

PHYSICS(HONOURS)

PAPER:DC-7P

[CBCS]

F.M:15

Time: 2h.

Answer all the questions given below:

5x3=15

1.What are digital signals and digital circuits?

2.Design (a) a full adder and (b) a full subtractor using EX-OR and basic gates.

3.Define a sequential logic circuits. How does it differ from combinational circuits?

4.What is meant by race-around condition? How can it be avoided?

5.What is a synchronous counter? What is its advantage over asynchronous counters?