

HCL Placement papers aptitude reasoning technical C,C++ Java Data base questions with answers,HCL previous years solved question papers,HCL free on line mock tests

HCL Placement paper questions with answers

1. Which of the following involves context switch,

- (a) system call
- (b) privileged instruction
- (c) floating point exception
- (d) all the above
- (e) none of the above

Ans: (a)

2. In OST, terminal emulation is done in

- (a) sessions layer
- (b) application layer
- (c) presentation layer
- (d) transport layer

Ans: (b)

3. For 1 MB memory, the number of address lines required,

- (a)11
- (b)16
- (c)22
- (d) 24

Ans. (b)

4. Semaphore is used for

- (a) synchronization
- (b) dead-lock avoidance
- (c) box
- (d) none

Ans. (a)

5. Which holds true for the following statement

class c: public A, public B

- a) 2 member in class A, B should not have same name
- b) 2 member in class A, C should not have same name
- c) both
- d) none

Ans. (a)

6. Preprocessor.. does not do which one of the following

- (a) macro
- (b) conditional compilation
- (c) in type checking
- (d) including load file

Ans. (c)

7. Piggy backing is a technique for

- a) Flow control
- b) Sequence
- c) Acknowledgement
- d) retransmission

Ans. (c)

8. Given the following statement

```
enum day = { jan = 1 ,feb=4, april, may}
```

What is the value of may?

- (a) 4
- (b) 5
- (c) 6
- (d) 11
- (e) None of the above

Ans (e)

9. Find the output for the following C program

```
i=20,k=0;
for(j=1;j9 && Y++!=10 && Y++>10)
{printf("%d", Y);
else
printf("%d", Y);
}
```

Ans. 13

12. Find the output for the following C program

```
f=(x>y)?x:y
```

- a) f points to max of x and y
- b) f points to min of x and y
- c) error

Ans. (a)

13. What is the sizeof(long int)

- (a) 4 bytes
- (b) 2 bytes
- (c) compiler dependent
- (d) 8 bytes

14. a=2, b=3, c=6

Find the value of $c/(a+b)-(a+b)/c$

Ans : 0.3

15.. What does the hex number E78 in radix 7.

- (a) 12455
- (b) 14153
- (c) 14256
- (d) 13541

(e) 131112

Ans. (d)

16.. 10 : 4 seconds :: ? : 6 minutes

Ans. 900

Questions 17 - 21 are to be answered on the following data

A causes B or C, but not both

F occurs only if B occurs

D occurs if B or C occurs

E occurs only if C occurs

J occurs only if E or F occurs

D causes G,H or both

H occurs if E occurs

G occurs if F occurs

17. If A occurs which of the following must occur

I. F and G

II. E and H

III. D

(a) I only

(b) II only

(c) III only

(d) I,II, & III

(e) I & II (or) II & III but not both

Ans. (e)

18. If B occurs which must occur

(a) D

(b) D and G

(c) G and H

(d) F and G

(e) J

Ans. (a)

19. If J occurs which must have occurred

(a) E

(b) either B or C

(c) both E & F

(d) B

(e) both B & C

Ans. (b)

20. Which may occurs as a result of cause not mentioned

I. D

II. A

III. F

(a) I only

(b) II only

(c) I & II

(d) II & III

(e) I, II & III

Ans. (c)

21. E occurs which one cannot occurs

(a) A

(b) F

(c) D

(d) C

(e) J

Ans. (b)

22. A man fixed an appointment to meet the manager, Manager asked him to come two days after the day before the day after tomorrow. Today is Friday. When will the manager expect him? (repeated from previous papers)

Ans: Monday

23. A man said he spent $\frac{1}{6}$ of his as a child, $\frac{1}{12}$ as salesman in a liquor shop, $\frac{1}{7}$ and 5 years as a politician and a good husband respectively. At that time Jim was born. Jim was elected as Alderman four years back. when he was half of his age. What is his age? (repeated from previous papers)

Ans: 84 years

24. Jack, Doug and Ann, 3 children had a running race while returning from school. Mom asked who won the race. Then Jack replied " I won't tell you I will give u clue, When Ann takes 28 steps Doug takes 24 steps, meantime

I take 21 steps. Jack explained that his 6 steps equals Doug's 7 steps and Ann's 8 steps. Who won the race?

Ans: Doug

25. Every day a cyclist meets a car at the station. The road is straight and both are traveling in the same direction. The cyclist travels with a speed of 12 mph. One day the cyclist comes late by 20 min. and meets the car 5 miles before the Station. What is the speed of the car?

Ans: 60 mph

26. A lady goes for shopping. She bought some shoestrings. 4 times the number of shoestrings, she bought pins and 8 times, handkerchiefs. She paid each item with their count as each piece's cost. She totally spent Rs. 3.24. How many handkerchiefs did she buy?

27. Complete the series :

a) 3,6,13,26,33,66,___

b) 364,361,19,16,4,1,___(" " ")

Ans : a) 63

b) 1

28. Lucia is a wonderful grandmother. Her age is between 50 and 70. Each of her sons have as many sons as they have brothers. Their combined number gives Lucia's age. What is the age?

Ans: 64

29. There are two towers A and B. Their heights are 200ft and 150ft respectively and the foot of the towers are 250ft apart. Two birds on top of each tower fly down with the same speed and meet at the same instant on the ground to pick a grain. What is the distance between the foot of tower A and the grain?

Ans: 90ft

30. Grass in lawn grows equally thick and in a uniform rate. It takes 40 days for 40 cows and 60 days for 30 cows to eat the whole of the grass. How many days does it take for 20 cows to do the same?

Ans: 120

TECHNICAL

31. What is the output of the following problem ?

```
#define INC(X) X++  
main()  
{  
int X=4;  
printf("%d",INC(X++));  
}
```

a) 4 b) 5 c) 6 d) compilation error e) runtime error

Ans : d

32. what can be said of the following

```
struct Node {  
char *word;  
int count;  
struct Node left;  
struct Node right;  
}
```

- a) Incorrect definition
- b) structures cannot refer to other structure
- c) Structures can refer to themselves. Hence the statement is OK
- d) Structures can refer to maximum of one other structure

Ans : c)

33. What is the output of the following program

```
main()
{
int a=10;
int b=6;
if(a=3)
b++;
printf("%d %d\n",a,b++);
}
```

- a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none

Ans : a

34. What can be said of the following program?

```
main()
{
enum Months {JAN =1,FEB,MAR,APR};
Months X = JAN;
if(X==1)
{
printf("Jan is the first month");
}
}
```

- a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error

Ans: b

35. What is the output of the following program?

```
main()
{
```



```
char *src = "Hello World";
char dst[100];
strcpy(src,dst);
printf("%s",dst);
}strcpy(char *dst,char *src)
{while(*src) *dst++ = *src++;
}
) "Hello World" b)"Hello" c)"World" d) NULL e) unidentified
```

Ans: d) NULL

36 .What is the output of the following program?

```
main()
{
int l=6;
switch(l)
{ default : l+=2;
case 4: l=4;
case 5: l++;
break;
}
printf("%d",l);
}
a)8      b)6      c)5      d)4      e)none
```

Ans : a) 8

37.What is the output of the following program?

```
main()
{
int x=20;
int y=10;
swap(x,y);
```

```
printf("%d %d",y,x+2);
}
```

```
swap(int x,int y)
```

```
{
int temp;
temp =x;
x=y;
y=temp;
}
```

a)10,20 b) 20,12 c) 22,10 d)10,22 e)none

Ans:b

38. Which of the following about the following two declaration is true

i) int *F()

ii) int (*F)()

a) Both are identical

b) The first is a correct declaration and the second is wrong

c) The first declaration is a function returning a pointer to an integer and the second is a pointer to function returning int

d) Both are different ways of declaring pointer to a function

Ans : c)

39. What are the values printed by the following program?

```
#define dprint(expr) printf(#expr "=%d\n",expr)
```

```
main()
```

```
{
```

```
int x=7;
```

```
int y=3;
```

```
dprintf(x/y);
```

```
}
```

a) #2 = 2 b) expr=2 c) x/y=2 d) none

Ans: c)x/y=2

40. Which of the following is true of the following program

```
main()
{
char *c;
int *p;
c=(char *)malloc(100);
ip=(int *)c;
free(ip);
}
```

41. output of the following.

```
main()
{
int i;
char *p;
i=0X89;
p=(char *)i;
p++;
printf("%x\n",p);
}
```

Ans:0X8A

42. which of the following is not a ANSI C language keyword?

Ans: Function.

43. When an array is passed as parameter to a function, which of the following statement is correct choice:

- a) The function can change values in the original array
- b) In C parameters are passed by value. The function cannot change the original value in the array
- c) It results in compilation error when the function tries to access the elements in the array
- d) Results in a run time error when the function tries to access the elements in the array

Ans: a)

44. The type of the controlling expression of a switch statement cannot be of the type

- a) int b) char c) short d)float e) none

Ans : d

Questions 41-45

Six knights - P,Q,R,S,T and U - assemble for a long journey in Two travelling parties. For security, each travelling party Consists of at least two knights. The two parties travel by separate routes, northern and southern. After one month, the routes of the northern and southern groups converge for a brief time and at that point the knights can, if they wish, rearrange their travelling parties before continuing, again in two parties along separate northern and southern routes. Throughout the entire trip, the composition of traveling parties must be in accord with the following conditions P and R are deadly enemies and, although they may meet briefly,can never travel together. p must trave in the same party with sQ cann't travel by the southern route U cann't change.

41. If one of the two parties of knights consists of P and U and two other knights and travels by the southern route,the other members of this party besides P and U must be

- a) Q and S
b) Q and T
c) R and S
d) R and T
e) S and T

Ans: e

42. If each of the two parties of knights consists of exactly three members, which of the following is not a possible travelling party and route?

- a) P,S,U by the northern route
b) P,S,T by the northern route
c) P,S,T by the southern route
d) P,S,U by the southern route
e) Q,R,T by the southern route

Ans: b

43.If one of the two parties of knights consists of U and two other knights and travels by the northern route, the other memnbers of this party besides U must be

- a) P and S

- b) P and T
- c) Q and R
- d) Q and T
- e) R and T

Ans: c

44. If each of the two parties of knights consists of exactly three members of different parties, and R travels by the northern route, then T must travel by the

- a) southern route with P and S
- b) southern route with Q and R
- c) southern route with R and U
- d) northern route with Q and R
- e) northern route with R and U

Ans: a

45. If, when the two parties of knights encounter one another after a month, exactly one knight changes from one travelling party to the other traveling party, that knight must be

- a) P
- b) Q
- c) R
- d) S
- e) T

Ans: e

46. How many of the integers between 25 and 45 are even ?

- (A)21 (B)20 (C)11 (D)10 (E)9

Ans:d

46. If taxi fares were Rs 1.00 for the first $\frac{1}{5}$ mile and Rs 0.20 for each $\frac{1}{5}$ 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

Ans :d

47. A computer routine was developed to generate two numbers (x,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 following pair satisfies the routine EXCEPT

- (A) (99.10) (B) (85.9) (C) (50.7) (D) (1.1) (E) (1.0)

Ans: A

48. 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

49. 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 p.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

50 .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%

51.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%

Ans :c

52. A millionaire bought a job lot of hats $\frac{1}{4}$ of which were brown. The millionaire sold $\frac{2}{3}$ of the hats including $\frac{4}{5}$ of the brown hats. What fraction of the unsold hats were brown.

- (A) $\frac{1}{60}$ (B) $\frac{1}{15}$ (C) $\frac{3}{20}$ (D) $\frac{3}{5}$ (E) $\frac{3}{4}$

Ans :c

53.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 n+9 ?

(A)5 (B)6 (C)7 (D)8 (E)9

Ans :D

54. 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

55. 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

56. 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

57. A decorator bought a bolt of d m number of red chips in any one stack ?

(A) 7 (B) 6 (C) 5 (D) 4 (E) 3

Ans :C

58.

```
main()
{
int i;
clrscr();
printf("%d", &i)+1;
scanf("%d", i)-1;
}
```

a. Runtime error.

b. Runtime error. Access violation.

- c. Compile error. Illegal syntax
- d. None of the above

Ans: d,

59.

```
main(int argc, char *argv[])  
{  
(main && argc) ? main(argc-1, NULL) : return 0;  
}
```

- a. Runtime error.
- b. Compile error. Illegal syntax
- c. Gets into Infinite loop
- d. None of the above

Ans: b

60.

```
main()  
{  
int i;  
float *pf;  
pf = (float *)&i;  
*pf = 100.00;  
printf("\n %d", i);  
}
```

- a. Runtime error.
- b. 100
- c. Some Integer not 100
- d. None of the above

Ans: d