Here is a question paper of CDAC EXAM. I want to share a pattern of CDAC exam. Those student who was preparing for the CDAC paper see this question paper this one was very helpful to you. Click Below To see a Paper.
CDAC Technical - Other

## 1. Aptitude

2. c/c++
3. Java

Aptitude is nothing it will be very easy, jus from R.S Agarvall example 1.time and work problem
2.train problem
3.chain rule problem
4.ratios

And in technical side it will be from c and $\mathrm{c}++$ ? and im hosting some of the c and $\mathrm{c}++$ question which i know
1.Find which one of the following is correct?
a) ! $(\mathrm{p} \| \mathrm{q})!\mathrm{p} \|!\mathrm{q}$
b) $!!!p=!p$
c) $\mathrm{p} \& \& \mathrm{q} \| \mathrm{r} p \& \&(\mathrm{q} \| \mathrm{r})$
d)nothing
2. find the output of the following program?
main()
\{
static i=3;
pringf("\%d",i-)
return $\mathrm{i}>0$ ? main():0;
\}
ans:
a) 333
b) 321
c) 111
d)error in the code
3.find the output of the following program?
main()
\{

```
charp[] = "%d\n";
p[1] = ,c,c;
printf(p,65);
}
ans:
a) 0
b) a
c) A
d) error in the code
```

4.which will return integer?
a) int*s ( )
b) $\left(\right.$ int $\left.^{*}\right) \mathrm{s}($ )
b) int (*s ) ( )
5.find the output of the following program? char*myfunc(char*ptr)
\{
ptr $+=3$;
return (ptr);
\}
int main()
\{
char*x,*y;
x="HELLO";
$\mathrm{y}=$ myfunc $(\mathrm{x})$;
printf("y = \%s $\ln ", y)$;
return 0;
\}
ans:
a) HELLO
b) LLO
c) LO
d) L
6.find the output of the following program? main()
\{
int i = _1_abc(10);
printf("\%d\n",-i);
\}
\{
int_1_abc(int i)

```
{
return(++i);
}
ans:
a) 10
b) 11
c) 9
d)error
```

7.In order to force derived class A to redefine a function a fun, void foo( ) how should A declare foo( )?
inline foo()
virtual $\operatorname{voidfoo(})=0$
8. which operator cant be overloaded?
ans:
a) \&;
b) [ ];
c) :: ;
d) all the above;
8.If u allocate it as, int *ptr = new int [ 25];
How will u deallocate it ? ans:
a) delete *pint;
b) delete [ ] pint;
c) delete pint [25];
d) all ;
9. which virtual?
a) constant;
b) static function;
c) return;
d) none;
10. How many times "hello world" will be printed?
void fun(int n)
\{
int i;
for $(\mathrm{i}=0 ; \mathrm{i}<=\mathrm{n} ; \mathrm{i}++$ )
\{
fun(n-i);
printf("hello world");

```
}
}
ans:
a) infinite
b)zero
c)one
d)n times
```

CDAC Whole Testpaper
CDAC PAPER ON 20th AUGUST 2006 DESD
Hi folks! i am Anwarul Abbasi, i have managed to get some questions of the recent CDAC (all India) entrance paper of DESD, it was held on 20.08.2006, and here they are:
Sections A ( C programming) Total Question 35
Sections B ( Digital, Mup,Electrical,Networking) Total Question 35
Sections C( Apittute) Total Question 30
Section A

1. What is the output of main()
\{
int $\mathrm{a}=3, \mathrm{~b}=5, \mathrm{c}=50$;
$a=b==c$;
printf("a-\%d\n",a);
\}
Ans: $\mathrm{a}=0$
2. What is the output of main()
\{
int $x=4$;
$\mathrm{x} \ll 1$;
printf("\%d",x)
\}
Ans: 8
3.Arrays are preffered over link list while?

Ans: Accessing elements.
4. The getch() library function returns:

Ans: ans Displays a character on the screen when any key is pressed.
Section B

1. Consider the boolean expression $\mathrm{x}, \mathrm{yz},+\mathrm{x}, \mathrm{y}, \mathrm{z}+\mathrm{x}(\mathrm{y}+\mathrm{z})$ and give its POS.

Ans: NA
2. The logic Expression $\mathrm{Y}=\operatorname{Em}(0,3,6,7,10,12,15)$ is equivalent to.

Ans: NA
3. The number of 43 in $2, \mathrm{~s}$ complement is

Ans: 00101011
4. The process to process delivery of the entire message is the responsibilty of $\qquad$
Ans: Transport Layer
5. The IP is $\qquad$ protocol
Ans: Reliable and connection oriented
6. The $\qquad$ sub layer is responsible for the operation of CSMA/CD access method in framing Ans: MAC
7. Gigabit ethernet has a data rate of $\qquad$ Mbps
Ans: NA
Section C
Analogies:

1. Mansard: Roof::

Ans: Dormer: window
2. Curatot:painting::

Ans: Archvist:manuscript
Antonyms:

1. Motile

Ans: NA
2. Forge

C-Dac Sample quesion paper - pattern 2
Programmin Concepts
61. The ability to reuse objects already defined, perhaps for a different purpose, with modification appropriate to the new purpose, is referred to as
Information hiding
Inheritance

## Redefinition

Overloading
62. The term given to the process of hiding all the details of an object that do not contribute to its essential characteristics is called $\qquad$
data-hiding
packaging
encapsulation
abstraction
63.Object Oriented Technology`s $\qquad$ feature means that a small change in user requirements should not require large changes to be made to the system Abstraction
Modularity
Encapsulation
Modelling
64. An object has $\qquad$

## State

Behaviour
Identity
All of these options
65. Which of the following is true:

Class is an object of an object
Class is meta class
Class cannot have zero instances
None of these options
66. If a derived class object is explicitly destroyed by applying the delete operator to a base-class pointer to the object, the $\qquad$ function is automatically called on the object Derived-class destructor
Base-class destructor
Base-class constructor
Derived-class constructor
67. In object orientated programming a class of objects can $\qquad$ properties from another class of objects
utilize
borrow inherit adapt
68. Contracts are not meant to be used in cases of $\qquad$
Composition
`has-a` relationship
`is-a` relationship
Both Composition and `has-a` relationship
69. Inheritance through interface is called $\qquad$
Implementation inheritance
Definition inheritance
Delegation inheritance
Interface inheritance model
70. When a class uses dynamic memory, what member functions should be provided by the class?
An overloaded assignment operator
The copy constructor
A destructor
All of these options
71. $\qquad$ means that both the data and the methods which may access it are defined together in the same unit
Data hiding
Encapsulation
Data Binding
None of these options
72. The term given to the process of hiding all the details of an object that do not contribute to its essential characteristics is called $\qquad$ data-hiding
packaging
encapsulation
grouping
73. Car contains a steering wheel is example of $\qquad$
Composition
Association
Composition and Association
None of these options
74. Can two classes contain member functions with the same name?

No
Yes, but only if the two classes have the same name
Yes, but only if the main program does not declare both kinds
Yes, this is always allowed
75. A contract is implemented through

Class
Interface
Abstract Class
Interface and Abstract Class

## English Language Ability

Directions:- The given pair of words contains a specific relationship to each other. Select the best pair of choices which expresses the same relationship as the given
76. IGNOMINY : DISLOYALTY ::
fame : heroism
death : victory
derelict : fool
martyr : man

## 77. EXPLOSION : DEBRIS ::

flood : water
famine : food
fire : ashes
disease : germ
78. Bland : Piquant ::
inane : relevant
charlatan : genuine
slavish : servile
terse : serious

## 79. NEGLIGENT : REQUIREMENT::

remiss : duty
cogent :argument
easy : hard
careful : position
Directions:- Choose the best word, which is most opposite in the meaning to the given word
80. FETTER :
delay
stretch
comply
thrive

## 81. SEDULOUS :

rampant
esoteric
morose
indolent

## 82. SUCCULENT :

ordinary
tasteless
inexpensive
invigorating

## 83. DORMANT : <br> authoritative <br> elastic <br> active <br> uninteresting

## 84. COURT :

reject
uncover
infect
subject
Directions:- The given pair of words contains a specific relationship to each other. Select the best pair of choices which expresses the same relationship as the given

## 85. INTIMIDATE : FEAR ::

Maintain : satisfaction
Astonish : wonder
Soothe : concern
Lion : tame
Directions:- Pick out the best choice which can complete the incomplete stem correctly and meaningfully
86. It was an extremely pleasant surprise for the hutment-dweller when the Government officials told him that
he had to vacate hutment which he had been unauthorized occupying he had been gifted with a furnished apartment in a multistoried building he would be arrested for wrongly encroaching on the pavement outside his dwelling
they would not accede to his request
87. In the closing days of the civil War, President Abraham Lincoln was planning to graciously welcome the defeated confederate states back into the Union. After Lincoln was assassinated, however, the "Radical Republicans" in Congress imposed martial law in the South, creating resentment that caused problems well into this century. Had Lincoln lived, the history of regional conflict in 20th century America would have been considerably different. All of the following assumptions underline the argument above EXCEPT The imposition of martial law in the South was primarily responsible for the resentment felt in the South Had he lived, lincoln would have treated hte defeated South as he had planned Lincoln would have been able to prevent the Radical Republicans in Congress from imposing martial law in the South

Factors other than the imposition of martial law in the South affected the history of regional conflicts in 20th century America
88. A politician wrote the following: "I realize there are shortcomings to the questionaire method. However, since I send a copy of the quetionnaire to every home in the district, I believe the results are quite representative.... I think the numbers received are so large that it is quite accurate even though the survey is not done scientifically" Most people who received the questionnaire have replied Most people in the district live in homes. the questionnaire method of data collection is unscientific A large, absolute number of replies is synonymous with accuracy
89. A worldwide ban on the production of certain ozone-destroying chemicals would provide only an illusion of protection. Quantities of such chemicals, already produced, exist as coolants in millions of refrigerators. When they reach the ozone layer in the atmosphere, their action cannot be halted. So there is no way to prevent these chemicals from damaging the ozone layer further. Which of the following, if true, most seriously weakens the argument above? It is impossible to measure with accuracy the quantity of ozone-destroying chemicals that exist as coolants in refrigerators. In modern societies, refrigeration of food is necessary to prevent unhealthy and potentially lifethreatening conditions. Even if people should give up the use of refrigerators, the coolants already in existing tefrigerators are a threat to atmospheric ozone. The coolants in refrigerators can be fully recovered at the end of the useful life of the refrigerators and reused
90. Every town with a pool hall has its share of unsavory characters.This is because the pool hall attracts gamblers and all gamblers are unsavory. Which of the following, if true cannot be inferred from the above?
All gamblers are unsavory
All pool halls attract gamblers
Every town has unsavory characters
All gamblers are attracted by pool halls
Directions:- The workweek in a small business is a five-day workweek running from Monday through Friday. In each workweek, activities L,M,N,O and P must all be done. The work is subject to the following restrictions:
L must be done earlier in the week than O and earlier than P
M must be done earlier in the week than N and earlier than O
No more than one of the activities can ever be done on any one day
91. Which of the following is an acceptable schedule starting from Monday to Friday?
$\mathrm{L}, \mathrm{M}, \mathrm{N}, \mathrm{O}, \mathrm{P}<-$ ans

M, N, O, N, M
O, N, L, P, M
P, O, L, M, L
92. In a game, exactly six inverted cups stand side by side in a straight line, and each has exactly one ball hidden under it. The cups are numbered consecutively 1 through 6. Each of the balls is painted a single solid color. The colors of the balls are green, magenta, orange, purple, red, and yellow. The balls have been hidden under the cups in a manner that conforms to the following conditions: The purple ball must be hidden under a lower-numbered cup than the orange ball.
The red ball must be hidden under a cup immediately adjacent to the cup under which the magenta ball is hidden.
The green ball must be hidden under cup 5 .
Which of the following could be the colors of the balls under the cups, in order from 1 through 6 ?
Green, yellow, magenta, red, purple, orange
Magenta, green, purple, red, orange, yellow Magenta, red, purple, yellow, green, orange<-ans
Orange, yellow, red, magenta, green, purple
Directions:- In a group there are five students coded as P Q R S T.Qand R are intelligent in mathematics and geology. $P$ and $R$ are intelligent in mathematics and hindi. Q and S are intelligent in psychology and buddhist studies. T is intelligent in buddhist studies hindi and psychology
93. who is intelligent in psychology, geology and buddhist studies
$\mathrm{Q}<-$-ans
T
R
S
Directions:- The following questions are based on the following situations.Asha, Babli, Charn, Deepti, Eira, Farha are cousins. No two cousins are of the same age ,but all have birth days on the same date in that year. The youngest is 17 years old and the oldest is Eira is 22 .Farha is somewhere between Babli and Deepti in age.Asha is older than Babli. Charn is older than Deepti
94. If asha is one year older than charn the number of logically possible orderins of all six cousins by increasing age is
2 <-ans(Babli,Asha, Farha, Charn, Deepti,Eira )
3
95. It is easier to swim in the sea water than in river water because sea is vast mass of water sea water is generally calm the density of sea water is higher than river water $<-$ ans they water of sea is cool and greenish
96. starting from a point x jayant walked 15 metres towards the west he turned to his left and walked 20 metres he then turned to his left and walked 15 metres he then further turned to his right and walked 12 metres how far is jayant from the point x and in which direction?
32 metres south
47 metres east
42 metres north
27 metres south < -ans
97. Rock and roll music started in the 1950s as a young mans medium and rock is still best performed by men in their twenties and thirties. As rock performers grow into their forties and even fifties, they are simply less physically capable of producing the kind of exciting music they did when they were younger. All of the following assumptions underline the argument above EXCEPT:
As rock performers mature, their performances tend to become less exciting Rock music is dominated by male performers
Women performers have always played a significant role in rock music The physical demands of performing rock are better met by the young < -ans

## Mathematical Problems

98. Which of the following statements are true, if $x+y+z=10 y>=5$ and 4 $>=\mathrm{z}>=3$
99. $x<z$
100. $x>y$
101. $x+z<=y$

1 only
2 only
3 only
1 and 3 only < -ans
99. The solution of the equation $4-5(2 y+4)=4$ is
-2/5
8
4
$-2<-$ ans
100 . When $\mathrm{x} 5+1$ is divided by $(\mathrm{x}-2)$, the remainder is 15

33
101. How many terms of the series $-9,-6,-3, \ldots \ldots \ldots$.....must be taken such that the sum may be 66 ?

11
13
$\qquad$
ans10
102. The side of a rectangle are whole numbers. What must their lengths be for the perimeter for the rectangle to be numerically equal to its area?
3 and 6
4 and 5
4 and 6
5 and 5
103. A path 7 metres wide surrounds a circular lawn whose diameter is 252 m . What is the area of path?
5698 sq.mtrs.
5000 sq.mtrs.
5500 sq.mtrs.
None of these
104. If the negative of the sum of two consecutive odd numbers is less than -35 , which of the following may be one of the numbers?
18


16
15
13
105. What is the perimeter of a rectangle that is twice as long as it is wide and has the same area as a circle of diameter 8 ?
8(P) $1 / 2$
8P
12(2P)1/2
12P
106. Towns A and C are connected by a straight highway which is 60 miles long. The straight line distance between town A and town B is 50 miles, and the straight line distance from town B to town C is 50 miles. How many miles is it from town B to the point on the highway connecting town A and C which is closest to town B?
108. A batsman played 17 innings during a season and he was not out. The score of 85 improves his average by 3 runs in the 17th innings. His average score after 16th innings is
37
35
34
36
109. If paper costs 1 paisa per sheet, and a buyer gets a $2 \%$ discount on all the paper he buys after the first 1000 sheets, how much will it costs to buy 5000 sheets of paper?
Rs 49.30
Rs 50.00
Rs 39.20
Rs 49.20
110. The income of a broker remains unchanged though the rate of commission is increased from $4 \%$ to $5 \%$. The percentage of slump in business is $8 \%$ 1\%
20\%
80\%
111. There are 4 quarts in a gallon. A gallon of motor oil sells for Rs. 12 and a quart of the same oil sells for Rs.5. The owner of a rental agency has 6 machines and each machine needs 5 quarts of oil. What is the minimum amount of money she must spend to purchase enough oil ?
Rs. 84
Rs. 94
Rs. 96
Rs. 102
112. A truck departed from Newton at 11:53a.m. and arrived in Far City, 240 miles away, at 4:41 p.m. on the same day. What was the approximate average speed of the truck on this trip?
16/1,200 MPH
40/288 MPH
1,494/240 MPH
50 MPH
113. A girl rode her bicycle from home to school, a distance of 15 miles, at an average speed of 15 miles per hour. She returned home from school by walking at an average speed of 5 miles per hour. What was her average speed for the round trip if she took the same route in both directions?
7.5 miles per hour

10 miles per hour
12.5 miles per hour

13 miles per hour
114. A is thrice as good a workman as B. If the time taken by B to do piece of works exceeds that taken by A by 8 days. In how many days A does the work. 8

4
12
10
115. The population of a town was 54,000 in the last census. It has increased $2 / 3$ since then. Its present population is
18,000
36,000
72,000
90,000
116. One hundred job applicants show up in response to a classified ad.If 60 percent of them are female and if $3 / 4$ of the female applicants are willing to relocate if the job demands it, how many are not willing to relocate?
55
45
15
It cannot be determined from the information given
117. Mr. Smith drove at an average speed of 50 mph for the first two hours of his trip. For the next three hours, he averaged 20 mph . What was Mr. Smith`s average speed for the five-hour trip ?
20 mph
32 mph
35 mph
38 mph
118. A postal truck leaves its station and heads for Chicago, averaging 40 mph .

An error in the mailing schedule is spotted and 24 minutes after the truck leaves, a car is sent to overtake the truck. If the car averages 50 mph , how long will it take to catch the postal truck?
1.6 hours

3 hours
2 hours
1.5 hours
119. The length breadth and height of a cuboid are in the ratio $1: 2: 3$. The length, breadth and height of the cuboid are increased by $100 \%, 200 \%$ and $200 \%$ respectively. Then the increase in the volume of the cuboid is 5 times
6 times
12 times
17 times
120. An Automobile covers the distance between two cities at a speed of 60 km . per hour and on the return journey it covers at a speed of 40 km . per hour. Find the average speed.
60
50
48
121. A man buys 200 shares (par value of Rs.10) of a company, which pays $12 \%$ per annum as dividend, at such a price he gets $15 \%$ on his money. Find the market value(app.) of a share.
Rs. 9
Rs. 12
Rs. 8
Rs. 7.50
122. An old picture has dimensions 33 inches by 24 inches. What one length must be cut from each dimension so that the ratio of the shorter side to the longer side is $2: 3$ ?
2 inches
6 inches
9 inches
$101 / 2$ inches
123. Hiralal earned a profit of Rs. 300 by selling 100 kg of mixture of A and B types of rice at a total price of Rs. 1100. What was the proportion of A and B types of rice in the mixture if the cost prices of A and B types of rice are Rs. 10 and Rs. 5 per kg respectively ?
3:2
2:5
2:773
5:2
124. A fraction has a value of $2 / 5$. If the numerator is decreased by 2 and the
denominator increased by 1 , then the resulting fraction is $1 / 4$. What is the value of the numerator of the original fraction ?
5
6
7
8
C-Dac Sample quesion paper - pattern 3
Answer: 1. What is data structure?
A data structure is a way of organizing data that considers not only the items stored, but also their relationship to each other. Advance knowledge about the relationship between data items allows designing of efficient algorithms for the manipulation of data.
2. List out the areas in which data structures are applied extensively?

Compiler Design,
Operating System,
Database Management System,
Statistical analysis package,
Numerical Analysis,
Graphics,
Artificial Intelligence,
Simulation
3. What are the major data structures used in the following areas: RDBMS,

Network data model \& Hierarchical data model.
RDBMS â€" Array (i.e. Array of structures)
Network data model âe" Graph
Hierarchical data model âe" Trees
4. If you are using C language to implement the heterogeneous linked list, what pointer type will you use?
The heterogeneous linked list contains different data types in its nodes and we need a link, pointer to connect them. It is not possible to use ordinary pointers for this. So we go for void pointer. Void pointer is capable of storing pointer to any type as it is a generic pointer type.
5. Minimum number of queues needed to implement the priority queue?

Two. One queue is used for actual storing of data and another for storing priorities.
6. What is the data structures used to perform recursion?

Stack. Because of its LIFO (Last In First Out) property it remembers its $\hat{a}^{\wedge} €^{\wedge}$ callerâ $€^{\mathrm{TM}}$ so knows whom to return when the function has to return.

Recursion makes use of system stack for storing the return addresses of the function calls.

Every recursive function has its equivalent iterative (non-recursive) function. Even when such equivalent iterative procedures are written, explicit stack is to be used.

CDAC Technical - C \& C++
C-Dac Sample quesion paper - pattern 1
Fundamentals of Programming
1.The programming language that was designed for specifying algorithm

Address
ASCII
ALGOL
None of these options
2. $\qquad$ contains the addresses of all the records according to the contents of the field designed as the record key.
Index<——ans
Subscript
Array
File
3. $\qquad$ symbol is used for Processing of data.
Oval
Parallelogram< ——ans
Rectangle
Diamond
4. $\qquad$ is the analysis tool used for planning program logic
Protocol
None of these options
PROLOG
Pseudocode
5. Machine language has two part format the first part is $\qquad$ and the second part is $\qquad$
OPCODE,OPERAND<——ans
OPERAND,OPCODE
DATA CODE,OPERAND
OPERAND,CODEOP
6. Language Primarily used for internet-based applications

ADA

C++
JAVA; ans
FORTRAN
7. $\qquad$ is a point at which the debugger stops during program execution and awaits a further command.
Memory Dump
Watch point< ans
Break point
None of these options
8. $\qquad$ do not contain any program logic and are ignored by the language Processor
Protocol
Virus
Comment
None of these options
9. The component of data base management system is $\qquad$
Data definition Language
Data manipulation Language
Data definition Language and Data manipulation Language
None of these options
10. The quality of Algorithm is judged on the basis of $\qquad$
Time requirement
Memory Requirement
Accuracy of solution
All of these options $<$ ans
11. Advantages of using flow charts is

Effective Analysis
Efficient Coding
Time consuming
Effective Analysis and Efficient Coding<-ans

## Programming in C

12. The Real constants in C can be expressed in which of the following forms

Fractional form only
Exponential form only
ASCII form only
Both Fractional and Exponential forms $<-$ ans

> 13. The program, which translates high-level program into its equivalent machine language program, is called
> Transformer

Language processor
Converter
None of these options<——ans<!-[if !supportEmptyParas]->
14. Consider the following statements. i.Multiplication associates left to right
ii.Division associates left to right
iii.Unary Minus associates right to left
iv.subtraction associates left to right All are true < - ans
only i and ii are true
all are false
only iii and iv are true
15. What will be the value of variable a in the following code?
unsigned char a;
$\mathrm{a}=0 \mathrm{xFF}+1$;
printf("\%d", a);
0xFF
$0 \times 100$
$0<$ ans
$0 \times 0$
16. What is the output of the following program?
\#include <stdio.h>
void main()
\{
printf("ln10!=9 : \%5d",10!=9);
\}
$1<$ ans
0
Error
None of these options
17. \#include<stdio.h>
void main()
\{
int $\mathrm{x}=10$;
$(\mathrm{x}<0)$ ? (int $\mathrm{a}=100)$ :(int $\mathrm{a}=1000$ );
printf(" \%d",a);
\}
Error<-ans
1000
100
None of these options
18. Which of the following shows the correct hierarchy of arithmetic operations in C

$$
\begin{aligned}
& (), * *, * \text { or } /,+ \text { or }- \\
& (), * *, *, /,+,- \\
& (), * *, /, *,+,- \\
& (), / \text { or } *,- \text { or }+<- \text { Ans }
\end{aligned}
$$

19. What is the output of the following code?

## \#include<stdio.h>

void main()
\{
int $\mathrm{a}=14$;
$a+=7$;
a $-=5$;
a *=7;
printf("\n\%d", a);
\}
$112<$ ans
98
89
None of these options
20. What is the output of the following code? \#include<stdio.h> \#define T t
void main()
\{
char $\mathrm{T}={ }^{\text {' }} \mathrm{T}$;
printf("\n\%c\t\%c\n",T,t);
\}

## Error

T t
T T
t t
21. The statement that prints out the character set from $\mathrm{A}-\mathrm{Z}$, is
for $\left(a={ }^{\prime} z ; a<{ }^{\prime} a^{\prime} ; a=a-1\right)$
printf("\%c", \&a);
for $\left(\mathrm{a}=` \mathrm{a} ; ~ \mathrm{a}<=` \mathrm{z}^{\prime} ; \mathrm{a}=\mathrm{a}+1\right.$
printf("\%c", \&a);
for $\left(\mathrm{a}={ }^{`} \mathrm{~A}^{\prime} ; \mathrm{a}<=\mathrm{Z}^{\prime} ; \mathrm{a}=\mathrm{a}+1\right)<—$ Ans printf("\%c", a$)$;
for $\left(\mathrm{a}={ }^{`} \mathrm{Z}\right.$; $; \mathrm{a}<=` \mathrm{~A}^{\prime} ; \mathrm{a}=\mathrm{a}+1$ )
printf("\%c", a);
22. The statement which prints out the values 1 to 10 on separate lines, is for ( count $=1$; count $<=10$; count $=$ count +1 ) printf("\%d\n",count); for $($ count $=1 ;$ count $<10 ;$ count $=$ count +1$)$ printf("\%d\n",count); $\qquad$
for $($ count $=0 ;$ count $<=9 ;$ count $=$ count +1$) \operatorname{printf}(" \% d$ ",count $) ;$
for $($ count $=1 ;$ count <> 10; count = count +1 ) printf("\%d\n",count);
23. What does the term `call-by-reference` refer to?

Passing a copy of a variable into a function. Passing a pointer to a variable into a function. $\qquad$ ans
Choosing a random value for a variable.
A function that does not return any values.
24. What is the output of the following code? \#include<stdio.h> void swap(int\&, int\&);
void main()
\{
int $\mathrm{a}=10, \mathrm{~b}=20$;
swap ( $a++, b++$ );
printf("\n\% $\% \backslash t \% d \backslash t ", a, b) ;$
\}
void swap(int\& x, int\& y)
\{
$\mathrm{x}+=2$;
$y+=3$;
\}
14, 24
$11,21<$ ans
10, 20
Error
25. What is the output of the following program code \#include<stdio.h>
void abc(int a[])
\{
a++;
$\mathrm{a}[1]=612$;
\}
main()
\{
char a[5];
abc(a);
printf("\%d",a[4]);
\}
100
612
Error<-ans
None of these options
26. which of the following is true about recursive function
i. it is also called circular definition
ii. it occurs when a function calls another function more than once
iii. it occurs when a statement within the function calls the function itself
iv. a recursive function cannot have a return statement within it"
i and iii< ans
i and ii
ii and iv
i, iii and iv
27. What will happen if you assign a value to an element of an array whose subscript exceeds the size of the array?
The element will be set to 0
Nothing, its done all the time
Other data may be overwritten
Error message from the compiler
28. What is the output of the following code? \#include<stdio.h> void main()
\{
int $\operatorname{arr}[2][3][2]=\{\{\{2,4\},\{7,8\},\{3,4\}\},,\{\{2,2\},\{2,3\},\{3,4\}\}$,$\} ;$
printf(" $\ln \% \mathrm{~d} ", * *(* a r r+1)+2+7)$;
\}
$16<-$ ans
7
11
Error
29. If int $s[5]$ is a one dimensional array of integers, which of the following refers to the third element in the array?

```
* (s+2)<-ans
*(s+3)
s + 3
s+2
30. \#include"stdio.h"
main()
{
int *p1,i=25;
void *p2;
p1=&i;
p2=&i;
p1=p2;
p2=p1;
printf("%d",i);
}
```

The output of the above code is :
Program will not compile <- ans
25
Garbage value
Address of I
31. What is the output of the following code? void main()
\{
int $\mathrm{i}=100, \mathrm{j}=200$;
const int * $\mathrm{p}=\& \mathrm{i}$;
$\mathrm{p}=\& \mathrm{j}$;
printf("\%d",*p);
\}
100
$200<$ ans
300
None of the above
32. void main()
\{
int $\mathrm{i}=3$;
int $* \mathrm{j}=\& \mathrm{i}$;
clrscr();
printf("\%d\%d",++*j,*(\&i));
\}
What is the output of this program?
33
$43<$ ans
4,address of i printed
Error:Lvalue required
33. What is the output of the following code? \#include<stdio.h>
void main()
\{
int arr[] $=\{10,20,30,40,50\}$;
int $* \operatorname{ptr}=$ arr;
printf("ln \%dlt\%dlt",*ptr++,*ptr);
\}
1020
10 10<-ans
2020
2010
34. Which of these are reasons for using pointers?
1.To manipulate parts of an array
2.To refer to keywords such as for and if
3.To return more than one value from a function 4.To refer to particular programs more conveniently
$1 \& 3<$ ans
Only 1
Only 3
All of the above

## 35. struct num

\{
int no;
char name[25];
\};
void main()
\{
struct num n1[]=\{ \{25,"rose" $\},\{20$, "gulmohar" $\}$,
\{8,"geranium"\},\{11,"dahalia"\}\};
printf("\%d\%d" ,n1[2].no,(*\&n1+2)->no+1);
\}
What is the output of this program?
88
$89<$ ans
98
8 , unpredictable
36. During initializing a union

Only one member can be initialised.
All the members will be initialised. Initialisation of a union is not possible. $\ll$
-ans
None of these options
37. Self referential structure is one
a. Consisting the structure in the parent structure
b. Consisting the pointer of the structure in the parent structure

Only a
Only b
Both a and b
Neither a nor b
38. Individual structure member can be initialized in the structure itself

True
False
Compiler dependent
None of these options
39. Which of the following is the feature of stack?

All operations are at one end
It cannot reuse its memory
All elements are of different data types
Any element can be accessed from it directly<——ans
40. When stacks are created

Are initially empty< - ans
Are initialized to zero
Are considered full
None of these options
41. What is time required to insert an element in a stack with linked implementation?
(1)
$(\log 2 n)<\longleftarrow$ ans
(n)
( $\mathrm{n} \log 2 \mathrm{n}$ )
42. Which of the following is the feature of stack?

All operations are at one end
It cannot reuse its memory
All elements are of different data types
Any element can be accessed from it directly $<$ _ ans $^{\text {an }}$
43. Time taken for addition of element in queue is
(1)
(n)
$(\log \mathrm{n})<-$ ans
None of these options
44. When is linear queue said to be empty ? Front==rear Front=rear-1
Front=rear+1
Front=rear< - ans
45. When queues are created

Are initially empty<— ans
Are initialized to zero
Are considered full
None of the above
46. What would be the output of the following program?
\#include <stdio.h>
main()
\{

```
printf("\n%c", "abcdefgh"[4]);
}
abcdefgh
d
e<_-ans
```

error
47. Select the correct C code which will read a line of characters(terminated by $\mathrm{a} \backslash \mathrm{n}$ ) from input_file into a character array called buffer. NULL terminate the buffer upon reading a $\backslash \mathrm{n}$.
int ch, loop = 0 ; ch = fgetc( input_file ); while( (ch != `n`)\&\& (ch != EOF) ) \{buffer[loop] = ch; loop++; ch = fgetc(input_file );\} buffer[loop] = NULL;
int ch, loop = 0 ; ch = fgetc( input_file $)$; while( $(\mathrm{ch}=" \ln ") \& \&(\mathrm{ch}=$ EOF $))\{$ buffer[loop] = ch; loop-; ch = fgetc(]input_file ); \} buffer[loop]= NULL; int ch, loop $=0$; ch = fgetc( input_file ); while( (ch <>"|n") \&\& (ch != EOF) ) \{ buffer[loop] = ch; loop++; ch = fgetc(input_file ); ) buffer[loop] = -1;
None of the above
48. What is the output of the following code ?
void main()
\{
int $\mathrm{a}=0$;
int $\mathrm{b}=0$;
$++\mathrm{a}==0 \|++\mathrm{b}==11$;
printf("ln\%d,\%d",a,b);
\}
0,1
$1,1<\quad$ ans
0, 0
1, 0
49. What is the output of the following program? \#define $\operatorname{str}(\mathrm{x}) \# \mathrm{x}$ \#define $\operatorname{Xstr}(\mathrm{x}) \operatorname{str}(\mathrm{x})$
\#define oper multiply
void main()
\{
char *opername=Xstr(oper);
printf("\%s",opername);
\}
opername
Xstr
multiply $\square$
Xstr
50. What is the output of the following code? \#include<stdio.h> \#include<string.h>
void main()
\{
char *a = "C-DAC\010ACTS\0\n"; printf("\%s\n",a); \}
C-DAC ACTS
ACTS
C-DAC < - ans
None of these
51. \#include<stdio.h>
void main()
\{
while (1)
\{if (printf("\%d",printf("\%d")))
break;
else
continue;
\}
\}
The output is
Compile time error
Goes into an infinite loop
Garbage values < - ans
None of these options
52. Select the correct C statements which tests to see if input_file has opened the data file successfully. If not, print an error message and exit the program.
if( input_file == NULL ) \{ printf("Unable to open file.\n");exit(1); \}
if( input_file != NULL ) \{ printf("Unable to open file.\n");exit(1); \}
while( input_file = NULL ) \{ printf("Unable to open file.ln");exit(1);\}
None of these options
53.The code
int $\mathrm{i}=7$;
printf("\%d\n", i++ * i++);
prints 49
prints $56<$ ans
is compiler dependent
expression $\mathrm{i}++$ * $\mathrm{i}++$ is undefined
54. Recursive procedure are implemented by

Linear list
Queue
Tree
Stack $<-$ ans
55. Which of these are reasons for using pointers?

1. To manipulate parts of an array
2. To refer to keywords such as for and if
3. To return more than one value from a function 4 . To refer to particular programs more conveniently
$1 \& 3<-$ ans
only 1
only 3
None of these options
4. The expression $\mathrm{x}=4+2 \%-8$ evaluates to -6 6 4
None of these options
5. What is the output of the following code? \#include<stdio.h> main()
\{
register int $\mathrm{a}=2$;
printf("\nAddress of $\mathrm{a}=\% \mathrm{~d}$, ,", \&a); printf("\tValue of $\mathrm{a}=\% \mathrm{~d} ", \mathrm{a})$;
Address of a,2 <- ans
Linker error
Compile time error
None of these options
6. What is the output of the following code? \#include<stdio.h> void main()
\{
int $\operatorname{arr}[]=\{0,1,2,3,4,5,6\}$;
int i,*ptr;
for(ptr=arr+4,i=0; $\mathrm{i}<=4 ; \mathrm{i}++$ ) printf(" $\mathrm{ln} \% \mathrm{~d}$ ",ptr[-i]); (as the $0=4$,for -1 it becomes $=3$ )
\}
Error
65432
0 garbage garbage garbage garbage
$43210<$ ans
7. Which of the following is the correct way of declaring a float pointer:
float ptr;
float *ptr; < $\longleftarrow$ ans
*float ptr;
None of the above
60.If the following program (newprog) is run from the command line as:newprog 123 What would be the output of the following?
void main (int $\operatorname{argc}$, char* $\operatorname{argv}[]$ )
\{
int $\mathrm{I}, \mathrm{j}=0$;
for ( $\mathrm{I}=0 ; \mathrm{I}<\operatorname{argc} ; \mathrm{I}++$ )
$\mathrm{j}=\mathrm{j}+\operatorname{atoi}(\operatorname{argv}[I])$;
printf("\%d",j);
\}
123
6
123
Compilation error<—ans
