

IBM Aptitude Test

1. In 1978, a kg of paper was sold at Rs25/-. If the paper rate increases at 1.5% more than inflation rate which is of 6.5% a year, then what will be the cost of a kg of paper after 2 years?

a) 29.12 (b) 29.72 (c) 30.12 (d) 32.65 (e) none of these

2. In A,B,C are having some marbles with each of them. A has given B and C the same number of marbles they already have to each of them. then, B gave C and A the same no. of marbles they have, then C gave A and B the same no. of marbles they have. At the end A,B, and C have equal no. of marbles.

(i) If x, y, z are the marbles initially with A,B,C respectively. then the no of marbles B have at the end

(a) $2(x-y-z)$ (b) $4(x-y-z)$ etc.

(ii) If the total no. of marbles are 72, then the no. of marbles with A at the starting

a. 20 b. 30 c. 32

3. If a car starts from A towards B with some velocity due to some problem in the engine after travelling 30km. If the car goes with $\frac{4}{5}$ th of its actual velocity the car reaches B 45min later to the actual time. If the car engine fails after travelling 45km, the car reaches the destination B 36min late to the actual time, what is the initial velocity of car and what is the

distance between A and B in km

ans) 20 & 130.

4. A person has Rs 100/- in his pocket, he can as 25 pencils or 15 books. He kept 15% of the money for travelling expenses and purchased 5 pencils. So how many books he can purchase with the remaining money.

5. ten questions on analogies.

ex: hammer : carpenter ::

B knife : butcher.

6. The values of shares A,B and C from January to June are as follows.

month	A	B	C
JAN	30	60	80
FEB	35	65	85
MAR	45	75	65
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MAY	55	75	85
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i) During this period which share has undergone max fluctuation?

ii) In which month it is possible to buy B and C selling A?

iii) In which month the share values are very low?

iv) By purchasing one share of A and 4 each of B and C in the beginning of the period, to get max profit when this shares should be sold?

v) ?

7. In a computer institute 9 languages can taught. The module is of 6 months duration and only six languages each of one month can be taught. In addition to that BASIC is always there and should be in first month itself

word perfect is to be taught in the preceeding week of word star.

FORTRAN can not be taught until COBAL is coarsed prior to that

BINO, FIFO never be taught in single module languages are BASIC, WORD STAR, WORD PERFECT, FORTRAN,

COBAL, BINO, FIFO, LOTUS, C

i. Of the following which module is possible based on above conditions.

ii) If word star is in 3rd month, what could be in 6th month.

iii) If COBAL is in the 2nd month and BINO in 6th month are there in addition to the above condition, FORTRAN will be in which month.

8. In a class, except 18 all are above 50 years. 15 are below 50 years of age. how many people are there

a) 30 b) 33 c) 36 d) none of these.

9. A square plot of some size, at four corners equal squares of some size are cut and is formed as open box. If this open box carries 128ml of oil. What is the size of the plate i.e. side

a.17 b.14 c.13

10. In a square, all the mid points are joined. the inner square is shaded. If the area of the square is A, what is the shaded area?

11. two questions on basic angles i.e given a circle, a few chords or diameter is drawn etc

12. $@(a,b) = (a+b)/2$

$/(a,b) = a.b$

$*(a,b) = ab$, if $a=1$, $b=2$ find

i) $/(a,(@(a,b),*(a,b)))$

ii)

13. $(x\#y) = x+y-xy$

$(x*y) = (x+y)/2$

i) $(x\#y)\#(x*y) < (x\#y)$, which of the below values of x, y will satisfy this equation

ii) $(a*b)\#(b*c) < (a\#b)*(b*c)$, what values of a,b,c satisfy the above.

14. By using the data given below answer the following questions.

	B.tech	M.sc	M.A
male	20		
female		80	

total 60

some thing similar to that question.

- i) 40% of females are B.Techs
- ii) Half of the students are either from B.Techs of M.Sc
- iii) ...
- i. what is the no. of female B.techs
- ii....

dont remember this question , just for an example this has been given .

45Q). PS1 pwd

export PS1 results in

- a). your primary prompt being your current directory
- b). " " and secondary prompts being the current dir
- c). " " prompt being your home dir
- d). " " and secondary prompts being the home dir
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8Q). If you type in the command

nohup sort employees > list 2 > error out & and log off ,the next time you log in . the

output will be

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7Q). In UNIX a files i-node

a)is a data structure that defines all specifications of a file like the file size ,number of lines to a file ,permissions etc.

b).----

c). - - - -

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(ans is -----(a))

44Q). The UNIX shell is....

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- b).forms the interface between the user and the kernal
- c) does not give any scope for programming
- d) deos not allow calling one program from with in another
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(ans is (b))

48Q).enum number { a=-1, b= 4,c,d,e}

what is the value of e ?

7,4,5,15,3

(ans is 7) check again

3Q).The very first process created by the kernal that runs till the kernal process is haltes is

- a)init
- b)getty
- c)
- d)
- e)none

(Ans is a)

47 Q) Result of the following program is

```
main()
{
int i=0;
for(i=0;i<20;i++)
{
switch(i)
case 0:i+=5;
case 1:i+=2;
case 5:i+=5;
default i+=4;
break;}
printf("%d",i);
}
}
```

a)0,5,9,13,17

b)5,9,13,17

c)12,17,22

d)16,21

e)syntax error

(Ans is d)

1 Q) What is the result

```
main()
{
char c=-64;
int i=-32
unsigned int u =-16;
if(c>i){
printf("pass1,");
if(c and >>
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a) do the same function

b) differ : > overwrites, while >> appends

c) differ : > is used for input while >> is used for output

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Ans) b

50) The command

`grep first second third /usr/you/myfile`

- a) prints lines containing the words first, second or third from the file /usr/you/myfile
- b) searches for lines containing the pattern first in the files second, third, and /usr/you/myfile and prints them
- c) searches the files /usr/you/myfiel and third for lines containing the words first or second and prints them
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IBM Aptitude Test Paper 2

1. In 1978, a kg of paper was sold at Rs25/-. If the paper rate increases at 1.5% more than inflation rate which is of 6.5% a year, then what will be the cost of a kg of paper after 2 years?

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Ans) b

IBM Aptitude Test Paper

1. Speed of boat in still water is 10kmph..if it travels 24km downstream,16km upstream in the same amount of time,what is the speed of the stream?
(a)3kmph
(b)3.5kmph
(c)2kmph
(d)...
2. A cube of 3 units is painted on all sides. If this cube is divided into cubes of 1 unit,how many cube have none of their faces painted?
(a)...
(b)2
(c)1
(d)0
(e)none of these
3. If a person sells a product for rs141/- he suffers a loss of 6%.if he has to have a profit of 10%, at what price should he sell it?
(a)
(b)rs.175
(c)..
(d)rs.165
ans. rs.165 (i think,check)
4. A ball falls from a height of 8ft ,bounces back to half the distance & continues till it comes to rest. what is the total distance travelled by the ball?
(a)24ft
(b)...
(c)infinite
(d)cannot be determined
ans:(a)
5. Which of the following is the sum of 3 consecutive prime nos?
(a)49
(b)59
(c)both a &b
(d)....
ans:c
6. If the area of a square has increased by 69%,by what % has its side increased?
7. In a class the average age is 16yrs.if the teacher who is 40 yrs of age is also included ,the average becomes

17yrs,how many students were there?
8. If 3 houses are to be painted,mr A can paint a house in 6 days(nos are not same)...mr B can do the same in 8

days...& mr.C in 12 days.if mr A does the work for 8 days & leaves for vacation, & mr B continues the work
for the next 6 days, for how many days should mr.C work?
ans:11 days(check)
9. 4 thieves rob a bakery of the breadone after the other. each thief takes half of what is present ,& half

a

bread...if at the end 3 bread remains, what is the no of bread that was present initially?

ans:63(check)

10. If the 1st day of 1999 is a sunday, what is the last day?

(a)sunday

(b)monday

(c)....

(d)cannot be determined.

11. If A driver drives a car four times a lap 10,20 30,60 kmph what is his average speed.

ans:20kmph

In a group there are two kinds of people type A & type B. type A people answer for any question as YES &

that of type B as NO. if they can not answer to these question then they remain silent. the mayor asks question to

them as follows.....

12. If he asks a person are u type A

a. YES b. NO c. Silent d. Can not be determined

13. He asks two persons X & Y simultaneously whether u of same type

a. YES b. NO c. YES or NO d. Silent e. can not be determined

14. Pointing to a person X he asks Y what is his type

a. YES b. No c. Silent d. can not be determined

15. Pointing to a person X he asks Y if I ask him whether r u type A, will he answer YES. Y says NO. what type

of B is

a. YES b. NO c. Silent d. can not be determined

16. Six squares of same dimension are kept side by side to make a rectangle with a perimeter of 182 cm. what is

the perimeter of each square.

ans) 52.

17. One student takes 20 mins to reach school if he goes at a speed of 15kmph. At what speed should he go to

reach in 15 mins (nos are not same) ans: 16kmph(check)

18. How many rational numbers are there between 0 & 5

ans:infinite

19. A certain number of bullets were shared by 3 people equally. Each of them fired 4 bullets and the sum of the

remaining bullets was equal to the initial share each had got. what was the initial number of bullets?

ans:18. ($18/3=6$;

$6-4=2, 6-4=2, 6-4=2$;

2+2+2=6=ans)

Technical:

20. A trigger is

- (a) a statement ..start of database..
- (b) statements that r executed as a side effect to the modification to the database
- (c)...
- (d)...

ans (b)

21. What does the following statement mean?

int (*a)[4]

- (a)'a' is a pointer to an array of 4 integers
- (b)'a' is an array of pointers to integer
- (c)'a' is a pointer to function returning an integer
- (d)...

ans:a

22. Best method to find out whether a given array already sorted,is sorted or not in min. time

ans. insertion sort (check)

23. A primary key in one table also present in some other table is called

- (a)foreign key
- (b)secondary key
- (c)subordinate key
- (d)...

ans. foreign key

24. Which of the following is a real time system?

- (a)robotics control
- (b)airline ticket reservation(ans)
- (c)
- (d)...

25. A question to convert a big no in decimal to octal(check only for the last 2 nos in ans is sufficient)

26. Which of the following is an example of a spooling device?

- (a)..
- (b)line printer..
- (c)
- (d)
- (e)...

27. If in a table:account no,account holders name,account type ,.....(something else was given)are the fields,which

of them could be the primary key?

- (a)account no(ans)
- (b)account holders name
- (c)account type
- (d)..

28. If a file is opened in "r+" mode(in C),it means

- (a) write
- (b)read
- (c)...
- (d).....

29. What is the difference between 123 and 0123 in c?

- (a)120
- (b)40
- (c)0
- (d)...

ans:40

30. Software Configuration Management process is -

- (a)developing & managing software forsoftware....
- (b)developing & managing hardware for....software.....
- (c)...
- (d)...

31. Data Integrity constraint is

- (a)to ensure the presence of primary key
- (b)...
- (c)...
- (d)...

32. Which of the following uses the minimum length of cable?

- (a)ring
- (b)star
- (c)mesh
- (d)bus
- (e)all of the above

31. How can u append the ls and who to certain existing file (like that)(i.e.listing & output of who is to be directed

to a file

- (a)ls;who>filename
- (b)ls;who>>filename
- (c)(ls;who)>>filename
- (d)who;ls<filename
- (e)...

34. Suppose u have a network .users complain of slowu suspect a problem in network adapter once u find that

the data is continuous and erroneous. what device do u use?

- (a)volt-ohmmeter
- (b)SNMP
- (c)protocol... checking
- (d)all of the above

35. What is vector processing?

36. $x = y + 1$ is equivalent to what?

- (a) $x = x - y + 1$
- (b)...
- (c) $x = x - y - 1$
- (d)...

ans:(c)

37. In a student form what is the relationship

b/w student and course

- (a)one to one

- (b)many to one
- (c)one to many
- (d)many to many

38. ROM is

- (a)volatile
- (b)permanent & fast
- (c)device containig boot up program & is not accessible
- (d)...

IBM Recruitment Test 1

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is 6.5% a year, then what will be the cost of a kg of paper after 2 years?(a) 29.12

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of them already have. Then, B gave C and A the same number of marbles they already have. Then C gave A

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(a) $2(x-y-z)$

(b) $4(x-y-z)$

(c) $2(3y-x-z)$

(d) $x + y - z$

Ans. (c)

(ii) If the total number of marbles are 72, then the number of marbles with A at the starting

(a) 20

(b) 30

(c) 32

(d) 39

Ans. (d)

3. If a car starts from A towards B with some velocity. Due to some problem in the engine after travelling

30km, the car goes with $\frac{4}{5}$ th of its actual velocity. The car reaches B 45 min later to the actual time. If the

car engine fails after travelling 45km, the car reaches the destination B 36min late to the actual time. What

is the initial velocity of car and what is the distance between A and B in km

Ans. 20 & 130.

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travelling expenses and purchased 5 pencils. So how many books he can purchase with the remaining money.

5. Ten questions on analogies.

eg: chief : tribe :: governor : state
epaulette : shoulder :: tiara : head
guttural : throat :: gastric : stomach
inept : clever :: languid : active
knife : butcher ::
hammer : carpenter ::

6. The values of shares (in Rs).of A, B and C from January to June are as follows.

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April	40	75	82
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- During this period which share has undergone maximum fluctuation?
- In which month it is possible to buy B and C selling A?
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7. In a computer institute 9 languages can be taught. The module is of 6 months duration and of the six languages

only one can be taught each month . In addition to that BASIC is always taught and should be in first month itself

- WORD PERFECT is to be taught in the preceeding week of WORD STAR.
- FORTTRAN can not be taught until COBAL is taught prior to that
- BINO, FIFO can never be taught in single module

Languages are BASIC, WORD STAR, WORD PERFECT, FORTTRAN, COBAL, BINO, FIFO, LOTUS, C

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- (d) none of these.

Ans. (d)

9. A square plate of some size is cut at four corners. Equal squares of the same size are cut and is formed as open

box.If this open box carries 128 ml of oil. What is the size of the side of the plate?

- (a) 17
- (b) 14
- (c) 13
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10. In a square, all the mid points are joined. The inner square is shaded. If the area of the square is A, what is the

area of the shaded area?

11. Two questions on basic angles i.e given a circle, a few chords or diameter is drawn etc.

12. If the follwoing statements are given

- $@(a,b) = (a+b)/2$
- $/(a,b) = a/b$
- $*(a,b) = ab$

If $a=1$, $b=2$ then find

i) $/(a,(@(a,b),*(a,b)))$

ii) $*/(a,@(* (a,b)))$

13. If the follwoing statements are given

- $(x\#y) = x + y - xy$
- $(x*y) = (x + y)/2$

i) Find the values of x, y will satisfy this equation $(x\#y)\#(x*y) < (x\#y)$

ii) Find the values of x, y will satisfy this equation $(a*b)\#(b*c) < (a\#b)*(b*c)$

14. Export PS1 results in(PS1 pwd)

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- d) you will not be allowed to log in
- e) none of the above

16. In UNIX a file's i-node

Ans. Is a data structure that defines all specifications of a file like the file size, number of lines to a file, permissions

etc.

17. The UNIX shell

- a) does not come with the rest of the system
- b) forms the interface between the user and the kernel
- c) does not give any scope for programming
- d) does not allow calling one program from within another
- e) all of the above

Ans. (b)

18. enum number { a= -1, b= 4,c,d,e} What is the value of e ?

- (a) 7
- (b) 4
- (c) 5
- (d) 15
- (e) 3

19. The very first process created by the kernel that runs till the kernel process halts is

- a) init
- b) getty
- c) both (a) and (b)
- d) none of these

Ans. (a)

20. Output of the following program is

```

main()
{int i=0;
for(i=0;i<20;i++)
{switch(i)
case 0:i+=5;
case 1:i+=2;
case 5:i+=5;
default i+=4;
break;}
printf("%d",i);
}
}

```

- a) 0,5,9,13,17
- b) 5,9,13,17
- c) 12,17,22
- d) 16,21
- e) Syntax error

Ans. (d)

21. What is the output in the following program

```

main()
{char c=-64;
int i=-32
unsigned int u =-16;
if(c>i)
{printf("pass1,");
if(c<u)
printf("pass2");
else
printf("Fail2");
}
else
printf("Fail1");
if(i<u)
printf("pass2");
else
printf("Fail2")
}
}

```

- a) Pass1,Pass2
- b) Pass1,Fail2
- c) Fail1,Pass2
- d) Fail1,Fail2
- e) None of these

Ans. (c)

22. In the process table entry for the kernel process, the process id value is

- (a) 0
- (b) 1
- (c) 2
- (d) 255
- (e) it does not have a process table entry

Ans. (a)

23. Which of the following API is used to hide a window

- a) ShowWindow
- b) EnableWindow
- c) MoveWindow
- d) SetWindowPlacement
- e) None of the above

Ans. (a)

24. What will the following program do?

```
void main()
{
    int i;
    char a[]="String";
    char *p="New String";
    char *Temp;
    Temp=a;
    a=malloc(strlen(p) + 1);
    strcpy(a,p); //Line number:9//
    p = malloc(strlen(Temp) + 1);
    strcpy(p,Temp);
    printf("(%s, %s)",a,p);
    free(p);
    free(a);
} //Line number 15//
```

- a) Swap contents of p & a and print:(New string, string)
- b) Generate compilation error in line number 8
- c) Generate compilation error in line number 5
- d) Generate compilation error in line number 7
- e) Generate compilation error in line number 1

Ans. (b)

25. In the following code segment what will be the result of the function,value of x , value of y

```
{unsigned int x=-1;
    int y;
    y = ~0;
    if(x == y)
    printf("same");
```

```

else
    printf("not same");
}

```

- a) same, MAXINT, -1
- b) not same, MAXINT, -MAXINT
- c) same , MAXUNIT, -1
- d) same, MAXUNIT, MAXUNIT
- e) not same, MAXINT, MAXUNIT

Ans. (a)

26. PATH = /bin : /usr : /yourhome The file /bin/calender has the following line in it cal 10 1997The file

/yourhome/calender has the following line in it cal 5 1997 If the current directory is /yourhome and calender is

executed

- a) The calendar for May 1997 will be printed on screen
- b) The calendar for Oct 1997 will be printed on screen
- c) The calendar for the current month(whatever it is) will be printed
- d) Nothing will get printed on screen
- e) An error message will be printed

27. What will be the result of the following program ?

```

char *gxxx()
{static char xxx[1024];
return xxx;
}

main()
{char *g="string";
strcpy(gxxx(),g);
g = gxxx();
strcpy(g,"oldstring");
printf("The string is : %s",gxxx());
}

```

- a) The string is : string
- b) The string is :Oldstring
- c) Run time error/Core dump
- d) Syntax error during compilation
- e) None of these

Ans. (b)

28. What will be result of the following program?

```
void myalloc(char *x, int n)
{
    x= (char *)malloc(n*sizeof(char));
    memset(x,\0,n*sizeof(char));
}
```

```
main()
{
    char *g="String";
    myalloc(g,20);
    strcpy(g,"Oldstring");
    printf("The string is %s",g);
}
```

- a) The string is : String
- b) Run time error/Core dump
- c) The string is : Oldstring
- d) Syntax error during compilation
- e) None of these

29. Which of the following function is used to repaint a window immediatelya)

SendMessage(hWnd,WM_PAINT,.....)

- b) InvalidateRect(.....)
- c) MoveWindow
- d) WM_COPY
- e) None

30. Which function is the entry point for a DLL in MS Windows 3.1

- a) Main
- b) Winmain
- c) Dllmain
- d) Libmain
- e) None

Ans. (b)

31. The standard source for standard input, standard output and standard error is

- a) the terminal
- b) /dev/null
- c) /usr/you/input, /usr/you/output/, /usr/you/error respectively
- d) None

Ans. (a)

32. What will be the result of the following program?

```
main()
{
    char p[]="String";
    int x=0;
    if(p=="String")
    {printf("Pass 1");
```

```

        if(p[sizeof(p)-2]=='g')
            printf("Pass 2");
        else
            printf("Fail 2");
    }
    else
    {
        printf("Fail 1");
        if(p[sizeof(p)-2]=='g')
            printf("Pass 2");
        else
            printf("Fail 2");
    }
}

```

- a) Pass 1, Pass 2
- b) Fail 1, Fail 2
- c) Pass 1, Fail 2
- d) Fail 1, Pass 2
- e) syntax error during compilation

33. Which of the choices is true for the mentioned declaration ?

```

const char *p;   and
char * const p;

```

- a) You can't change the character in both
- b) First : You can't change the character & Second : You can't change the pointer
- c) You can't change the pointer in both
- d) First : You can't change the pointer & Second : You can't change the character
- e) None

34. The redirection operators > and >>

- a) do the same function
- b) differ : > overwrites, while >> appends
- c) differ : > is used for input while >> is used for output
- d) differ : > write to any file while >> write only to standard output
- e) None of these

Ans. (b)

35. The command `grep first second third /usr/you/myfile`

- a) prints lines containing the words first, second or third from the file /usr/you/myfile
- b) searches for lines containing the pattern first in the files second, third, and /usr/you/myfile and prints them
- c) searches the files /usr/you/myfile and third for lines containing the words first or second and

prints them

- d) replaces the word first with the word second in the files third and /usr/you/myfile
- e) None of the above

Ans. (b)

IBM Recruitment Test 2

Aptitude

1. Speed of boat in still water is 10kmph..if it travels 24km downstream,16km upstream in the same amount of time,what is the speed of the stream?
(a)3kmph
(b)3.5kmph
(c)2kmph
(d)...
2. A cube of 3 units is painted on all sides.If this cube is divided into cubes of 1 unit,how many cube have none of their faces painted?
(a)...
(b)2
(c)1
(d)0
(e)none of these
3. If a person sells a product for rs141/- he suffers a loss of 6%.if he has to have a profit of 10%, at what price should he sell it?
(a)
(b)rs.175
(c)..
(d)rs.165
ans.rs.165 (i think,check)
4. A ball falls from a height of 8ft ,bounces back to half the distance & continues till it comes to rest. what is the total distance travelled by the ball?
(a)24ft
(b)...
(c)infinite
(d)cannot be determined
ans:(a)
5. Which of the following is the sum of 3 consecutive prime nos?
(a)49
(b)59
(c)both a &b
(d)....
ans:c
6. If the area of a square has increased by 69%,by what % has its side increased?
7. In a class the average age is 16yrs.if the teacher who is 40 yrs of age is also included ,the average becomes

17yrs,how many students were there?
8. If 3 houses are to be painted,mr A can paint a house in 6 days(nos are not same)...mr B can do the same in 8

days...& mr.C in 12 days.if mr A does the work for 8 days & leaves for vacation, & mr B continues the work
for the next 6 days, for how many days should mr.C work?

ans:11 days(check)

9. 4 thieves rob a bakery of the bread one after the other. each thief takes half of what is present, & half a

bread...if at the end 3 bread remains, what is the no of bread that was present initially?

ans:63(check)

10. If the 1st day of 1999 is a Sunday, what is the last day?

(a) Sunday

(b) Monday

(c)....

(d) cannot be determined.

11. If a driver drives a car four times a lap 10, 20, 30, 60 kmph what is his average speed.

ans:20kmph

In a group there are two kinds of people type A & type B. type A people answer for any question as YES &

that of type B as NO. if they can not answer to these questions then they remain silent. the mayor asks questions to

them as follows.....

12. If he asks a person are you type A

a. YES b. NO c. Silent d. Can not be determined

13. He asks two persons X & Y simultaneously whether you of same type

a. YES b. NO c. YES or NO d. Silent e. can not be determined

14. Pointing to a person X he asks Y what is his type

a. YES b. No c. Silent d. can not be determined

15. Pointing to a person X he asks Y if I ask him whether you type A, will he answer YES. Y says NO. what type

of B is

a. YES b. NO c. Silent d. can not be determined

16. Six squares of same dimension are kept side by side to make a rectangle with a perimeter of 182 cm. what is

the perimeter of each square.

ans) 52.

17. One student takes 20 mins to reach school if he goes at a speed of 15 kmph. At what speed should he go to

reach in 15 mins (nos are not same) ans: 16 kmph (check)

18. How many rational numbers are there between 0 & 5

ans: infinite

19. A certain number of bullets were shared by 3 people equally. Each of them fired 4 bullets and the sum of the

remaining bullets was equal to the initial share each had got. what was the initial number of bullets?

ans:18..(18/3=6;
6-4=2,6-4=2,6-4=2;
2+2+2=6=ans)

Technical:

20. A trigger is

- (a) a statement ..start of database..
 - (b) statements that r executed as a side effect to the modification to the database
 - (c)...
 - (d)...
- ans (b)

21. What does the following statement mean?

int (*a)[4]

- (a)'a' is a pointer to an array of 4 integers
- (b)'a' is an array of pointers to integer
- (c)'a' is a pointer to function returning an integer
- (d)...

ans:a

22. Best method to find out whether a given array already sorted,is sorted or not in min. time

ans. insertion sort (check)

23. A primary key in one table also present in some other table is called

- (a)foreign key
- (b)secondary key
- (c)subordinate key
- (d)...

ans. foreign key

24. Which of the following is a real time system?

- (a)robotics control
- (b)airline ticket reservation(ans)
- (c)
- (d)...

25. A question to convert a big no in decimal to octal(check only for the last 2 nos in ans is sufficient)

26. Which of the following is an example of a spooling device?

- (a)..- (b)line printer..- (c)
- (d)
- (e)...

27. If in a table:account no,account holders name,account type ,.....(something else was given)are the fields,which

of them could be the primary key?

- (a)account no(ans)
- (b)account holders name
- (c)account type
- (d)..-

28. If a file is opened in "r+" mode(in C),it means

- (a) write
- (b)read
- (c)...

(d).....

29. What is the difference between 123 and 0123 in c?

(a)120

(b)40

(c)0

(d)...

ans:40

30. Software Configuration Management process is -

(a)developing & managing software forsoftware....

(b)developing & managing hardware for....software.....

(c)...

(d)..
(d)...

31. Data Integrity constraint is

(a)to ensure the presence of primary key

(b)...

(c)...

(d)...

32. Which of the following uses the minimum length of cable?

(a)ring

(b)star

(c)mesh

(d)bus

(e)all of the above

31. How can u append the ls and who to certain existing file (like that)(i.e.listing & output of who is to be directed

to a file

(a)ls;who>filename

(b)ls;who>>filename

(c)(ls;who)>>filename

(d)who;ls<filename

(e)...

34. Suppose u have a network .users complain of slowu suspect a problem in network adapter once u find that

the data is continuous and erroneous.what device do u use?

(a)volt-ohmmeter

(b)SNMP

(c)protocol... checking

(d)all of the above

35. What is vector processing?

36. $x = y + 1$ is equivalent to what?

(a) $x = x - y + 1$

(b)...

(c) $x = x - y - 1$

(d)...

ans:(c)

37. In a student form what is the relationship b/w student and course

(a)one to one

- (b)many to one
- (c)one to many
- (d)many to many

38. ROM is

- (a)volatile
- (b)permanent & fast
- (c)device containig boot up program & is not accessible
- (d)...

IBM Recruitment Test 2

Aptitude

1. like 3 consecutive prime adds to some no what is that ans: both 49 and 59.
2. One person travelled 4 laps with the speed of 10,20,40 (or 30) and 60 kmph and what is the average speed.
ans: 20 (sure)
3. like one student takes 20 mins if he goes with speed 15kmph and at what speed he should go to reach in 15 mins (

nos are not same) ans: 16kmph(but not sure)

4. There are 2 type of people group 'yes' who always says yes (they never say 'no') if they are not sure about

they will remain silent. and other group name 'no' where the group of people always say 'no' if they are not sure

they will remain silent. that's it now questions are

1. what will be the answer if I ask are you belong to group 'yes' options are: they remain silent ,say yes, say no, either

yes or no, can't be determined

2. Same question but if I ask are you belong to group 'no' answers for both above questions are not (not determined)

3. what will the other person say if I ask are you belong to group 'yes' and etc here were 5 questions first 4 you can do it

last one little bit tough. spend some time on this you can do it.

9. like from height of 8 mts on ball fell down and each time it bounces half the distance back. so what will be the

distance travelled ans: 24 (sure) like $8+4+4+2+2+1+1+0.5+0.5+$ and etc .. answer is not 20

10. like 6 cubes are arranged adjacent lay and given the perimeter and asked to find the perimeter of one cube.

ans: if x is the total perimeter then $(x/14)*4$ leads to the answer. but check it once you will be having plenty of time.

answer is 52 (13*4)

11. some data is given like this 10kmph in still water ship took some x mins and downstream some y mins in same

time what is the stream value (q is not exact) ans: 3 (not sure)

12. Some average problem like 16 students average weight and teacher joins them ans: 23 (sure) do this

$(16x+40)/(x+1)$ will give the value.

13. Some problem on square like to increase area by 69% by what percent side should be increased
ans: square root of 169 i.e 13 (not sure)

14. no of rational nos b/w 0 and 5 ans: infinite

15. First day of 1999 is Sunday what day is the last day ans: Monday

16. bullets problem some x no of bullets are shared by 3 people equally and each fired 4 bullets then the sum of remaining bullets is equal to initially division value ans: 18 (sure)

17. bread problem, one comes and eats half no of breads and something... ans: 63 (check it)

18. like A can do in 6 days and B can do in 8 and C can do in 12 days but B left after working for 6 days for how

many no of days A and C should work ans: 11 (I don't think so this is correct)

19. I give a JCL code with Programmer name: smith Jobname: ABC Jobclass=c Message class = a All messages are

to be displaced code it in a JCL.

A) //ABC,smith,class=c,message class=a,message level=(2,1)

B) //ABC,smith,class=c,message class=a,message level=(1,1)

C) //ABC,smith,class=c,message class=a,message level=(0,1)

D) none of these.

20. For a COBOL program Move 5 to work-sd. A statement which says that the value of work-st is 0.

perform Para1.

.....

Para1.

Add 3 to work-sd

Add 2 to work-st

If work-st < 11 go to main-para.

.....

go to para1.

What would be the value of work-sd?

a) 15

- b) 18
- c) 10
- d) none

21. Given 2 tables T1 and T2.

T1	T2
A	1
B	2
C	3

You make a query `SELECT * FROM T1,T2.`

What is the no: of rows that are fetched from this query?

- a) 4
- b) 5
- c) 6
- d) 9

22. Who is the data base manager of db2?

- a) buffer register
- b) runtime supervisor
- c) DBRM
- d) None

23. You have a file with `DISP=SHR`, when u open the file in output mode

- a) the records get appended
- b) the records gets overwritten
- c) the job abends

d) none of these

24. To exclude some records while sorting which parameter do we use?

a) OMIT

b) EXCLUDE

c)d)....

25 You have a dataset TIME.WORK.OCT88, u want to concatenate other datasets like TIME.WORK
.JUL88, TIME.WORK.APR88, TIME.WORK.MAY88. how do u do that?

a) //DDname DD DSN = TIME.WORK.OCT88, DISP = SHR

DD DSN = TIME.WORK.JUL88, DISP = SHR

DD DSN = TIME.WORK.APR88, DISP = SHR

DD DSN = TIME.WORK.MAY88, DISP = SHR

b) //DDname DD DSN = TIME.WORK.JUL88, DISP = SHR

DD DSN = TIME.WORK.OCT88, DISP = SHR

DD DSN = TIME.WORK.APR88, DISP = SHR

DD DSN = TIME.WORK.MAY88, DISP = SHR

c) //DDname DD DSN = TIME.WORK.APR88, DISP = SHR

DD DSN = TIME.WORK.JUL88, DISP = SHR

DD DSN = TIME.WORK.MAY88, DISP = SHR

DD DSN = TIME.WORK.OCT88, DISP = SHR

e) none of these

26. When db2 entries are made while working in cics, the enteries should be made in

a) TCT

b) PCT

- c) DCT
- d) RCT

27. Find the odd one out

- a) KSDS
- b) RRDS
- c) LDS
- d) PDS

28. Full form of VTOC

29. Question based on SKIP and COUNT parameter

Technical

1. what is vector processing
2. what is data integrity ans: option a (like the range of values is defined by data integrity)
3. which topology takes minimum wiring options: star, bus, ring and complete etc
ans: find it from network text book (may be bus or ring)
4. best sorting if elements are already sorted ans: insertion sort (sure)
5. software configuration management ----

ans: option a (but check it from SE text book there are only 2 confusing

answers)

6. In network the packers are flowing unnecessarily what is the way to control it and

options: SNMP,

7. some octal no to decimal conversion for given octal no the last digit was 7

ans: the option a (the decimal last

digit was 1)

8. $x = y + 1$ is equivalent to ans: $x = x - y - 1$ (sure) because it is interpreted as $x = x - (y + 1)$
9. in a student form what is the relationship b/w student and course

ans: actually it is many to one but they

specified in a student form so think and write.

10. which is correct to append the output of ls and who to some file x. ans: `(who;ls)>>x` (check it)

11. what is trigger in DBMS (know what it will do)

12. what happens when we open a file in r+ mode like whether file will be created if it is not there can we write to file 13. what is ROM ans: it contains boot up program and it is not accessible that was one answer and another option was

it is non volatile (choose one among these 2)

14. what is int (*a)[4]

ans: pointer to an array of 4 integer (check it)

15. primary key of another table is present and so on.....

ans: foreign key

16. what is the difference b/w 0123 and 123 in c?

ans: 40 (sure)

17. which among the devices is spooled device

18. if u get error in adapter which device will u use?

ans: contact electronics student. one of the options was voltmeter.

IBM Sample Test Paper 1

1. $10^{10^{10}}$ how much time will it take to write this number, if it takes 1 sec to write 1 digit.
 - a. 1000 secs.
 - b. 10 year.
 - c. more than 1 million years.
 - d. a few days.ans. more than 1 million years.
2. starting from 2 upto how many numbers we need to check whether 907 is prime or not?
3. A persons age is similar to the year he was born (last two digits is counted as age).ans. 80
4. What is YACC? ans. yet another compiler compiler.
5. flop is a unit of ? ans. processing speed.
6.

```
#define hello(x,y) printf("#expr"%d",expr);  
main(){  
float x=1,y=2;  
expr=x/y;  
hello(expr);  
}
```

ans. $x/y=1$;
7. time and work and days.(easy questions).
8. A&B fill 3 litres and 5 litres of oil in the car. C pays Rs. 8/- to A7B. How much will A get?
9. A question on "set" theory.it was given that less than 30 persons in class.(Ans . cannot be determined.)
10. 4 cows are there at the four corners of a square. if the radius of the rope is 1 and lenth of one side of the square is 14, find the area along the square which the cow cannot gaze.
ans. $14*14-\pi*r*r$;
11. Two glasses were filled with $\frac{1}{3}$ and $\frac{1}{4}$ milk. they were filled with water & then mixed in tumbler. what is the percentage of milk in the resultant.
12. average speed $\frac{2xy}{x+y}$.
13. A belongs to the truther tribe " who says yes". B belongs to the liers tribe " who says no always". when A&B were asked to which group do they belonged to both of them replied "yes". when a third person C was asked whether A&B belong to same group, he notified groups he answered "No". to which group do A,B and C belong? ans. LLL or LTT.
14. There were three clocks they gave alarm after 24secs, 12secs and 36 secs. if they rang simultaneously at 8:20, then at what time they again rang simultaneously?(something like this

but numbers may differ). ans. 8:27:12

15. A plane starts from a place A, it goes 1000 kms south then 1000km east then 1000 km north and 1000km west, what is its distance from the starting place? ans. same starting place.

16. question on Bipartite graph (definition).

17. heap-sorting algorithm time complexity. (ans $n \log n$)

18. white-box testing.

19. postfix evaluation of: $(A+B)*C$ (Ans: $AB+C*$)

20. question on catch-throw? c++

21.

```
main(){
    main();
}
```


ans. stack overflow.

24.

```
main()
{ char a,b;
printf("%d%d%d%d",sizeof('a');
sizeof(NULL),sizeof(b),sizeof(main));
}
Ans(1,1,1,2)
```

22. Five file sizes given. what should be the order of their access so that least time is taken.
ans. least size first.

23. SQL query does what?

24. 5 questions on reasoning.

IBM Technical Test Paper

1. FLOP is the unit of – i)clock speed, ii)frequency....i ii)memory, iv)processors speed.
2.

```
main()
{
    printf("hello");
    main();
}
```

how many times it will print?
3. complexity of heap sort(ans:o(nlogn).
4. what will be the o/p?

```
int main()
{
    char a,b;
    printf("%d%d%d%d",sizeof('A'), sizeof('NULL'), sizeof('a'), sizeof(main));
}
```
5. necessity of parity bit(ans:b).
6. >what is the o/p?

```
#DEFINE xyz(exr)printf("exr=%d",exr)
main()
{
    int x=3,y=2;
    xyz(x/y);
}
```
7. simple question on graph
8. simple question on sql
9. files r there of size like 26543b,2000b,4000b,1000b arrange them according to there access time
Aptitude(TOTAL25)
10. unit digit of 7^{173} ?
- 11.two train coming towards from dist 24 miles with speed 12 miles/hr ,a fly randomly flying between two trains at the speed of 18 miles/hr.how many distance covered by the fly before will collide?(30,36.....)
- 12.what is the increase of volume of a sphere if its radius increases by 10%?

13. A man climbing in a rock at 24 km/hr and downhill 36 km/hr. determine avg speed?
- 14.problem on language (some percent known german,some knows French,some English)ans:24.
- 15.Here two same size glass one is filled $\frac{1}{3}$ of milk and other is $\frac{1}{4}$ milk.then the glasses filled with water and mixed,what is the percentage of milk now?
- 16.One is filled $\frac{1}{3}$ of milk and other is $\frac{1}{4}$ milk.then the glasses filled with water and mixed,what is the percentage of milk now?
- 17.If the time required for write one digit is one second then how many time for $(10^{10})^{10}$?
(ans:i) few day ii) millions of day iii) one year
- 18.In 1930 the age of one student is same as the last two digit of his year of birth and the case is same for his grand father also ,what is the sum of age his and his grand father?(ans:80check).
- 19.In 1930 the age of one student is same as the last two digit of his year of birth and the case is same for his grand father also ,what is the sum of age his and his grand father?(ans:80check).
- 20.blue socks:4pair,red socks:3pair,white socks:2pair,how many socks one will take for two different socks .
- 21.what is the probability of 2 man will be born in a same month(ans: $\frac{1}{12}, \frac{1}{6}, \frac{1}{24}, \frac{1}{2}$)
- 22.There is a square ground of side 14cm,two horses r there in two different point of the square such that they can just touch them, how much grass will not be covered by the horses.
(ans: $14*14 - 2*(\frac{1}{4})*\pi*(7*\sqrt{2})^2$).
- 23.A man is started his journey from point A he goes 1000km south then 1000km east ,1000km north,then 1000km west.where is he now.(ans:i)at point A ii)1000km east from Aiii)....iv)....