## HCL Sample Test Paper 2

- Aptitude

1. How many of the integers between 25 and 45 are even?
(A)21 (B)20 (C)11 (D)10 (E)9

Ans:d)10
2. If taxi fares were Rs 1.00 for the first $1 / 5$ mile and Rs 0.20 for each $1 / 5$ miles thereafter. The taxi fare for a 3-mile ride was
(A)Rs 1.56
(B)Rs 2.40
(C)RS 3.00
(D)Rs 3.80
(E)Rs 4.20

Answer :d)Rs 3.80
3. A computer routine was developed to generate two numbers ( $\mathrm{x}, \mathrm{y}$ ) the first being a random number between 0 and 100 inclusive, and the second being less than or equal to the square root of the first. Each of the followin pair satisfies the routine EXCEPT
(A) (99.10) (B) (85.9) (C) (50.7) (D) (1.1) (E) (1.0)

Answer : A) (99.10)
4. A warehouse had a square floor with area 10,000 sq.meters. A rectangular addition was built along one entire side of the warehouse that increased the floor by one-half as much as the original floor. How many meters did the addition extend beyond the original buildings ?
(A) 10 (B)20 (C)50 (D)200 (E)500

Ans: c)50
5. A digital wristwatch was set accurately at 8.30 a.m and then lost 2 seconds every 5 minutes. What time was indicated on the watch at $6.30 \mathrm{p} . \mathrm{m}$ of the same day if the watch operated continuously that time ?
(A)5:56
B)5:58
(C) 6.00
(D)6.23
(E)6.26

Ans:E) 6.26
6. A 5 litre jug contains 4 litres of a salt water solution that is 15 percent salt. If 1.5 litres of the solution spills out of the jug, and the jug is then filled to capacity with water, approximately what percent of the resulting solution in the jug is salt?
(A) $7.5 \%$
(B) $9.5 \%$
(C) $10.5 \%$
(D) $12 \%$
(E) $15 \%$

Ans :A)7.5\%
7. A plane travelled K miles in the first 96 miles of flight time. If it completed the remaining 300 miles of the trip in 1 minute, what was its average speed in miles per hour for the entire trip ?
(A)
(B)
(C)
(D)
(E)

Ans :(300+k)/97* 60
8. A merchant sells an item at a 20 percent discount. but still makes a gross profit of 20 percent of the cost. What percent of cost would be gross profit on the item have been if it had been sold without the discount?
(A) $20 \%$
(B) $40 \%$
(C) $50 \%$
(D) $60 \%$
(E)66.6\%

Ansr :c) 50\%
9. A millionaire bought a job lot of hats $1 / 4$ of which were brown. The millionaire sold $2 / 3$ of the hats including $4 / 5$ of the brown hats. What fraction of the unsold hats were brown.
(A)1/60
(B) $1 / 15$
(C) $3 / 20$
(D) $3 / 5$
(E) $3 / 4$

Ans :c)3/20
10.How many integers $n$ greater than and less than 100 are there such that, if the digits of $n$ are reversed, the resulting integer is $\mathrm{n}+9$ ?
(A)5
(B) 6
(C) 7
(D) 8 (E)9

Ans:D) 8
11.An investor purchased a shares of stock at a certain price.If the stock increased in price Rs 0.25 per share and the total increase for the x shares was Rs 12.50 , how many shares of stock had been purchased?
(A) 25
(B) 50
(C) 75
(D) 100
(E) 125

Ans :B)50
12.At a special sale, 5 tickets can be purchased for the price of 3 tickets. If 5 tickets are purchased at the sale, the amount saved will be What percent of the original price of the 5 tickets?
(A) $20 \%$
(B) $33.3 \%$
(C) $40 \%$
(D) $60 \%$
(E) $66.6 \%$

Ans :c)40\%
13.Working independently, Tina can do a certain job in 12 hours. Working independently, Ann can do the same job in 9 hours. If Tina Works independently at the job for 8 hours and then Ann works independently, how many hours will it take Ann to complete the remainder of the jobs?
(A) $2 / 3$
(B) $3 / 4$ (C) 1 (D) 2
(E) 3

Ans:E)3
14.A decorator bought a bolt of $\mathrm{d} m$ number of red chips in any one stack ?
(A) 7 (B) 6
(C) 5
(D)
(E) 3

Ans :C) 5
15.A sink has 12 lits of water some quantity of water is taken out. if the remainng water is 6 litres less then the water taken out then quantity of water taken out is.
a. 3
b. 6
c. 9
d. 1
16. which is the 4 digit number whose second digit is thrice the first digit and $3^{\prime} \mathrm{rd}$ digit is sum of 1 'st and 2'nd and last digit is twice the second digit.
1.2674
2.1349 .
3.3343
4.3678
17. In a straight highway 2 cars starts from the same point in opposite directions each travels for 8 Kms and takeleft turn then travel for 6 Kms what is the distance between them now.
1.16
2.20
3.25
4.10

Technical Section

1. In ANSI C which is such thing is not in Java.
typedef struct node
$\{$
int
NODEPTR * NODE
$\}$
2. Q . In signed magnitude notation what is the minimum value that can be represented with 8 bits a) -128 b) $-255 \mathrm{c})-127 \mathrm{~d}) 0$
3. Q. there is an employer table with key feilds as employer no. data in every n'th row are needed for a simple followingqueries will get required results.
a) select A employe no. from employe A, where exists from employe B where A employe no. $=\mathrm{B}$ employehaving $\left(\operatorname{count}\left(^{*}\right) \bmod \mathrm{n}\right)=0$
b) select employe no. from employe A, employe B where A employe no. = B employ
no.grouply employe no. having $(\operatorname{count}(*) \bmod n=0)$
c) both $\mathrm{a} \& \mathrm{~b}$
d) none of the above
4. Piggybacking is done for, Ans=>Acknowledgement.
5. WHICH IS NOT BASIC data type ans.Char*
6. which of the following statement is valid for string copy
char *srt,*ptr;
a) while(*str) \{
*str=*ptr;
++ str=++ptr;
\}
b) while(*str)
$\left\{{ }^{*}++\mathrm{str}=*++\mathrm{ptr}\right\} ;$
c)
7. Two variable cannt have the same name in a)function b) block c) file d)--- C Section
8. \#define inc(x) $x++$ main()
\{
int $\mathrm{t}=1$;
printf("\%d",inc(t++));
\}
9. one or two que for the complicated declaration.
10. Const char * $\mathrm{a}=$ "Abcd"; char const * $\mathrm{a}=$ "lmno"; base do this, Two que were there.
11.char *p ;
char q[20];
11. int $\mathrm{i},{ }^{*} \mathrm{p}=\& \mathrm{i}$;
$\mathrm{p}=$ malloc(10);
free(p);
printf("\%d",p);
ans : garbage
13.int $\mathrm{i}=20,{ }^{*} \mathrm{j}=$ \&i
f(i)
printf("\%d",i);
14.\#define val $1+2$
printf("\%d\%d",val/val,val^3)
ans : 39
15.\#define "this" "\#"
\#define ( $\mathrm{x}, \mathrm{y}$ ) x\#\#y
printf("this","this is")
ans: compilation error (tested)
$\left.16.2^{\wedge} 2\right)+\left(a^{\wedge} a\right)$
12. int $a, b=7$
$a=b<4 ? b \ll 1: b>4$ ? $7 \gg 1: a$ ans. 3
18.one que on $\mathrm{c}++$ class member function ans.d
19.work of memory management unit.
20.who relate virtual memory to physical memory ans.os
21.memory is allocated to variable a)when declared b)when define c)...
22.Question on double linked list
23.Define success 1
define failure - 1
if(condition)
printf(success);
else
printf(failure); ans success
24.main()
\{
int var=25, varp;
varp=\&var;
varp $=10$;
fun(varp);
printf(\%d\%d",var,varp);
ans a)45,45 b)55,55 c) 20,55;
25.u r given two statements
$a=(10.15)$;
$\mathrm{b}=10,15$;
if they are executed what is the output printf("\%d $\% \mathrm{~d} ", \mathrm{a}, \mathrm{b})$;
a) 10,15 b) 15,10 c) 10,10 d) 15,15 ans a
26.\#define inc(x) $x++$ main()
\{
int $\mathrm{t}=1$;
printf("\%d",inc(t++));
\}
ans.error
27.main
\{int $\mathrm{x}=1, \mathrm{y}=2, \mathrm{z}=3$;
$x=y==z$;
printf(x); \}
