# Sample Questions for CDAC Common Admission Test (C-CAT)

## Section A

1. The stenographer is very efficient. He is _____ to his firm.
   A) an asset
   B) a credit
   C) a blessing
   D) a boon

2. This brand of TV is quite inferior_____ that one.
   A) than
   B) to
   C) with
   D) over

3. Two men start together to walk to a certain destination, one at 3 kmph and another at 3.75 kmph. The latter arrives half an hour before the former. What is the distance?
   A) 6km
   B) 7.5km
   C) 8km
   D) 9.5km

4. What is the average of the positive numbers from 1 to 100?
   A) 49.5
   B) 50
   C) 50.5
   D) 51

5. If RAJIYA is coded as YARAJI, How is SHIVANI CODED?
   A) NISIHVA
   B) NISHVIA
   C) NISHIVA
   D) NIHSIVA

6. The value of A is 1 if A% of 100 is1, then what is the value of p if p% of 50 is 85?
   A) 160
   B) 170
   C) 180
   D) 185

## Section B

1. What is the output of following program?

```
int main()
{
        char boolean[][6]={"TRUE","FALSE"};
        printf("%s",boolean[(unsigned int)-1 == ~0]);
}
```

A) 0
B) 1
C) FALSE
D) Run time error

2. What will be the out put of following program?

```
#include<stdio.h>
void main()
{
        int n=0;
        if(n++)
        {
                printf("C-DAC");
        }
                else if(n--)
        {
                printf("ACTS");
        }
}
```

A) C-DAC
B) ACTS
C) C-DAC ACTS
D) Error

3. Which of the following stack operations would result in stack underflow?
A) Peek
B) Pop
C) Push
D) Two or more of the above answers

4. Which of the following statement is true?
A) A link list is a collection of structure a ordered by their physical placement in memory like an array
B) The double linked lists have no beginning and no end
C) A stack is a buffer in which data items are retrieved in reverse order from which they are placed in the buffer
D) None of the above

5. Which of these is not a layer of the TCP/IP model?
A) Network
B) Internet
C) Presentation
D) Application

6. Which of the following topologies is used for Ethernet?
A) Star
B) Bus
C) Ring
D) All of the above

7. Which of the following is the most suitable scheduling scheme in a real-time operating system?
   A) Round-robin
   B) First-come-first-served
   C) Pre-emptive scheduling
   D) Random scheduling

8. In which of the following scheduling policies does context switching never take place?
   A) Round-robin
   B) Shortest job first
   C) Pre-emptive
   D) All of the above

9. What is the advantage of inheritance?
   A) Achieves Reusability of code
   B) Hides the data
   C) Allows usage of common function for multiple tasks
   D) Handles the Exception

10. A Vehicle and an engine have a _____.
   A) Is – A relationship
   B) Has – A relationship
   C) No relationship
   D) Polymorphic relationship

**Section C**

1. How many flip-flop circuits are needed to divide by 16
   A) Two
   B) Four
   C) Eight
   D) Sixteen

2. Program counter in a digital computer
   A) counts the number of programs run in the machine
   B) counts the number of times a sub-routine is called
   C) counts the number of time the loops are executed
   D) points the memory address of the current or the next instruction

3. S-R type flip-flop can be converted into D type flip-flop if S is connected to R through
   A) OR gate
   B) inverters
   C) AND gate
   D) Full Adder

4. Why DMA is faster than Programmer I/O technique?
   A) DMA transfers data directly using CPU
   B) DMA transfers data directly without using CPU

C) DMA uses buffers with CPU
D) DMA uses interrupted driven I/O

5. Convert decimal value $(888)_{10}$ to base-5.
A) $(444)_5$
B) $(12023)_5$
C) $(131313)_5$
D) $(12021)_5$

6. Simplify the Boolean expression (A+B+C)(D+E)' + (A+B+C)(D+E) and choose the best answer.
A) A + B + C
B) D + E
C) A'B'C'
D) D'E'

7. If the quantization error is 0.1% which of the following AD converter it belongs to?
A) 10 bit A/D converter
B) 5 bit A/D converter
C) 1 bit A/D converter
D) 20 bit A/D converter

8. For a request of data if the requested data is not present in the cache, it is called a _____
A) Cache Miss
B) Spatial Locality
C) Temporal Locality
D) Cache Hit

9. When the address of the subroutine is already known to the Microprocessor then it is _____ interrupt.
A) Maskable
B) Non-maskable
C) Non-vectored
D) Vectored