C Random Number Generator Answers

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1) Answer is a) Sets the seed for rand

2) Answer is b) rand()%100

3) Answer is b) minimum+rand()%(maximum-minimum+1)

4) Answer is d) To generate random numbers

5) Answer is b) int

Explanation: int rand(void)

6) Answer is d) None of the mentioned.

7) Answer is a) rand()

Explanation: rand() generates a random number between 0 to RAND_MAX

8) Answer is a) rand() and random()

9) Answer is d) time_t *

Explanation: (this is needed before srand())

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

int main()
{
        int i, n;
        time_t t;
        n = 5;
         /* Initializes random number generator */
        srand((unsigned) time(&t));
        //So, check here. We are sending the address of the time_t variable to time function
        //Hence, we can say, it accepts the argument of time_t *
         /* Print 5 random numbers from 0 to 50 */
        for( i = 0 ; i < n ; i++ )
        {
                printf("%d\n", rand() % 50);
        }
        return(0);
}
```

10) Answer is c) An integer between 0-999 including 0 and 999.

11) Answer is b)An integer in the range 0 to RAND_MAX.

12) Answer is a) Compile time error
Explanation:
Compiler would say: invalid use of void expression in printf("%d\n", srand(9000));
Remember, return type of srand() is void.

13) Answer is b) An integer in the range 0 to RAND_MAX

14)Answer is b) false.

Explanation: It will generate same number every time. To generate different random number every time, we have to use srand() function.

We can type the previous function to get different random number every time.
In the below program everytime program is run different numbers are generated.

```
1. #include <stdio.h>
2. int main()
3. {
4.        srand(time(NULL));
5.        printf("%d\n", rand());
6.        return 0;
7.}
```

15) Answer is a) true

16) Answer is b) rand()%2

References:
1) http://www.sanfoundry.com/c-interview-questions-answers/