

TISL -----> PAPER MODEL

Two parts.

Part A: aptitude (100 Que) 100 marks  
 1 to 40 letter series  
 41 to 65 problems  
 66 to 100 figures  
 Part B: comp knowledge test  
 50 QUE 50 marks

TISL (TATA-IBM) PAPER

-----

Q9). what will be the result of executing following program

```
main
{
char *x="new";
char *y="dictionary";
char *t;
void swap (char * , char *);
swap (x,y);
printf("(%s, %s)",x,y);

char *t;
t=x;
x=y;
y=t;
printf("-(%s, %s)",x,y);
}
void swap (char *x,char *y)
{
char *t;
y=x;
x=y;
y=t;
}
```

- a). (New,Dictionary) - (New,Dictionary)
  - b). (Dictionary,New) - (New,Dictionary)
  - c). (New,Dictionary) - (Dictionary,New)
  - d). (Dictionary,New) - (Dictionary,New)
  - e). None of the above
- (Ans will be b or e) check

Q10). If a directory contains public files (can be valied and used by any one ) which should not be altered ,the most liberal permissions that can be given to the directory is

- a) 755
- b) 777
- c) 757
- d) 775
- e) None of the above

(Ans a)

- 11) what would the following program results in  
main()

```
{
char p[]="string";
char t;
int i,j;
for(i=0,j=strlen(p);i<j;i++)
{
t=p[i];
p[i]=p[j-i];
p[j-i]=t;
}
printf("%s",p);
}
```

a)will print:string

b)will not print anything since p will be pointing to a null strin

g

c)will print:gnirts

d)will result in a complication error

e)will print invallid characters(junk)

(Ans will be b ) check

- 12) After the following command is executed

```
$ ln old new
```

a listing is performed with the following output

```
$ ls -li
```

```
total 3
```

```
15768 -rw-rw-rw- 2 you 29 Sep 27 12:07 old
```

```
15768 " " " " " " " " new
```

```
15274 " " 1 " 40 " " 09:34 veryold
```

which of the following is true

a)old and new have same i-node number,2

b) " " " " " " " " , 15768

c)old and new have nothing yo do with each other

d)very old and new are linked

e)very old and old are linked

(Ans is b)

- 13) What will be the result of executing the following statement

```
int i=10;
printf("%d %d %d",i,++i,i++);
```

a).10 11 12

b).12 11 10

c).10 11 11

d).result is OS dependent

e).result is compiler dependent

(Ans is e)

- 14) What does extern means in a function declaration

a)the funct has global scope

- b)the funct need not be defined\
- c)nothing really
- d)the funct has local scope only to the file it is defined in
- e)none of the above

(Ans will be c)

15) What will be result of the following program

```
main()
{
void f(int,int);
int i=10;
f(i,i++);
}
void f(int i,int j)
{
if(i>50)
return;
i+=j;
f(i,j);
printf("%d,",i);
}
```

- a) .85,53,32,21
- b) 10,11,21,32,53
- c) 21,32,53,85
- d) 32,21,11,10
- e) none of the above

(Ans is e)

16). MS windows 3.1 is a

- a)operating system
- b)Application
- c)Programing language
- d)database
- e)shell

(Ans will be b)

17).MS Windows 3.1 supports which type of multi-tasking?

- a)cycle
- b)executive
- c)preemptive
- d)Non-preemptive
- e)Manual

(Ans )

18)The command .....ln /bin/mail /usr/you/bin/m

- a)will not be executed because you are linking files across different file systems
- b)results ln /bin/main being the same file as /usr/you/bin/m
- c)results in 2 links to the file mail
- d) " " " " m
- e)none

(Ans will be b)

19)In a standerd directory lay out ,/etc is the directory where

- a) basic programs such as who and ed reside

- b) - - - - -
- c) various administrative files such as password file reside
- d) - - - - -
- e) - - - - -

(Ans is c)

20) The command echo \*

- a) echoes all files in the current directory
- b) - - - - -
- c)
- d)
- e)

(Ans is a)

21) What will be the result of the following segment of the program

```
main()
{
    char *s="hello world";
    int i=7;
    printf("%.7s",s);
}
a) syntax error
b) hello w
c)
d)
e)
```

(Ans is b)

22) What will be the result of the following program

```
main()
{
    int a,b;
    printf("enter two numbers :");
    scanf("%d%d",&a,&b);
    printf("%d+%d=%d",&a,&b,&a+b);
}
a) - - - - -
b) - --
c) will generate run time error /core dump
d)
e)
```

(Ans is c)

23) What is the size of 'q' in the following program?

```
union{
    int x;
    char y;
    struct {
        char x;
        char y;
        int xy;}p;
    }q;
```

- a) 11
- b) 6

- c) 4
- d) 5
- e) none

(Ans is b why because no of bytes for int =4 given in instructions)

24) Which message is displayed when a window is destroyed

- a) WM\_CLOSE
- b) WM\_DESTROY
- c) WM\_NCDESTROY
- d)
- E)

(Ans is b)

25) Send Message and postmessage are

- a) send message puts the message in the message queue and results,

postmessage processes the message immediately

- b) Sendmessage processes the message immediately, postmessage puts the message in the queue and returns
- c) Both put the message in the message queue and returns
- d) Both process the message immediately
- e) None of the above

(Ans will be b check)

26) Which of the following message is used to limit the size of teh Window

- a) WM\_SIZE
- b) WM\_PAIN
- c) - - - -
- d) - -- - -

(Ans is a)

27) until who | grep mary  
do

sleep 60

done

- a) is syntactically incorrect
- b) waits 60 seconds irrespective of Mary being logged in or not
- c) waits until Marry is logged in
- d) waits till Mary exited
- e) None

(Ans is c)

28) The UNIX system call that transforms an executable binary file into a process is

- a) execl()
- b) execv()
- c) execl()
- d) execve()
- e) All of the above

(Ans will be d check)

29) Which of the following is true about fork()

- a) - - - - -
- b) causes the creation of a new process ,the CHILD process with a new process ID

- c)
- d)
- e)

(Ans is b)

30) What do the following variable names represents?

sort          register  
volatile    default

a) - - - -

b ) - - - -

c) all the above are keywords

(Ans is c)

31) What will be the result of the following program

```
main()
{
char *x="String";
char y[] = "add";
char *z;
z=(char *) malloc(sizeof(x)+sizeof(y)=1);
strcpy(z,y);
strcat(z,y);
printf("%s+%s=%s",y,x,z);
}
```

a) Add+string=Add string

b) syntax error during compilation

c) run time error/core dump

d) add+string=

e) none

(Ans will be e consider cap&small letters)

32) What does the following expression means

a)

b)

c)

d) an array of n pointers to function returning pointers to  
functions returning pointers to characters

(ANS IS d)

33) Which of the following is not a DDL object

a) HBRUSH

b) HPEN

c) HBITMAP

d) HRGN

e) HWND

(Ans is e)

34) Which of the following message is used to initialize the  
contents of a dialog

a) WM\_CREATE

b) WM\_SIZE

c) WM\_COMMAND

d) WM\_INITDIALOG

e) none

(Ans will be d)

35) Interprocess communication in UNIX can be achieved using

- a) pipe
- b) Message
- c) Semaphores
- d) Shared Memory
- e) All of the above

(Ans is e)

36) Which of the following is true

- a) UNIX is a time sharing multi-user OS
- b) UNIX has a device independent file system
- c) UNIX is full duplex
- d) UNIX has command interpreter
- e) All of the above

(Ans is e)

Q). 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
- e). None of the above.

Q). 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

- a). in a file called list and the error will be typed in a file error out
- b). there will be no file called list or error out
- c). error will be logged in a file called list and o/p will be in error out
- d). you will not be allowed to log in
- e). none of the above

Q). In UNIX a file's 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). - - - -

d). \_ \_ \_

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

Q). The UNIX shell is....

- a). does not come with the rest of the system
- b). forms the interface between the user and the kernel
- c). -- -- --
- d). - - - -
- e) none

(ans is (b) )

Q). 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

Q).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)

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 )

Q) What is the result

```
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
(Ans is c)

```

# APTITUDE TEST

\*\*\*\*\*

Missing leter

```

1).eefgghii- (Ans j)
2)
3)defdefghi- (Ans g)
4)cdexyzfghxyz- (Ans i)
5)defdegde- (h)
6)abczabcyabc- (x)
7)fgbhibjkb- (l)
8)- - - - - (Ans is r)
9)aarbsctarb- (s)
10)bccdeefg- (g)
11)efhikl- (n)
12)abccdeffg- (h)
13amnbopc- (q)
14)tttssrqqqp- (p)
15)ddffhhjj- (l)
16)mnmnklopopkl- (q)
17)cddeeefff- (f)
18)gfed- (c)
19)dfhjl- (n)
20)abcijdefij (g)
21)efgefghefghi- (e)
22)bcbdedfgfhi- (h)
23)aababccdc- (d)
24)aibcidef- (i)
25)cehl- (q)
26)abdehimn- (s) check again
27)becfdge- (h)
28)agbhc- (i)
29)adhko- (r)
30)efghjklno- (q)
31)aedhg- (k)
32aeibf- (j)
33)zdwgt- (J)
34)zeyijxg- () find
35)cgreuvvg- (y)
36)ksjtih- (v)

```

- 37)rsjtuhvw- (f)  
 38)ieajfbk- (g)  
 39)hebifej- (g)  
 40)hjlmiel- (h)  
 -----

TOTAL 60 QUE'S 25-PROBLEMS & 35 FIGURES (figure series, we have to find next coming figure)

HERE 13 PROB'S ARE THERS.REMAINING ALSO ALMOST LIKE THIS .

- 1) A boy multiplied a number with 10 and got 100, insted of dividing it . If he devided it what would be the answer?  
 (Ans is 1)
- 2) If 12 shell cup board requires 18ft of wall space then  
 30 " " " " how much wall space?  
 (Ans is 45)
- 3) The average salary of three employee is 95Rs.per week.  
 If one employee earns 115 and other earns 65 rupees.  
 how much will third be earn?  
 (Ans is 105Rs)
- 4) A company instaled 36 punching machines at the begining of the year. In the spring they instaled 9 additional m/c's and then discontinued 18 in the fall. How many were still installed at the end of the year?  
 (Ans is 9) check
- 5) During a given week a programmer spend  $\frac{1}{4}$  of his time preparing charts,  $\frac{3}{8}$  of his time for coding, rest of his time for debugging the programs. If he had 48 hrs during the week how many hours did he spend debugging the program.  
 (Ans is 18hrs)
- 6) A 16 story building has 12000ft on each floor. Company A rents 7 floors and company B rents 4 floors. What is the number of square feet of unrented floor space?  
 (Ans is 60000 sqft)
- 7) A man owns  $\frac{2}{3}$  of a computer service buroue business and sells  $\frac{3}{4}$  of his share for \$75000. What is the value of the business.  
 (Ans is 150,000)
- 8) A computer printer produces 176400 lines in a given day. If the printer was in operation for 7hrs during the day how many lines did it print per minute?  
 (Ans is 420)
- 9) From its total income a company spent \$20000 for advertising half of the remainder on salaries and had \$6000 left. What was the total income?  
 (Ans is \$32000)
- 10) In a certain company 20% of the men and 40% of the women

attended the annual company picnic.If 35% of all the employees are men .What % of all the employee went to the picnic?  
(Ans is 33%)

11)The dimensions of certain IBM m/c are 48"\*30". If the size of the m/c is increased proportionally until the sum of its dimensions equals to 156".What will be the increase in the shortest side?

(Ans is 30)

12)If a card punch operator can process 80 cards in half an hour How many cards can this process in 7hr30min?

(Ans is 1200)

13)In a computer tape library there are two racks with 40 tapes per rack.In a given day 30 tapes are in use . What fraction remains in the rack?

(Ans is 5/8)

TATA -IBM

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LETTER SERIES

		answers
		-----
1)e e f g g h i i ---	-	j
2)a z a y b z b y c ---	a e x y z	z
3)d e f d e f g h i ---	d e f g h	g
4)c d e x y z f g h x y z	i j k l m	i
5)de f de g d e ---	d j z h i	h
6)a b c z a b c y a b c ---	a b x y z	x
7)d g b h i b j k b ----	b e l m n	l
8)t s p t s q t s ---	r s t v w	r
9)q a r b s a t a r b ----	a b e r s	s
10)b c c d e e f g --	e f g h i	g
11)e f h i k l ---	m n o p q	n
12)a b cc d e ff g --	efghi	h
13)a m n b op c ---	depqr	q
14)ttt sss qqq p ---	opqrs	p

15) ddfhjhj---	ijklm	l
16) mnmnklopokl -----	kopqr	q
17) cddeeefff---	efghi	f
18) gfde----	bcfgh	c
19) dfhjl -----	jklmn	n
20) abcijdefij----	ghijk	g
21) efgefghefghi -----		e
22) bcbdedffghi -----	fghjk	h
23) aababccdc ---	cdefg	d
24) aibcidef ---	efghi	i
25) cehl ---	opqrs	q
26) abdehimn ---	pqrst	s
27) becfdge ---	efghi	h
28) agbhc -----	dfghi	i
29) adhko ---	pqrst	r
30) efghjklno ---	pqrst	q
31) aeibf ---	cdgij	j
32) aedhg--	hijkl	k
33) zdwgt ---	hijkl	j
34) zeiyijxj---	ijklm	k
35) dqreuvvg---	vwxyz	y
36) ksjtjuh---	vwxyz	v
37) rsjtuhvw---	cdefg	f
38) ieajfbk -----	cdefg	g

39)hebijej ---- ghijk g

40)njfmiel --- dhijm h

1)

```
main()
{
    char *p1="name";
    char *p2;
    p2=(char*)malloc(20);
    while(*p2++ = *p1++);
    printf("%s\n",p2);
}
Ans:empty string.
```

2)

```
main()
{
    int x=20,y=35;
    x=y++ + x++;
    y= ++y + ++x;
    printf("%d%d\n",x,y);
}
Ans : 57 , 94
```

3)

```
main()
{
    int x=5;
    printf("%d%d%d\n",x,x<<2,x>>2);
}
ans: 5,20,16
```

4)

```
#define swap(a,b) a=a+b;b=a-b;a=a-b;
main()
{
    int x=5;y=10;
    swap1(x,y);
    printf("%d %d\n",x,y);
    swap2(x,y);
    printf("%d %d\n",x,y);
}
int swap2(int a, int b)
{
    int temp;
    temp=a;
    b=a;
    a=temp;
    return;
}
like that
ans: 10 , 5
```

10 ,5

5)

```
main()
{
    char *ptr = " Ramco Systems"
    (*ptr)++;
    printf("%s\n",ptr);
    ptr++;
    printf("%s\n",ptr);
}
Ans:  Samco Systems
      amco systems
```

6)

```
main()
{
    char s1[]="Ramco";
    char s2[]="systems";
    printf("%s",s1);
}
```

Ans: compilation error giving that it can not modified

Lvalue.

7)

```
main()
{
    char *p1;
    char *p2;
    p1=(char *)malloc(25);
    p2=(char *)malloc(25);
    strcpy(p1,"Ramco");
    strcpy(p2,"systems");
    strcat(p1,p2);
    printf("%s",p1);
}
Ans: Ramcosystems
```

8)

The following variable is available in file1.c

```
static int average float;
```

Ans: all the functions in the file1.c can access the variable.

9)

Ans : [2] . extern int x;  
check the answer.

10) Another problem with

```
#define TRUE 0
somecode.
while(TRUE)
{
    somecode
}
```

This will not go into the loop as TRUE is defined as 0.

Ans : None of the above i.e (D).

- 11)
- Ans :  
[4]. A question in structures where the members are dd,mm,yy.  
mm:dd:yy  
09:07:97
- 12) Ans: [5] Another structure question.  
1.Rajiv system analyst.
- 13)
- Ans: INFILE.DAT is coupled to OUTFILE.DAT.
- 14) A question with argc and argv.  
Inputfile will be.  
c:\TEMP.EXE Ramco systems India.  
Outputfile will be.  
India: I n d i a  
systems: s y s t e m s  
Ramco: R a m c o  
Ans : choice (d)
- 15) structure kswap  
Ramco India  
Ramco Systems Corporation  
Ramco .... Limited.
- After swaping the result will be  
First two will be swaped  
Ramco Systems Corporation.  
Ramco India  
Ramco .... Limited.
- 16) 

```
int x;
main()
{ int x=10;
  x++;
  change-value(x);
  x++;
  modify-value();
  printf("First output:%d\n",x);

  x++;
  change-value(x);
  printf("secpnd output:%d\n",x);
  modify-value();
  printf("Third output:%d\n",x);
}
modify-value()
{
  return(x+=10);
}
change-value()
{
```

```
    return(x+=1);
}
```

Ans: 12 , 1 , 1

```
17) main()
    {
        int x=10;y=15;
        x = x++;
        y = ++y;
        printf("%d %d\n",x,y);
    }
```

Ans: 11, 16

```
18) main()
    {
        int a=0;
        if(a==0) printf("Ramco Systems\n");
        printf("Ramco Systems\n");
    }
```

Ans: only one time "Ramco Systems" will be printed.