# KERNEL MASTERS

## SCHOLARSHIP ENTRANCE TEST

## Question Booklet - A

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## Instructions:

1. Please read all the instructions carefully.
2. This Question booklet contains 100 questions.
3. Each question carries 1 mark.
4. The duration of the exam is 90 minutes.
5. There is no negative marking.
6. Answers are to be written only in the Answer Sheet provided separately.
7. Nothing is to be written on the question booklet.
8. Both Question booklet and Answer Sheet needs to be returned after the examination.
9. Overwriting is not accepted. Answer needs to be provided neatly without any scratches or corrections.
10. Answers are to be filled in Answer sheet using a blue ball point pen only.

**WISH YOU ALL THE BEST**

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**Engineering Electronics Basics(Question#1 to 50)**

1. Instruction Cycle is defined as
   a) Time required to complete data transfer from memory.
   b) Time required to complete the execution of an instruction.
   c) Time taken to complete a CPU reference.
   d) None of the above.

2. The code where all successive numbers differ from their preceding number by single bit is
   a) Binary code          b) BCD          c) Excess – 3          d) Gray

3. The gates required to build a half adder are
   a) EX-OR gate and NOR gate          c) EX-OR gate and OR gate
   b) EX-OR gate and AND gate          d) Four NAND gates.

4. This OS interleaves execution of processes in an application program to meet its deadline
   a) Batch Processing          b) Multiprogramming          c) Real time          d) Time sharing

**C Programming (Question#51 to 80)**

1. What will be the output?
```
main()
{
    int i = 4;
    if(i = 1)
            printf("statement 1");
    else
            printf("statement 2");
}
```
   a. Statement 1          b. statement 2          c. Error          d. No output

2. What will be the output of the following.
```
int main( )
{
    char arr[10];
    arr="world";
    printf("%s",arr);return 0;
}
```
   a. world          b.w          c.null          d.compilation error

**Aptitude (Question#81 to 100)**

3. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?
   a. 3          b. 4          c. 9          d. None

4. A can finish a work in 18 days and B can do the same work in 15 days. B worked for 10 days and left the job. In how many days, A alone can finish the remaining work?
   a. 5          b. 5.5          c. 6          d. 8