

# HCL technologies placemaent papers 2012

Paper : HCL Campus Placement Paper Pattern( Aptitude, C, Puzzle)

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## Aptitude Questions

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.Preproconia.. does not do which one of the following

- (a) macro
- (b) conditional complication
- (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;j<9 && 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

Ans: (a) or (c)

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

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

Ans : 0.3 or 3/10

15.. What does the hexanumber E78 in radix 7.

(a) 12455

(b) 14153

(c) 14256

(d) 13541

(e) 131112

Ans. (d)

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

Ans. 900

17.. From the following statements determining the order of ranking

? M has double the amount as D

? Y has 3 rupees more than half the amount of D

Ans. Data insufficient

Questions 18 – 22 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

18. 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)

19. If B occurs which must occur

(a) D

(b) D and G

(c) G and H

(d) F and G

(e) J

Ans. (a)

20. 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)

21. Which may occur 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)

22. E occurs which one cannot occur

(a) A

(b) F

(c) D

(d) C

(e) J

Ans. (b)

23. 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

[Don't confuse it with Tuesday. the correct answer is Monday]

24. 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

[Assume that he lived x years.

$\frac{x}{6} + \frac{x}{12} + \frac{x}{7} + 5 + 4 + \frac{x}{2} = x$ . Solving  $x = 84$ , Same as Question in Shakundala Devi book]

25. 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? (repeated from previous papers)

Ans: Doug

[ Ann steps = 8,16,24,28 --- finished by 3 & half full steps

Doug steps=7,14,21,24 --- finished before 3 & half full steps

Jack steps= 6,12,18,21 --- finished by 3 & half full steps

So Doug won the race ]

26. 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

[Very similar to Shakuntala Devi puzzles to puzzle you problem no: 38 ]

27. 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? (repeated from previous papers)

28. Complete the series :

a) 3,6,13,26,33,66,\_\_\_\_(repeated from previous papers)

b) 364,361,19,16,4,1,\_\_\_\_( " " " )

Ans : a) 63

b) 1

29. 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

30. 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

31. 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

32. Four tourists A,B,C,D and four languages English, German, French and Italian. They are not able to converse among themselves in one language. Though A does not know English he can act as an interpreter between B and C. No one spoke both French and German. A knows German and was able to converse with D who doesn't know a word in German. Only one language was spoken by more than two persons. Each spoke two languages. Find who spoke what.

Ans : A- German, Italian

B- French, Italian

c- German, English

D- Italian, English

33. There is a five digit number. It has two prime digits (1 is not a prime number). Third digit is the highest. Second digit is the lowest. First digit is one less than the third digit. The fifth digit is half of the fourth. The sum of 4th and 5th is less than the first. Find the number.

Ans ? 71842

34. Four persons A, B, C and D are playing cards. Each person has one card, laid down on the table below him, which has two different colors on either side.

No card has the same color on both sides. The colors visible on the table are Red, Green, Red and Blue respectively. They see the color on the reverse side and give the following comment.

A: Yellow or Green

B: Neither Blue nor Green

C: Blue or Yellow

D: Blue or Yellow

Given that out of the 4 people 2 always lie find out the colours on the cards each person.

Ans: A- Yellow

B- Yellow

C- Green

D- Red

35. A 1 k.m. long wire is held by n poles. If one pole is removed, the length of the gap becomes  $\frac{12}{3m}$ . What is the number of poles initially?

Ans:6km

36. Find the digits X,Y,Z

X X X X

Y Y Y Y +

Z Z Z Z

\_\_\_\_\_

Y X X X Z

\_\_\_\_\_

Ans: X Y Z

9 1 8

37. A man starts walking at 3 pm . he walks at a speed of 4 km/hr on level ground and at a speed of 3 km/hr on uphill , 6 km/hr downhill and then 4 km/hr on level ground to reach home at 9 pm. What is the distance covered on one way?

Ans: 12 km

38. A grandma has many sons; each son has as many sons as his brothers. What is her age if it's the product of the no: of her sons and grandsons plus no: of her sons? (age b/w 70 and 100).

Ans: 81

39. An electric wire runs for 1 km b/w some no: of poles. If one pole is removed the distance b/w each pole increases by  $1\frac{2}{6}$  (mixed fraction). How many poles were there initially?

40. There is a church tower 150 feet tall and another catholic tower at a distance of 350 feet from it which is 200 feet tall. There is one each bird sitting on top of both the towers. They fly at a constant speed and time to reach a grain in b/w the towers at the same time. At what distance from the church is the grain?

Ans: 90

41. A person wants to meet a lawyer and as that lawyer is busy he asks him to come three days after the before day of the day after tomorrow? on which day the lawyer asks the person to come?

Ans: thursday

42. A person is 80 years old in 490 and only 70 years old in 500 in which year is he born?

Ans: 470

43. A person says that their speed while going to a city was 10mph however while returning as there is no much traffic they came with a speed of 15mph. what is their average speed?

Ans: 12mph

45. There is a peculiar island where a man always tells truth and a women never says two 2 consecutive truth or false statements that is if she says truth statement then she says false statement next and vice versa. A boy and girl also goes in the same way. one day i asked a child " what r u a boy or a girl" however the child replied in their language that i dint understand but the parents knew my language and one parent replied that " kibi is a boy" the other one said that "no kibi is a girl, kibi lied".

a: is kibi a boy or a girl

b: who answered first mother or father?

Ans: kibi is a girl and mother answered first.

46. The boy goes to school reaches railway station at his  $\frac{1}{3}$  of his journey & mill at  $\frac{1}{4}$  of his journey the time taken him to walk between railway station & mill is 5 mins. Also he reaches railway station at 7.35am when he started from house & when he reaches school?

Ans: 7:15 to 8.15

47. If a person is sitting in a exam having 30 questions (objective type) the examiner use the formula to calculate the score is  $S=30+4c-w$  here c is number

of correct answer and w is number of wrong answer, the examiner find the score is more than 80, tell how many questions are correct? if the score is little less but still more than 80 then u wont be able to answer.

Ans :- 16

48. If a person having 1000 Rs and he want to distribute this to his five children in the manner that each son having 20 Rs more than the younger one, what will be the share of youngest child

Ans- 160

49. Raju having some coins want to distribute to his 5 son, 5 daughter and driver in a manner that, he gave first coin to driver and  $\frac{1}{5}$  of remaining to first son he again gave one to driver and  $\frac{1}{5}$  to 2nd son and so on.... at last he equally distributed all the coins to 5 daughters. how many coins raju initially have???

Ans:-881

50. if ravi binded his book and the binder cut the pages of the book, ravi decided to mark the pages by himself own, what he found that number of three appears 61 times find of number of pages answer

Ans – 300

51. a painter went in a exhibition to purchases some pictures where T,U,V,W,X,Y,Z pictures were remaining, he want to buy only five in the condition on that

if T is there then X should not be there,  
if U is there than y should be there  
if if v is there then X should be there  
which is the combination the painter can have

- (a) T,U,V,W,Y
- (b)T,Z,U,W,X
- (c)T,X,U,V,W
- (d)T,U,Y,W,Z

Ans (d)

52. There are 100 men in town. Out of which 85% were married, 70% have a phone, 75% own a car, 80% own a house. What is the maximum number of people who are married, own a phone, own a car and own a house ? ( 3 marks)

Sol: 15%

53. There are 10 Red, 10 Blue, 10 Green, 10 Yellow, 10 White balls in a bag. If you are blindfolded and asked to pick up the balls from the bag, what is the minimum number of balls required to get a pair of at least one colour ? ( 2 Marks)

Sol :6 balls.

54. Triplet who usually wear same kind and size of shoes, namely, Annie, Danny, Fanny. Once one of them broke a glass in kitchen and their shoe prints were there on floor of kitchen. When their mother asked who broke Annie said, ?I didn't do it?; Fanny said ?Danny did it?; Danny said ?Fanny is lying?; here two of them are lying, one is speaking truth. Can you find out who broke it ? (3 Marks)

Sol : Annie

55. 4 players were playing a card game. Cards had different colours on both sides. Neither of cards had same colour on both sides. Colors were 2 Red, 2 Blue, 2 Green, 2 Yellow. Cards were lying in front of each player. Now, each player knew the colour on other side of his card. They are required to tell their colour. Statement given by each of them was :

Annie : Blue or Green

Bobby : Neither Blue nor Green

Cindy : Blue or Yellow

Danny : Blue or Yellow

colors of cards that are visible to all were Red, Blue, Green, Blue in order of their names. Exactly two of them are telling truth and exactly two of them are lying. Can you tell the colour on other face of card for each player ? (6 Marks)

Sol : Annie : Yellow (Lying)

Bobby : Yellow (Telling truth)

Cindy : Blue (Telling truth)

Danny : Green (Lying)

56. In a game i won 12 games, each game if i loose i will give u one chocolate, You have 8 chocolates how many games played.

Ans : 32

57. 75 persons Major in physics, 83 major in chemistry, 10 not at major in these subjects u want to find number of students majoring in both subjects

Ans 68.

58. if A wins in a race against B by 10 mts in a 100 Meter race. If B is behind of A by 10 mts. Then they start running race, who will won?

Ans .A

59.  $A+B+C+D=D+E+F+G=G+H+I=17$

given  $A=4$ . Find value of  $G$  and  $H$ ?

Ans :  $G = 5$   $E=1$

60. One guy has Rs. 100/- in hand. He has to buy 100 balls. One football costs Rs. 15/, One Cricket ball costs Re. 1/- and one table tennis ball costs Rs. 0.25 He spend the whole Rs. 100/- to buy the balls. How many of each balls he bought?

Ans :  $F=3, T=56, C=41$

61. The distance between Station Atena and Station Barcena is 90 miles. A train starts from Atena towards Barcena. A bird starts at the same time from Barcena straight towards the moving train. On reaching the train, it instantaneously turns back and returns to Barcena. The bird makes these journeys from Barcena to the train and back to Barcena continuously till the train reaches Barcena. The bird finally returns to Barcena and rests. Calculate the total distance in miles the bird travels in the following two cases:

(a) The bird flies at 90 miles per hour and the speed of the train is 60 miles per hour.

(b) the bird flies at 60 miles per hour and the speed of the train is 90 miles per hour

Ans: time of train=1hr.so dist of bird= $60 \times 1=60$ miles

62. A tennis championship is played on a knock-out basis, i.e., a player is out of the tournament when he loses a match.

(a) How many players participate in the tournament if 15 matches are totally played?

(b) How many matches are played in the tournament if 50 players totally participate?

Ans: (a)16

(b)49

63. When I add 4 times my age 4 years from now to 5 times my age 5 years from now, I get 10 times my current age. How old will I be 3 years from now?

Ans: Age=41 years.

64. A rich merchant had collected many gold coins. He did not want anybody to know about them. One day, his wife asked, "How many gold coins do we have?" After pausing a moment, he replied, "Well! If I divide the coins into two unequal numbers, then 37 times the difference between the two numbers equals the difference between the squares of the two numbers." The wife looked puzzled. Can you help the merchant's wife by finding out how many gold R

Ans:37

66. A set of football matches is to be organized in a "round-robin" fashion, i.e., every participating team plays a match against every other team once and only once. If 21 matches are totally played, how many teams participated?

Ans :7

66. Glenn and Jason each have a collection of cricket balls. Glenn said that if Jason would give him 2 of his balls they would have an equal number; but, if Glenn would give Jason 2 of his balls, Jason would have 2 times as many balls as Glenn. How many balls does Jason have?

Ans: 14

67. Suppose 8 monkeys take 8 minutes to eat 8 bananas.

a) How many minutes would it take 3 monkeys to eat 3 bananas?

(b) How many monkeys would it take to eat 48 bananas in 48 minutes

Ans: a)48

B)6

68. It was vacation time, and so I decided to visit my cousin's home. What a grand time we had! In the mornings, we both would go for a jog. The evenings were spent on the tennis court. Tiring as these activities were, we could manage only one per day, i.e., either we went for a jog or played tennis each day. There were days when we felt

lazy and stayed home all day long. Now, there were 12 mornings when we did nothing, 18 evenings when we stayed at home, and a total of 14 days when we jogged or played tennis. For how many days did I stay at my cousin's place?

Ans : 22 days

69 A 31" x 31" square metal plate needs to be fixed by a carpenter on to a wooden board. The carpenter uses nails all along the edges of the square such that there are 32 nails on each side of the square. Each nail is at the same distance from the neighboring nails. How many nails does the carpenter use?

Ans :124

70. Given that A,B,C,D,E each represent one of the digits between 1 and 9 and that the following multiplication holds:

A B C D E

X 4

\_\_\_\_\_

E D C B A

\_\_\_\_\_ what digit does E represent ?

- a) 4
- b) 6
- c) 8
- d) 7

Ans: c

71. (16)HCL prototyping machine can make 10 copies every 4 seconds. At this rate, How many copies can the machine make in 6 min.?

- a) 900
- b) 600
- c) 360
- d) 240
- e) 150

Ans: a

72.(18)10^2(10^8+10^8) =\_\_\_\_\_ 10^4

- a) 2(10)^4
- b) 2(10)^6
- c) 10^8
- d) 2(10)^8
- e) 10^10

Ans: b

73.Worker W produces n units in 5 hours. Workers V and W, workers independently but at the same time, produce n units in 2 hours. how long would it take V alone to produce n units?

- a) 1 hr 26 min
- b) 1 hr 53 min
- c) 2 hr 30 min
- d) 3 hr 30 min
- e) 3 hr 20 min

Ans: d

74.. 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) compilation error

75. 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)

76. 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) 10,6

77. 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) Prints : Jan..

78. 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

```

79. 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

80. 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)20,12

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

- i) int \*F()
- ii) int (\*F)()

Choice :

- 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)

82. 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);
}
```

Choice:

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

Ans: c)x/y=2

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

```
main()
```

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

Ans: The code functions properly releasing all the memory allocated

84. output of the following.

```
main()
```

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

Ans:0X8A

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

Ans: Function.

86. 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)

87. 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)float

88. What is the value of the expression  $(3^6) + (a^a)$ ?

a) 3 b) 5 c) 6 d) a+18 e) None

Ans : 5

89. What is the value assigned to the variable X if b is 7 ?

$X = b > 8 ? b << 3 : b > 4 ? b >> 1 : b;$

a) 7 b) 28 c) 3 d) 14 e) None

Ans: c)

Questions 90-94

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 travel in the same party with S Q can't travel by the southern route U can't change.

90. 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

91. 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

92. If one of the two parties of knights consists of U and two other knights and travels by the northern route, the other members 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

93. 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

94. 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

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

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

Ans: d)10

96. 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

Answer :d)Rs 3.80

97. 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)

Answer : A) (99.10)

98. 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

99. 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) 6.26

100. 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%

101. 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) 50%

102. 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)  $\frac{3}{20}$

103. 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) 8

104. 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

105. 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%

106. 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)  $\frac{2}{3}$  (B)  $\frac{3}{4}$  (C) 1 (D) 2 (E) 3

Ans :E) 3

107. 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) 5