# Digital Logic Design: CBSE CS

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*Abstract*—This manual provides solutions to Digital Design problems from Computer Science papers in the CBSE board exams.

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1.1. Reduce the following Boolean Expression to its simplest form using K-Map :

$$F(P,Q,R,S) = \sum(0,1,2,3,5,6,7,10,14,15) \tag{1.1.1}$$

**Solution:** The logic expression is obtained from Fig. 1.1.1 as
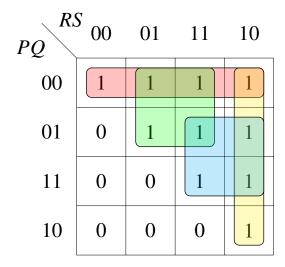
$$F = P'Q + RS' + P'S + QR \tag{1.1.2}$$



Fig. 1.1.1

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