunal
    Correct Answer:- Option-C
Question17:-Which among the following was 'Melmundu Samaram'?
    A:-Paliyam Satyagraha
    B:-Kuttamkulam Satyagraha
    C:-Vaikom Satyagraha
    D:-Shanar Agitation
    Correct Answer:- Option-D
Question18:-Who is known as the father of library movement in Kerala?
    A:-K.M. Panikkar
    B:-K.N. Panikkar
    C:-P.N. Panikkar

D:-K.P. Panikkar

Correct Answer:- Option-C

Question19:-Who is the author of the drama, 'Koottukrishi'?

A:-M.P. Battathiripad

B:-Edasseri Govindan Nair

C:-K. Damodaran

D:-V.T. Battathiripad

Correct Answer:- Option-B

Question20:-Who among the following is not included modern Triumvirate of Malayalam poetry?

A:-Cherusseri

B:-Kumaran Asan

C:-Vallathol

D:-Ulloor

Correct Answer:- Option-A

Question21:-Let A, B and C are three finite sets. Find |A| if |A| = |B|, |A`uu`B| = 2a + 3b, and |A`nn`B| = b

A:-a+2b

B:-2a+b

C:-2a+2b

D:-a+b

Correct Answer:- Option-A

Question22:-Let X = {2, 3, 6, 12, 24, 48}, and ≤ be the partial order defined by X ≤ Y if X divides Y. Number of edges in the Hasse diagram of (X, ≤) is

A:-4

B:-6

C:-5

D:-8

Correct Answer:- Option-C

Question23:-A box contains 8 red and 6 yellow balls. The probability of drawing two balls of the same colour is

A:-42/98

B:-43/95

C:-43/91

D:-None of the above

Correct Answer:- Option-C

Question24:-A die is tossed. If the number is odd, what is the probability that the number is prime?

A:-1/3

B:-2/3

C:-4/3

D:-3/4

Correct Answer:- Option-B

Question25:-Let `P(K)=1+3+5....+(2K-1)=3+K^2` . Then which of the following is true?

A:-Principle of mathematical induction can be used to prove the formula

B:-P(1) is correct

C:-P(k) implies P(k+1)

D:-None of the above

Correct Answer:- Option-C

Question26:-Three bags P, Q and R contains 20%, 40% and 40% of the total eggs produced in an industry. Past experience shows that 5%, 4% and 2% of the eggs contained in the respective bags are defective. If an egg was found to be defective, what is the the probability that the egg was from the bag P?

A:-10/36

B:-8/36

C:-10/34

D:-4/35

Correct Answer:- Option-C

Question27:-For the set {1, 2, 3, 4}, which of the following is true for the relation R = {(1,3), (1,4), (2,3),(2,4), (3,1), (4,1), (4,2), (3,4), (3,2)}

A:-R is symmetric

B:-R is transitive

C:-R is antisymmetric

D:-None of the above

Correct Answer:- Option-D

Question28:-A correlation coefficient of 1 means that
    A:-For every positive increase in one variable, there is a positive increase in a fixed proportion of the other variable
    B:-For every positive increase in one variable, there is a negative decrease in a fixed proportion of the other variable
    C:-For every positive increase in one variable, there is no change in a fixed proportion of the other variable
    D:-There is no relation between the variables
    Correct Answer:- Option-A
Question29:-Multiple regression is used
    A:-To predict scores on an independent variable from scores on multiple dependent variables
    B:-To predict scores on an dependent variable from scores on multiple dependent variables
    C:-To predict scores on an dependent variable from scores on multiple independent variables
    D:-To predict scores on an independent variable from scores on multiple independent variables
    Correct Answer:- Option-C
Question30:-Which of the following is not true when conducting multiple regression?
    A:-Data must be free from outliers for a multiple regression
    B:-Data must be heterogeneous for a multiple regression
    C:-Multiple regression can be used to access linear relationships
    D:-Data must be normally distributed for multiple regression
    Correct Answer:- Option-B
Question31:-As compared to TTL, CMOS logic has
    A:-Higher speed of operation
    B:-Higher power dissipation
    C:-Smaller physical size
    D:-All of the above
    Correct Answer:- Option-C
Question32:-Pin 21 of 8086 microprocessor is used for the signal
    A:-READY
    B:-ALE
    C:-RESET
    D:-QS1
    Correct Answer:- Option-C
Question33:-Assume that the following jobs are to be executed on a single processor system

    Job identifier   CPU-Burst Time
        P1   4
        P2   1
        P3   8
        P4   1
        P5   2

The jobs are assumed to have arrived at time 0 and in the order P1, P2, P3, P4, P5. Calculate the departure completion time
for job P1 if scheduling is round robin with time slice 1.
    A:-4
    B:-10
    C:-12
    D:-11
    Correct Answer:- Option-D
Question34:-The Banker's algorithm is used
    A:-To prevent deadlock in operating systems
    B:-To detect deadlock in operating systems
    C:-To avoid deadlock in operating systems
    D:-All of the above
    Correct Answer:- Option-C
Question35:-The performance of a digital computer improves when its RAM size increases. This is because
    A:-Size of virtual memory increases
    B:-Number of page faults are less
    C:-Larger RAMS are very faster
    D:-Number of segment faults are less
    Correct Answer:- Option-B
Question36:-Multiplier Quotient register is placed in
    A:-Main Memory
    B:-CPU

C:-I/O Equipment

D:-None of these

Correct Answer:- Option-B

Question37:-Which of the following is/are not true in contiguous allocation of disk space

A:-Size of the file is to be declared in advance

B:-There is no external fragmentation

C:-Difficulty in finding space for a new file

D:-Both 2 and 3

Correct Answer:- Option-B

Question38:-Interrupt latency for real time OS should be

A:-Maximum

B:-Zero

C:-Minimal

D:-None of the above

Correct Answer:- Option-C

Question39:-Which of the following is an invalid shell variables?

A:-india_15

B:-_15_india

C:-15_india

D:-Both 2 and 3

Correct Answer:- Option-C

Question40:-The output of the following shell programming is

var_1 = good

Readonly var_1

var_1= morning

echo $var_1

exit 0

A:-good

B:-morning

C:-program will generate an error message

D:-none of the above

Correct Answer:- Option-A

Question41:-The time complexity of building a heap with 'n' elements is

A:-O(n)

B:-O(log n)

C:-`O(n^2)`

D:-O(n log n)

Correct Answer:- Option-A

Question42:-Which of the following is false regarding AVL trees?

A:-AVL tree is more balanced than binary search tree

B:-AVL tree is more space efficient than binary search tree

C:-AVL tree is more time efficient than binary search tree

D:-None of the above

Correct Answer:- Option-B

Question43:-What is the worst case complexity of quicksort?

A:-O(n log n)

B:-O(n)

C:-`O(n^2)`

D:-O(log n)

Correct Answer:- Option-C

Question44:-Which data structure can be used to efficiently implement dijkstra's algorithm?

A:-Double ended queue

B:-Priority queue

C:-Stack

D:-Binary search tree

Correct Answer:- Option-B

Question45:-Which data structure is well suited for separate chaining?

A:-Singly linked list

B:-Doubly linked list

C:-Circular linked list

D:-Binary trees

Correct Answer:- Option-B

Question46:-In the following code, how many times the program will print "Hello"?

```
#include<stdio.h>
int main()
{
   printf("Hello");
   main();
   return 0;
}
```

A:-Infinite times

B:-32767 times

C:-65535 times

D:-till stack overflows

Correct Answer:- Option-D

Question47:-What will be output if you will compile and execute the following c code?

```
#include "string.h"
void main()
{
printf("%d%d",sizeof("program"),strlen("program"));
getch();
}
```

A:-8 7

B:-7 8

C:-8 8

D:-7 7

Correct Answer:- Option-A

Question48:-Predict the outputs of following C program.

```
int main()
{
   int x = -20;
   while (x++ !=1);
   printf("%d", x);
   return 0;
}
```

A:-2

B:-1

C:--1

D:-infinite

Correct Answer:- Option-A

Question49:-What is the return type of malloc()?

A:-void*

B:-pointer of allocated memory type

C:-void**

D:-int*

Correct Answer:- Option-A

Question50:-What does the following declaration mean?

int (*ptr)[20];

A:-ptr is array of pointers to 20 integers

B:-ptr is a pointer to an array of 20 integers

C:-ptr is an array of 20 integers

D:-None of these

Correct Answer:- Option-B

Question51:-If class C is derived from another class B which is derived from class A, which class will have minimum level of abstraction?

A:-Class A

B:-Class B

C:-Class C

D:-All have same level of abstraction

Correct Answer:- Option-C

Question52:-Which of the following statement is false?

A:-An abstract class is a class which cannot be instantiated
B:-Creation of an object is not possible with abstract class but it can be inherited
C:-An abstract class can contain only Abstract method
D:-None of these
Correct Answer:- Option-D

Question53:-Which is the necessary condition for virtual function to achieve late binding?
A:-Virtual function is to be accessed with direct name
B:-Virtual functions is to be accessed using base class object only
C:-Virtual function is to be accessed using pointer or reference
D:-Virtual function is to be accessed using derived class object only
Correct Answer:- Option-C

Question54:-Operator overloading is
A:-Making c++ operator works with objects
B:-Giving new meaning to existing operator
C:-Adding operation to the existing operators
D:-All the above
Correct Answer:- Option-C

Question55:-What are all the operators that cannot be overloaded?
A:-Scope Resolution (::)
B:-Member Selection (.)
C:-New operator (new)
D:-Both 1 and 2
Correct Answer:- Option-D

Question56:-Which two of the following methods are defined in class Thread?
A:-Start and wait
B:-Start and run
C:-Wait and notify
D:-Start Only
Correct Answer:- Option-B

Question57:-Which of these class object cannot be used to form a dynamic array in JAVA?
A:-ArrayList
B:-Map
C:-Vector
D:-ArrayList and Vector
Correct Answer:- Option-B

Question58:-Predict the output of the following code

```
public class Check
{
public static void main(String args[])
{
String s1 = "test";
String s2 = new String(s1);
System.out.println(s1==s2);
}
}
```

A:-true
B:-false
C:-0
D:-test
Correct Answer:- Option-B

Question59:-In java applet programs, the applet life cycle functions are called in which order?
A:-start(), init(), paint(), destroy(), stop()
B:-init(), run(), start(), stop(), destroy()
C:-init(), start(), paint(), stop(), destroy()
D:-start(), run(), paint(), destroy(), stop()
Correct Answer:- Option-C

Question60:-The three notion of java virtual machine are
A:-class, object, variable
B:-specification, implementation, instance
C:-primitive, referential, user defined

D:-byte code, object code, executable

Correct Answer:- Option-B

Question61:-Collection of entities that have the same attributes are called

A:-Domain

B:-Value set

C:-Entity set

D:-Entity type

Correct Answer:- Option-D

Question62:-Which of the following key is related with referential integrity constraint?

A:-Primary key

B:-Candidate key

C:-Foreign key

D:-Super key

Correct Answer:- Option-C

Question63:-Consider the following table of data r(R) of the relation schema R(XYZ)

```
 X   Y   Z
x1  y1  z1
x2  y1  z1
x3  y2  z1
```

Which of the following functional dependency sets are valid

A:-X->Y, Y->Z, Z->X

B:-X->Y, X->Z, Y->Z

C:-Both 1 and 2

D:-None of the above

Correct Answer:- Option-B

Question64:-The SQL aggregate function that returns number of values in a given column is

A:-count( )

B:-count(*)

C:-sum( )

D:-All of the above

Correct Answer:- Option-A

Question65:-Which of the following construct returns true if a given tuple is not present in the subquery

A:-exists

B:-not present

C:-not exists

D:-none of the above

Correct Answer:- Option-C

Question66:-What will be the output of the following query?

CREATE EmployeeView VIEW AS SELECT nothing FROM Employee WHERE ID < 100

A:-EmployeeView will be created with no columns

B:-EmployeeView will be created with column nothing

C:-Syntax error

D:-None of the above

Correct Answer:- Option-C

Question67:-Consider a relation A with m rows and relation B with n rows. How many rows will be generated if A × B is performed?

A:-m

B:-m + n

C:-m - n

D:-m * n

Correct Answer:- Option-D

Question68:-_____ is the statement which specifies when the trigger is to be executed.

A:-From

B:-Where

C:-When

D:-None of the above

Correct Answer:- Option-C

Question69:-Which of the following is true about Atomicity?

A:-Smallest unit of transaction
B:-Either all of its operations are executed or none
C:-Atleast one of the operation should be executed
D:-All of the above
Correct Answer:- Option-B

Question70:-Which of the following differentiates Two-Phase Locking with Strict Two-Phase Locking in Concurrency control?
A:-Release locks after usage
B:-Release locks at commit
C:-Cascading aborts
D:-None of the above
Correct Answer:- Option-B

Question71:-The middle layer of a three layer client/server architecture is called
A:-Presentation layer
B:-Application layer
C:-Database layer
D:-None of the above
Correct Answer:- Option-B

Question72:-Which of the following element in CSS allows authors to use external style sheets in their pages?
A:-position
B:-span
C:-extern
D:-link
Correct Answer:- Option-D

Question73:-Which of the following object displays prompt dialog in JavaScript?
A:-alert
B:-prompt
C:-document
D:-window
Correct Answer:- Option-D

Question74:-A technology for locating information in an XML document is
A:-xPath
B:-XSL
C:-MathML
D:-All of the above
Correct Answer:- Option-A

Question75:-The method used in PHP to transfer binary data from client to server is
A:-GET
B:-POST
C:-Both 1 and 2
D:-None of the above
Correct Answer:- Option-B

Question76:-The directive used to specify information needed by ASP.NET to process an ASPX file
A:-Page
B:-Register
C:-Import
D:-Master
Correct Answer:- Option-A

Question77:-Which object in AJAX applications manage asynchronous interaction with the server?
A:-HttpURLConnection
B:-HttpRequest
C:-XMLHttpRequest
D:-All of the above
Correct Answer:- Option-C

Question78:-Cross-Site Scripting attacks are normally initiated by
A:-Web Client
B:-Web Server
C:-Both 1 and 2
D:-None of the above
Correct Answer:- Option-A

Question79:-Which of the following in ASP.NET is a data source control method?

A:-ExecuteReader

B:-SqlDataReader

C:-SqlCommand

D:-SqlConnection

Correct Answer:- Option-D

Question80:-Which of the following function is used to exit from a PHP Script?

A:-exit( )

B:-die( )

C:-both 1 and 2

D:-none of the above

Correct Answer:- Option-C

Question81:-Which one among the following is a private IP address?

A:-11.0.0.1

B:-168.172.29.41

C:-172.15.24.33

D:-192.168.24.40

Correct Answer:- Option-D

Question82:-Which layer in the TCP/IP stack is equivalent to the Transport layer in the OSI model?

A:-Application

B:-Host-to-Host

C:-Internet

D:-Network Access

Correct Answer:- Option-B

Question83:-Which among the following describes the DHCP Discover message?

i.   It uses FF:FF:FF:FF:FF:FF as a layer 2 broadcast
ii. It uses UDP as the Transport layer protocol
iii. It uses TCP as the Transport layer protocol
iv. It does not use a layer 2 destination address

A:-i only

B:-i and ii

C:-iii and iv

D:-iv only

Correct Answer:- Option-B

Question84:-Among the following IP address classes, which one provides a maximum of only 254 host addresses per network ID?

A:-Class A

B:-Class B

C:-Class C

D:-Class D

Correct Answer:- Option-C

Question85:-You have an IP address of 172.16.13.5 with a 255.255.255.128 subnet mask. What is your class of address, subnet address, and broadcast address?

A:-Class A, Subnet 172.16.13.0, Broadcast address 172.16.13.127

B:-Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.127

C:-Class B, Subnet 172.16.13.0, Broadcast address 172.16.13.255

D:-Class B, Subnet 172.16.0.0, Broadcast address 172.16.255.255

Correct Answer:- Option-B

Question86:-You have an interface on a router with the IP address of 192.168.192.10/29. Including the router interface, how many hosts can have IP addresses on the LAN attached to the router interface?

A:-32

B:-30

C:-8

D:-6

Correct Answer:- Option-D

Question87:-The number of unique substitution boxes in DES after the 48 bit XOR operation are

A:-4

B:-6

C:-8

D:-12

Correct Answer:- Option-C

Question88:-For `p=11` and `q=17`, choose `e=7`. Find the plain text for the Cipher text 11 using the RSA algorithm

A:-88

B:-111

C:-122

D:-143

Correct Answer:- Option-A

Question89:-Which of the following is true about HTTP headers and connection management?

A:-All HTTP responses must either close a connection or include a Content-Length:header to signify to end of a HTTP response body

B:-The Host : field in HTTP allows the same web server to server content for multiple domains

C:-When transferring many small Web objects, the only performance difference between persistent and non-persistent HTTP connections is related to connection establishment

D:-HTTP headers have a fixed size

Correct Answer:- Option-B

Question90:-Which of the following about UNIX socket programming is true?

i. When a TCP sender calls close(), the network stack immediately sends a FIN packet to its peer
ii. send() on a TCP socket causes a sender to a generate a TCP/IP packet and send it out the appropriate network interface
iii. accept() returns when the receiver completes the three-way TCP handshake
iv. The return value of recv() specifies the number of bytes read from a socket, or if the socket was closed or an error was encountered

A:-i only

B:-i and ii

C:-iii and iv

D:-iv only

Correct Answer:- Option-C

Question91:-COCOMO stands for

A:-Consumed Cost Model

B:-Constructive Cost Model

C:-Common Control Model

D:-Composition Cost Model

Correct Answer:- Option-B

Question92:-Which of the following is not defined in a good Software Requirement Specification (SRS) document?

A:-Functional Requirement

B:-Nonfunctional Requirement

C:-Goals of implementation

D:-Algorithm for software implementation

Correct Answer:- Option-D

Question93:-Software process and improvement are assessed by

A:-ISO 9000

B:-ISO 9001

C:-SPICE (ISO/IEC15504)

D:-Both 2 and 3

Correct Answer:- Option-D

Question94:-CMM model in Software Engineering is a technique of

A:-Develop the software

B:-Improve the software process

C:-Improve the testing process

D:-All of the above

Correct Answer:- Option-B

Question95:-Alpha and Beta Testing are forms of

A:-Acceptance testing

B:-Integration testing

C:-System testing

D:-Unit testing

Correct Answer:- Option-A

Question96:-Coupling and cohesion can be represented using a

A:-cause-effect graph

B:-dependence matrix

C:-structure chart

D:-SRS

Correct Answer:- Option-B

Question97:-The tests that run every night during the project development or before a programmer checks in any changes to the global repository are normally characterized as

A:-Integration tests

B:-Regression tests

C:-Validation tests

D:-System tests

Correct Answer:- Option-B

Question98:-Which of the following reason is valid ones for choosing a top-down process?

A:-Developers can present a demo of the project to the management faster than using a bottom-up process

B:-A top-down process is more time consuming because of the unit tests

C:-In a top-down design, if an error is detected its always because a lower-level module is not meeting its specifications (because the higher-level ones are already been tested)

D:-A top-down process makes it possible to detect performance problems faster

Correct Answer:- Option-A

Question99:-Consider the following statements

(i)   Bottom-up testing is not an effective way to reveal architectural design flaws.

(ii) Top-down testing can be time-consuming, because you need to write stubs for many   modules.

A:-Only (i) is true

B:-Only (ii) is true

C:-Both (i) and (ii) are true

D:-Both (i) and (ii) are false

Correct Answer:- Option-C

Question100:-Consider the following statements

(i)   When designing tests, if partitions are chosen perfectly, there is no point to testing boundary values near the edges of the partition.

(ii) Glass-box tests designed for one implementation are valid to use when testing another implementation.

A:-Only (i) is true

B:-Only (ii) is true

C:-Both (i) and (ii) are true

D:-Both (i) and (ii) are false

Correct Answer:- Option-C