Q-1 Reduce using K-Map: f = $\sum_m(2,3,6,7,8,10,11,13,14)$ **[Ans. f = A'C + B'C + CD' + AB'D' + ABC'D]**

Q-2 Reduce using K-Map: f = $\sum_m(0,1,2,3,5,7,8,9,10,12,13)$ **[Ans. f = AC' + A'D + B'D']**

Q-3 Reduce using K-Map: f = $\sum_m(0,2,4,6,7,8,10,12,13,15)$ **[Ans. f = C'D' + A'D' + B'D' + ABD + BCD]**

Q-4 Reduce using K-Map: f = $\sum_m(0,1,2,3,6,7,13,15)$ **[Ans. f = A'B' + A'C + ABD]**

Q-5 Reduce using K-Map: f = $\sum_m(2,3,6,7,10,11,12)$ **[Ans. f = A'C + B'C + ABC'D']**

Q-6 Reduce using K-Map: f = $\sum_m(0,1,2,3,4,5,6,9,12,13,14)$ **[Ans. f = A'B' + C'D + BD']**

Q-7 Reduce using K-Map: f = $\sum_m(2,3,5,7,9,11,12,13,14,15)$ **[Ans. f = AB + AD + BD + A'B'C]**

Q-8 Reduce using K-Map: f = $\sum_m(5,6,7,9,10,11,13,14,15)$ **[Ans. f = BD + AD + BC + AC]**

Q-9 Reduce using K-Map: f = $\sum_m(0,1,2,3,4,6,8,9,10,11)$ **[Ans. f = B' + A'D']**

Q-10 Obtain the simplified expression using K-Map:
F = ABD + A'C'D' + A'B + A'CD' + AB'D **[Ans. f = A'D' + BD + AD]**